



basic education

Department:  
Basic Education  
REPUBLIC OF SOUTH AFRICA

# **CURRICULUM AND ASSESSMENT POLICY STATEMENT GRADE R-5 FOR LEARNERS WITH SEVERE INTELLECTUAL DISABILITY**

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**MAINTENANCE**

**GRADE 4-5**

Curriculum and Assessment  
Policy Statement Grade R-5  
for learners with Severe  
Intellectual Disability

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# **1 SECTION 1: INTRODUCTION TO THE CURRICULUM AND ASSESSMENT POLICY STATEMENT GRADES R TO 5 FOR LEARNERS WITH SEVERE INTELLECTUAL DISABILITY**

## **1.1 Background**

The South African Constitution, Act 108 of 1996, enshrines the right of every child to access quality basic education without there being any form of discrimination. The Convention on the Rights of Persons with Disabilities, ratified by the Parliament of South Africa in 2007 (Article 24) requires Government to ensure that children with disabilities are able to access an inclusive, quality primary, compulsory education and secondary education on an equal basis with others in the communities in which they live and that persons with disabilities are not excluded from the general education.

There are learners participating in the General Education and Training Band who have an aptitude and interest in applied knowledge and vocational skills for whom the National Curriculum Statement, Grades R to 12 (NCS) needs to be differentiated to make it fully accessible. This would include learners with moderate to severe intellectual disability and learning difficulties. Knowledge and skills should be presented at a more functional level and at reduced depth and breadth, whilst a number of occupational subjects are also made available. They should be given an opportunity to receive an endorsed statement of achievement that is related to learning within their interest and aptitude.

This Learning Programme has been developed to respond more effectively to the needs of these learners who have been identified and assessed through the protocols outlined in the Policy on Screening, Identification, Assessment and Support of 2014. They will benefit from curriculum content that is aligned to the Foundation and Intermediate Phase of the National Curriculum Statement at a more applied and functional level in accordance with their age, interest and aptitude.

It is critical, that through flexibility and differentiated methodologies, learners enrolled for these differentiated subjects will be able to progress with regard to applied competencies, even where they might not be able to attain the minimum requirements set for the different grades. There should always be high expectations for all learners and the necessary scaffolding and learning support to master foundational competencies relevant to the specific subject. They should be in a position to demonstrate the values and practical competencies that they have mastered which will make it possible for them to progress to either the Technical Occupational pathway or the world of work.

The learning programme is structured in such a way that it makes provision for a wide spectrum of learners with moderate to severe intellectual disability and learning difficulties across the age span. It is aimed at the full development of their human potential and sense of dignity and self-worth. It also allows for the development of their personality, talents and creativity, as well as their mental and physical abilities, cultural, social, environmental and economic competencies to their fullest potential with a view to enabling them to participate effectively and independently in a free society as adults (Convention on the Rights of Persons with Disabilities, 2006 and the White Paper on the Rights of Persons with Disabilities, 2015).

The learning programme for CSPID should be consulted in cases where a learner enters the CAPS Grades R – 5 for learners with Severe Intellectual Disability (SID) programme at a level where they require bridging to join the appropriate grade. The CSPID learning programme will provide a framework for educators to design down to ensure that there is a smooth transition into the SID learning programme.

The introduction of this Learning Programme within the National Curriculum Statement is aimed at strengthening of respect for human rights, fundamental freedoms and human diversity. It will provide learners in ordinary and in special schools across the range of competencies and aptitudes with conditions that ensure dignity, promote self-reliance and facilitate active participation in the school and in the community and offer the opportunity to obtain a recognised and accredited statement of achievement.

## 1.2 Overview

Through the policy document the Minister of Basic Education will be able to prescribe the minimum norms and standards for differentiated education in the General Education and Training band.

The following legal framework will be adhered to:

- (i) The United Nations Convention on the Rights of People with Disabilities adopted by the United Nation general Assembly on 13 December 2006 and ratified by the South African parliament on 5 June 2007;
- (ii) The White Paper on the Rights of Persons with Disabilities (2015);
- (iii) The National Education Policy Act (Act 27 of 1996);
- (iv) The South African Schools Act (Act 84 of 1996);
- (v) The National Curriculum Statement, Grades R to 12 (2011);
- (vi) The South African National Curriculum Framework for Children from Birth to Four (2015);
- (vii) National Early Learning and Development Standards for Children Birth to Four Years (NELDS) (2009);
- (viii) Section 11 of the Children's Act (Act 31 of 2005);
- (ix) Chapter 5, section 76 of the Children's Act as amended (2007);
- (x) Education White Paper 6 on Special Needs Education: Building an Inclusive Education and Training System (2001);
- (xi) Continuing Education and Training Act (2006 as amended by Act No 3 of 2012 and Act No 1 of 2013);
- (xii) Standards and Quality Assurance for General and Further Education and Training (June 2008, Revised April 2013);
- (xiii) Umalusi's Quality Assurance of Assessment: Directives, Guidelines and Requirements;
- (xiv) Guidelines to Ensure Quality Education and Support in Special Schools and Special School Resource Centres (2014);
- (xv) Policy on Screening, Identification, Assessment and Support (SIAS) (2014);
- (xvi) Guidelines for Responding to Diversity in the Classroom (2012);
- (xvii) National Protocol on Assessment (2011), specifically Chapter 9;
- (xviii) National Policy Pertaining to Promotion and Progression Requirements (2011);
- (xix) Learning Programme for Children with Severe to Profound Intellectual Disability.

### 1.3 General aims of the Curriculum and Assessment Policy Statement Grades R to 5 for learners with Severe Intellectual Disability

- (a) The National Curriculum Statement Grades R to 9 gives expression to the knowledge, skills, values and attitudes worth learning in South African schools. This curriculum aims at removing the barriers that make it difficult for learners with moderate to severe intellectual disability and learning difficulties to access the curriculum. It will enable them to acquire and apply knowledge and skills in ways that are meaningful to their own lives. In this regard, the curriculum promotes knowledge in local contexts, while being sensitive to global imperatives.
- (b) The Curriculum and Assessment Policy Statement (CAPS) Grades R to 5 for learners with Severe Intellectual Disability serves the purpose of:
- Equipping learners, irrespective of their socio-economic background, race, gender, physical ability or intellectual ability, with the knowledge, skills and values necessary for self-fulfilment, and meaningful participation in society as citizens of a free country;
  - Facilitating the transition of learners from education institutions to either protective or open employment;
  - Providing employers with a sufficient profile of a learner's competences;
  - Being sensitive to issues of diversity such as poverty, inequality, race, gender, language, age, and other factors;
  - Valuing indigenous knowledge systems: acknowledging the rich history and heritage of this country as important contributors to nurturing the values contained in the Constitution; and
  - Credibility, quality and efficiency: providing an education that is comparable in quality, breadth and depth to those of other countries.
- (c) The curriculum is based on the following principles:
- Social transformation: ensuring that the educational imbalances of the past are redressed, and that equal educational opportunities are provided for all sections of the population;
  - Active learning: encouraging an active approach to multi-sensory learning;
  - Attainment of realistic, but high knowledge and skills levels: the minimum standards of knowledge and skills to be achieved at each grade are specified and set high, achievable standards in all subjects;

- Progression: content and context of each grade shows progression from simple to complex;
  - Human rights, inclusivity, environmental and social justice: infusing the principles and practices of social and environmental justice and human rights as defined in the Constitution of the Republic of South Africa.
- (d) Inclusivity should become a central part of the organisation's planning and teaching at each school. All teachers should have a sound understanding of how to recognise and address severe intellectual barriers to learning, and how to plan for diversity. The key to managing inclusivity is ensuring that barriers are identified and addressed by all the relevant support structures within the school community, including teachers, District-Based Support Teams, School-based Support Teams, parents and Special Schools as Resource Centres. To address barriers in the classroom, teachers should use various curriculum differentiation strategies such as those included in the Department of Basic Education's Guidelines for Responding to Learner Diversity in the Classroom (2011).

### 1.3.1 The aims of the Curriculum and Assessment Policy Statement Grades R to 5 for learners with severe intellectual disability

The specific aims of the CAPS Grades R to 5 for learners with Severe Intellectual Disability are to:

- Give recognition to learners who would follow the curriculum, irrespective if they meet the requirements and achieve the competencies as specified in the learning programmes;
- Provide a foundation of quality, standardised general education which will suit the needs of these learners and help prepare them to be more independent and better equipped for life after school. It may also enable the learners to enter a Technical Occupational curriculum;
- Promote Lifelong learning to enable learners to continue with further learning and skills development in sheltered or open employment;
- Prepare learners to function better in a fully inclusive society and employment; and
- Provide employers with a profile of the learner's competence.



1.3.1.1 Learners successfully completing the curriculum will be able to:

- Identify, select, understand and apply knowledge to the intended purpose and identify solutions to problems in the field of study;
- Demonstrate the necessary applied knowledge and skills identified for competence in a subject, as specified in the curriculum;
- Demonstrate knowledge and skills gained for purpose of formal communication and basic numerical operations;
- Use technology effectively and
- Demonstrate entrepreneurial skills that will enable them to create their own work in the contexts in which they live.

## 1.4 Subjects and time allocation

Instructional time for the Learning Programmes is 27½ hours in a five day cycle;

<b>Subjects</b>		<b>Time</b>
<b>General Education</b>		
<b>Languages</b>		5 – 14 years = 10 hours
Home Language		14 – 18 years = 6 hours
First additional language		14 – 18 year = 2 hours
<b>Mathematics</b>		5 – 14 years = 5 hours
		14 – 18 years = 3 hours
<b>Life Skills</b>	Life Skills – Personal and Social Wellbeing	5 – 14 years = 8 hours
		14 – 18 years = 5 hours
	Physical Education	1 hour
	Creative Arts	5 – 14 years = 3½ hours
		14 – 18 years = 1 hour
Natural Sciences		1½ hours
<b>Skills subjects</b>		14 – 18 years = 8 hours

<b>Subjects</b>  <b>CAPS Grades R to 5 for learners with severe intellectual disability:</b> <b>Electives</b>	<b>Time</b>
Agricultural Studies  Art and Crafts  Civil Technology: Bricklaying and Plastering  Civil Technology: Plumbing  Civil Technology: Woodworking and Timber  Consumer Studies: Food Production  Consumer Studies: Needlework  Hospitality Studies  Mechanical Technology: Body Works: Panel Beating and or Spray Painting  Mechanical Technology: Motor Mechanics  Mechanical Technology: Welding  Office Administration  Personal Care: Ancillary Health Care  Personal Care: Beauty and Nail Technology  Personal Care: Hairdressing and Beauty Care  Service Technology: Maintenance	8 hours
Total: General and Skills subjects	27½

The following table proposes the learner progression across the years in the curriculum.

Grades R – 3	Grades 4 – 5
<p>General Education</p> <p>Home Language</p> <p>Mathematics</p> <p>Life Skills</p> <ul style="list-style-type: none"> <li>- Personal and Social wellbeing</li> <li>- Physical education</li> <li>- Creative arts</li> </ul>	<p>General Education</p> <p>Home Language</p> <p>First Additional Language</p> <p>Mathematics</p> <p>Life Skills</p> <ul style="list-style-type: none"> <li>- Personal and Social wellbeing</li> <li>- Physical education</li> <li>- Creative arts</li> <li>- Natural Sciences</li> </ul> <p>Skills subjects</p> <p>A minimum of 3 skills and maximum of 4 skills</p>

## 2 SECTION 2: INTRODUCTION TO MAINTENANCE.

### 2.1 What is Maintenance?

Maintenance is a study of various interrelated skills in the maintenance sector such as health and safety, cleaning and good housekeeping, basic metalwork, mechanical, electrical, plumbing and building and construction skills. This subject equips learners to assist in the maintaining and servicing of plant and equipment at various private and public sites. The learner will be able to assist a qualified artisan, semi-skilled artisan or be able to follow a supervisor's instructions.

Maintenance skills and the content embedded in the skills are taught over two years in Grade 5 and 3 years in Grade 5. The teacher is allowed to adapt the difficulty level of the skills to the ability of the learner. During grade 5 in the second and third years the learners are placed in the learner work experience programme (LWEP) to acclimatise them to the world of work and prepare them for future jobs.

### 2.2 Specific Aims:

In Maintenance learners will study:

- Health, cleaning and safety procedures as well as good housekeeping principles
- The sectors in the maintenance industry and career possibilities in each sector
- Client services and customer care in the industry
- Managing resources and job planning
- Basic skills in each aspect of the Maintenance sector
- Introduction to the world of work

### 2.3 Topics to be studied in Maintenance include:

The table below indicates the main topics in the Maintenance programme.

1	Health and safety
2	Good housekeeping practices
3	Sketches and drawings

4	Basic metalwork skills
5	Maintenance – mechanical, bicycle and motor vehicle <ul style="list-style-type: none"> <li>• Maintenance on mechanical devices</li> <li>• Maintenance of a bicycle</li> <li>• Maintenance of a motor vehicle</li> </ul>
6	Maintenance electrical <ul style="list-style-type: none"> <li>• Basic electrical-motor vehicle</li> <li>• Basic electrical-home</li> </ul>
7	Building and construction skills <ol style="list-style-type: none"> <li>1. Painting, glazing and water proofing</li> <li>2. Woodwork</li> <li>3. Bricklaying and plastering</li> <li>4. Floor and wall finishes – tiling, carpet laying and laminating floors</li> </ol>
8	Basic plumbing maintenance skills
9	World of work

## 2.4 Requirements for Maintenance as a subject

### 2.4.1 Time Allocation

The compulsory instructional time for the Vocational Learning Programme for learners experiencing severe intellectual disabilities amounts to 8 hours per 5-day cycle. Schools may offer either three (3) or four (4) vocational subjects, depending on the number of learners in the school and the resources available. The compulsory instructional time for **Maintenance** is either:

- 2 hours per 5-day cycle plus three (3) other vocational subjects or
- 2,5 hours per 5-day cycle plus two (2) other vocational subjects.

Twenty percent (20%) of the above mentioned time is utilized to teach subject content which should be embedded in teaching the learners to execute the skills. This implies that theoretical lessons should not be instructed in isolation, but during the teacher's demonstration that takes place before the learners practise the skills. The learners are required to utilize eighty percent (80%) of the time to practise the various skills in the classroom.

### 2.4.2 Resources

#### 2.4.2.1 Human resources

An appropriately qualified teacher registered with SACE in line with National Education Policy Act 27 of 1998 section 7.4.

#### 2.4.2.2. Uniforms

Learners should use a two piece overall and safety shoes.

#### 2.4.2.2 Books, magazines and teaching media

- Each learner should have a learner workbook for the current module being studied
- The teacher should have well illustrated Do It Yourself magazines
- The teacher should have Do It Yourself books as well as other books related to the skills being taught
- The teacher should have access to you tube videos.

#### 2.4.2.3 Infrastructure and equipment

The subject may not be offered without the necessary infrastructure, tools and equipment.

##### 2.4.2.3.1 Infrastructure

A double or one and a half size classroom or a fully fledged workshop.

The workshop should contain the following furniture and equipment

<ul style="list-style-type: none"> <li>• 1 x teachers table and chair</li> <li>• 4 x lockable cupboards</li> <li>• 2 x 4/5 shelf open shelving</li> <li>• 4 x workbenches</li> <li>• 16 x bench vices (4 on each table)</li> <li>• 2 x welding screen</li> <li>• 1 x wash basin</li> <li>• 4 x Plug points for two phase welding equipment.</li> <li>• 1 x plug point for 3 phase welding equipment.</li> <li>• 5 x two phase plug points.</li> <li>• 4 x inverter welding machines</li> </ul>	<ul style="list-style-type: none"> <li>• 2 x set combination spanners 6mm-32mm</li> <li>• 2 x complete socket set ( includes ratchet, power bar etc) 8mm -32 mm</li> <li>• 1 x set metric allen keys</li> <li>• 2 x scissors</li> <li>• 2 x tile cutter</li> <li>• 4 x builders trowels</li> <li>• 4 x steel float</li> <li>• 4 x wooden float</li> <li>• 2 x builders square</li> <li>• 1 x wheelbarrow</li> <li>• 2 x brick bolster chisel</li> </ul>
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<ul style="list-style-type: none"> <li>• 1 x wall mounted drill press</li> <li>• 1 x bench grinder</li> <li>• 4 x long spirit level</li> <li>• 4 x try square</li> <li>• 4 x 5 metre. measuring tape</li> <li>• 1 x hand drill</li> <li>• 1 x angle grinder</li> <li>• 1 x jig saw</li> <li>• 1 x circular saw</li> <li>• 2 x electrical multi-tester</li> <li>• 2 x crimping tool</li> <li>• 4 x cross cut saw</li> <li>• 2 x tenon saw</li> <li>• 4 x claw hammer</li> <li>• 8 x ball pein hammers 200g</li> <li>• 4 x club hammer</li> <li>• 4 x rubber mallet</li> <li>• 1 x carpenters mallet</li> <li>• 4 x set centre punches</li> <li>• 4 x set steel chisels</li> <li>• 4 x set wood chisels</li> <li>• 4 x set star and flat screwdrivers</li> <li>• 4 x stanley knife</li> <li>• 4 x scrapers</li> <li>• 4 x putty knife</li> <li>• 4 x riveting gun</li> <li>• 4 x sash clamps</li> <li>• 4 x G clamps</li> <li>• 4 x vice grips</li> <li>• 4 x water pump pliers</li> <li>• 4 x long nose pliers</li> <li>• 4 x combination pliers</li> <li>• 4 x side cutters</li> <li>• 1 x stilson wrench</li> <li>• 1 x small adjustable wrench</li> </ul>	<ul style="list-style-type: none"> <li>• 4 x spades</li> <li>• 1 x pickaxe</li> <li>• 2 x glass cutter</li> <li>• 2 x pincer</li> <li>• 2 x pipe cutter</li> <li>• 2 x tap reseating tool</li> <li>• 4 x plunger</li> <li>• 1 x gas torch( canister type)</li> <li>• 15 x flat files</li> <li>• 4 x round file</li> <li>• 4 x triangular file</li> <li>• 4 x half round file</li> <li>• 4 x square file</li> <li>• 15 x hacksaws</li> <li>• 2 x junior hacksaws</li> <li>• 2 x coping saw</li> <li>• 2 x step ladders</li> <li>• 2 x steel dividers</li> <li>• 4 x set plug spanners</li> <li>• 2 x oil filter wrench</li> <li>• 2 x bottle jacks</li> <li>• 2 x wheel spanner</li> <li>• 1 x lead light</li> <li>• 1 x steel brush</li> <li>• 4 x automatic welding helmets</li> <li>• 1 x Set small gas bottles with attachments</li> <li>• 4 x tin snips</li> <li>• 1 x extension cord(10 metres)</li> <li>• 2 x chalk line</li> <li>• 2 x jack plane</li> <li>• 2 x steel rules</li> <li>• 1 x digital vernier calliper</li> <li>• 2 x scriber</li> <li>• 2 x fire extinguishers</li> </ul>
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<ul style="list-style-type: none"> <li>• 1 x large adjustable wrench</li> </ul>	<ul style="list-style-type: none"> <li>• Consumables are not included in list</li> </ul>
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The learners will work in groups of 2 or 4.

#### 2.4.2.4 Finances

The subject may not be offered without the necessary finances provided by the school.

- An annual budget should be available to purchase consumables for weekly practical tasks.
- Maintenance and purchasing of new tools/equipment should be added to the budget

#### 2.4.2.5 Stock control

- The teacher is responsible for the stock and will keep the workshop and tools and equipment locked at all times when not present.
- Annual stock control is essential, a stock control book must be kept in the workshop and a summary stock sheet must be kept in the office.
- Tools and equipment must be checked daily.

### 2.5 Career opportunities

Learners can:

- Be employed as assistants to an artisan or semi-skilled artisan.
- Be employed and work under supervision.
- Run a small business from home.
- Be employed under the 7 % disability job clause.
- Be sub-contractors.

### 3 SECTION 3: OVERVIEW OF TOPICS PER TERM AND ANNUAL TEACHING PLANS

Each week has a compulsory contact time of 2 to 2, 5 hours (depending on the number of vocational subjects offered at school) for the subject Maintenance.

#### 3.1 Content overview of theoretical topics

The content is embedded in the skills and the learners should execute the skills in a simulated working environment recreated in the classroom/centre. The table below indicates the topics and content in the **Maintenance** learning programme in grade 4 and 5.

		<b>Grade 4</b> The learner must be able to:	<b>Grade 5</b> The learner must be able to:
1	<b>Occupational Health and Safety Act 85 of 1993</b>	<ul style="list-style-type: none"><li>• Identify and remove potential hazards.</li><li>• Understand the implications of exposure to hazardous substances and hazards.</li><li>• Implement health and safety plans.</li><li>• Comply with the use of protective clothing.</li><li>• Observe statutory requirements.</li></ul>	<ul style="list-style-type: none"><li>• Identify and remove potential hazards.</li><li>• Understand the implications of exposure to hazardous substances and hazards and the prevention of thereof.</li><li>• Implement health and safety plans.</li><li>• Identify, care and use of protective clothing.</li><li>• Implement statutory requirements.</li><li>• Identify the location of fire extinguishers hoses and alarms.</li><li>• Identify, care and use of fire extinguishers.</li><li>• Observe procedures for emergencies.</li><li>• Report accidents and injuries.</li></ul>

2	<b>Good housekeeping practices</b>	<ul style="list-style-type: none"> <li>• Observe correct use of cleaning equipment and materials.</li> <li>• Observe safe use of cleaning equipment and materials.</li> <li>• Report faulty equipment</li> <li>• Keep the workshop clean.</li> <li>• Practice relevant safety routines</li> </ul>	<ul style="list-style-type: none"> <li>• Practice good housekeeping routines.</li> <li>• Realise the impact of poor housekeeping routines.</li> <li>• Practice cleanliness and care of equipment.</li> <li>• Carry out correct and safe use of cleaning equipment and materials.</li> <li>• Report faulty equipment</li> <li>• Ensure cleanliness of workstation and self.</li> <li>• Check equipment and tools for safe and effective</li> <li>• Check equipment for safe and effective</li> <li>• Set tools and equipment to specification.</li> <li>• Set tools and equipment in sequence.</li> <li>• Practice good housekeeping and the impact of poor housekeeping.</li> <li>• Observe organisational housekeeping policies and procedures.</li> <li>• Comply with housekeeping procedures and policies.</li> <li>• Identify and report shortcomings in housekeeping practices.</li> <li>• Comply with relevant safety routines.</li> <li>• Ensure that workstations conform to health and safety requirements.</li> <li>• Know how to isolate and replace faulty</li> </ul>
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		<ul style="list-style-type: none"> <li>Practice safe handling and use of tools and equipment.</li> <li>Practice cleanliness and tidiness of workshop.</li> </ul>	<p>equipment.</p> <ul style="list-style-type: none"> <li>Practice safe handling, use and care of tools and equipment.</li> <li>Practice cleanliness and tidiness of workshop.</li> <li>Store tools and equipment correctly after use.</li> <li>Understand the responsibilities of employees with regard to good housekeeping in the workplace.</li> </ul>
3	<b>Sketches and drawings</b>	<ul style="list-style-type: none"> <li>Identify and interpret components as per job requirements.</li> <li>Produce basic freehand sketches.</li> </ul>	<ul style="list-style-type: none"> <li>Identify and interpret components as per job requirements.</li> <li>Produce freehand sketches that comply with job requirements.</li> <li>Explain freehand sketches and materials.</li> </ul>
4	<b>Basic metalwork skills</b>	<ul style="list-style-type: none"> <li>Use millimetres and metres to measure items.</li> <li>Identify different types of metals.</li> <li>Identify, care and use of basic hand tools.</li> <li>Observe safety rules when using hand tools and equipment.</li> <li>Mark off metals.</li> </ul>	<ul style="list-style-type: none"> <li>Identify different metals and applications of the metals.</li> <li>Identify, care and use of basic hand tools, electric tools and equipment.</li> <li>Observe safety rules when using hand, electrical tools and equipment.</li> <li>Mark off metal accurately</li> </ul>

		<ul style="list-style-type: none"> <li>• Punch large holes in metals.</li> <li>• Demonstrates how to cut metal with a hacksaw.</li> <li>• File metal using cross filing methods.</li> <li>• Grind metal using a small hand grinding tool.</li> <li>• Prevent metal from rusting.</li> <li>• Cut sheet metal.</li> <li>• Repair and replace safety gates and burglar bars.</li> <li>• Identify and use of welding tools and equipment.</li> <li>• Observe safety rules when welding</li> <li>• Use basic metalwork tools and equipment.</li> </ul>	<ul style="list-style-type: none"> <li>• Punch all types of holes in metal.</li> <li>• Demonstrates how to cut metal using a cut-off saw.</li> <li>• File metal using the draw filing method.</li> <li>• Grind metal using an industrial grinding tool.</li> <li>• Treatment of rusted metal.</li> <li>• Mark, cut and bend sheet metal.</li> <li>• Replace a new gate.</li> <li>• Identify, use and care of welding tools and equipment.</li> <li>• Identify, care and use of the gas torch.</li> <li>• Demonstrates use of a soldering iron soldering procedures.</li> <li>• Demonstrates drilling procedures.</li> <li>• Use a riveting gun.</li> <li>• Use different methods of welding and connecting material.</li> </ul>
5	<b>Maintenance - mechanical, bicycle and motor vehicles.</b>	<ul style="list-style-type: none"> <li>• State and practice safety rules when working on a vehicle.</li> <li>• Name different types of small engines (2 stroke and 4 stroke; weed eaters and lawnmowers;</li> </ul>	

		<p>petrol and diesel).</p> <ul style="list-style-type: none"> <li>• Know when and how to start machinery.</li> <li>• Identify the different types of 2 stroke and ordinary oil.</li> <li>• Identify a two stroke petrol engine.</li> <li>• Mix two stroke oil and petrol.</li> <li>• Remove and replace trimmer lines, blades and chains.</li> </ul>	
	<b>Maintenance of a bicycle</b>	<ul style="list-style-type: none"> <li>• Name the different parts of a bicycle.</li> </ul>	<ul style="list-style-type: none"> <li>• Name the tools of sharpening blades.</li> <li>• Sharpen a blade or chain with a file or electric tool.</li> <li>• Operate a fuel or electric driven gardening tool.</li> <li>• Replace a spark plug on a petrol gardening tool.</li> </ul>
	<b>Maintenance of a motor vehicle</b>	<ul style="list-style-type: none"> <li>• Use a bicycle tire pump to pump up a bicycle tyre.</li> <li>• Wash, polish and vacuum a vehicle.</li> <li>• Identify the most common mechanical components/ parts of a vehicle.</li> <li>• Perform basic servicing on a vehicle</li> </ul>	<ul style="list-style-type: none"> <li>• State the basic mechanical workings of a bicycle i.e. brakes, gears etc.</li> <li>• Maintain and service a bicycle.</li> <li>• Replace a chain.</li> <li>• Replace bicycle brake pads.</li> <li>• Repair a bicycle tyre.</li> <li>• Change a bicycle tyre.</li> <li>• Name the parts that should be replaced when servicing a vehicle.</li> <li>• Remove and replace defective parts.</li> </ul>



		<p>accessories.</p> <ul style="list-style-type: none"> <li>• Name the different tools of electrical work.</li> <li>• Name the basic equipment.</li> <li>• Replace a three pin plug.</li> <li>• Replace electrical fittings.</li> <li>• Fix a broken extension lead.</li> <li>• Name different electrical devices.</li> <li>• Know the working system of a basic switch.</li> <li>• Know about connection blocks.</li> <li>• Know the system on a bulb fitting.</li> </ul>	<ul style="list-style-type: none"> <li>• Troubleshoot basic electrical problems.</li> <li>• Replace different bulbs</li> <li>• Repair household appliances.</li> <li>• Solder and insulate wires.</li> <li>• Replace a light fitting.</li> <li>• Replace basic electrical switches.</li> <li>• Assist with repairs of electrical appliances.</li> <li>• Replace a fuse on a stove.</li> <li>• Change defective female plug on a lead wire.</li> <li>• Wire a bed lamp switch.</li> <li>• Wire a bulb fitting.</li> </ul>
7	<b>Building and construction skills.</b> <b>7.1 Painting, Glazing and water proofing</b>	<ul style="list-style-type: none"> <li>• Apply safety regulations regarding paintwork.</li> <li>• Identify and/or the different tools of paintwork.</li> <li>• Identify and/or name the different paints.</li> <li>• Prepare different surfaces e.g. wood,</li> </ul>	



		<p>aluminium, steel, brick etc.</p> <ul style="list-style-type: none"> <li>Adhere to safety regulation regarding glass.</li> <li>Use tools required when working with glass.</li> <li>Measure glass and glass frames.</li> <li>Name different glass types.</li> <li>Know the different types and workings of waterproofing materials.</li> <li>Name the tools in waterproofing.</li> </ul>	<ul style="list-style-type: none"> <li>Apply primer to prepared surfaces.</li> <li>Dilute and mix paint and varnishes.</li> <li>Stain doors and frames.</li> <li>Apply paint, varnish with brush/ roller on all surfaces.</li> <li>Get a high quality finish on all surfaces.</li> <li>Handle glass.</li> <li>Cut glass.</li> <li>Glaze a window, doors and frames.</li> <li>Apply the correct finish.</li> <li>Prepare the surfaces for waterproofing.</li> <li>Work with waterproofing, installing and replace.</li> </ul>
	<b>7.2. Woodwork</b>	<ul style="list-style-type: none"> <li>Measure material.</li> <li>State the safety precautions when working with electrical tools.</li> <li>Work with woodwork tools.</li> <li>Identify and/or name basic carpentry tools.</li> <li>State the rules and safety of using tools.</li> <li>Identify and/or name the different types of timber framework and fittings.</li> </ul>	<ul style="list-style-type: none"> <li>Fit a door.</li> </ul>

		<ul style="list-style-type: none"> <li>Identify different lock types( able to fit door hinges and window fittings)</li> </ul>	<ul style="list-style-type: none"> <li>Fit a window frame.</li> <li>Fit door handle and lock to a door.</li> <li>Perform basic cupboard construction.</li> <li>Know the standard measurement of units (cupboards etc.).</li> <li>Replace cupboard fittings; ( fit cupboard hinges; set cupboard hinges; fit or replace handles; use corner blocks and replace door runners)</li> <li>Replace cupboard sections replace and hang cupboard door; replace drawer front; replace cupboard edgings; replace a sink top)</li> <li>Perform basic assembling.</li> <li>Perform basic woodworking.</li> <li>Solve basic defects and repair breakages in furniture with the use of different methods.</li> </ul>
	<b>7.3. Bricklaying and plastering</b>	<ul style="list-style-type: none"> <li>State safety rules.</li> <li>Identify, care and use of building tools.</li> <li>Construct ladders and scaffoldings.</li> <li>Prepare the area where repair will be done.</li> <li>Identify, care and use of the material in basic brick and plaster work.</li> <li>Mix concrete.</li> <li>Mix mortar/ plaster mix.</li> </ul>	<ul style="list-style-type: none"> <li>Carry out basic bricklaying and plastering techniques</li> <li>Repair basic brickwork.</li> <li>Repair concrete floors.</li> </ul>



		<ul style="list-style-type: none"> <li>• Know the different types of laminated floors (causes and effects).</li> </ul>	<ul style="list-style-type: none"> <li>• Use appropriate tools.</li> <li>• State the effects of expansion and contraction.</li> <li>• Repair a damp/ damaged laminated floor.</li> </ul>
8	<b>Basic plumbing maintenance skills</b>	<ul style="list-style-type: none"> <li>• Identify, use and care of plumbing tools.</li> <li>• State the safety precautions with regards to plumbing.</li> <li>• Identify the water mains shut off and other pipe shut off points.</li> <li>• Name the different types of plumbing pipes; e.g. copper, polycop, PVC, galvanized mild steel.</li> <li>• Measure pipes lengths.</li> <li>• Identify different types of pipes and sizes.</li> <li>• Identify and/or name the tools for fixing a blocked drain.</li> <li>• State the method of unblocking a drain.</li> <li>• Name and be able to use tools for fixing gutters and downpipes.</li> <li>• Identify different fittings for gutters and</li> </ul>	<ul style="list-style-type: none"> <li>• Connect PVC pipes.</li> <li>• Connect copper pipes with gas soldered methods.</li> <li>• Connect pipes with compression fittings.</li> <li>• Replace a tap.</li> <li>• Replace tap washers and reseal a tap.</li> <li>• Demonstrates how to unblock a drain.</li> <li>• Unblock a toilet/ basin/ bath or shower.</li> <li>• Connect gutters and downpipes.</li> <li>• Fix and fit down pipes and fittings.</li> </ul>

		downpipes.	
9	<b>World of work</b>	<ul style="list-style-type: none"> <li>• Practice good work habits- personal presentation</li> <li>• Practice good work habits- social presentation</li> </ul>	<ul style="list-style-type: none"> <li>• Work with competence</li> <li>• Have good work tolerance</li> <li>• Practice appropriate social skills training</li> <li>• Be orientated to the open labour market</li> <li>• Perform personal management/ activities for daily living.</li> <li>• Participate in the learner work experience programme (LWEP).</li> <li>• Identify the criteria for the learner work experience programme.</li> </ul>

### 3.2 OVERVIEW OF TEACHING AND LEARNING PER GRADE

Each term comprises of ten (10) weeks and a minimum of nine (9) **practical sessions** are compulsory. The sequence within the term is not compulsory and the teacher may cover the learning content and skills in any appropriate sequence. Learners spend two years in Grade 5, and therefore different activities are included for the first and second year in grade 4.

The Occupational Health and Safety (OHS) Act 85 of 1993 requires the teacher to comply with the safety regulations when issuing equipment and tools to the learners and the teacher may not leave learners unattended during Art and Crafts instructional time. A group discussion on the safety precautions that must be followed during all the instructional time is compulsory. Learners with a severe intellectual disability are not always able to make abstract judgments, and they are often not able to apply learned knowledge from one topic to the next. Impulsive behavior as well as the inability to make fast decisions can easily lead to learners finding themselves in, or being exposed to dangerous situations.

#### 3.2.1 Grade 4 1<sup>st</sup> and 2<sup>nd</sup> year Term 1

Grade 4 Term 1			
	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
1	<b>Occupational Health and Safety Act 85 of 1993</b>	<b>Grade 4 1<sup>st</sup> year.</b> <ul style="list-style-type: none"><li>• Understand the subject name and field</li><li>• Know health and safety rules.</li><li>• Dress in protective clothing</li><li>• Use protective clothing</li><li>• Identify dirty areas in the workshop</li><li>• Identify cleaning tools, e.g. broom, mop, dustpan.</li><li>• Identify/name cleaning materials, e.g. degreaser, hand cleaner, paraffin, soap</li></ul>	<b>Grade 4 1<sup>st</sup> year</b> <p>The teacher :</p> <ul style="list-style-type: none"><li>• Introduces the subject and subject matter</li><li>• Discusses the benefit of the subject to the learner</li><li>• Discusses the expectations of the teacher and learner</li><li>• Points out safety hazards</li></ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"><li>• Dress in protective clothing</li><li>• Clean the workshop</li><li>• Comply with the rules of the workshop.</li></ul>

Grade 4 Term 1			
	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
		<p>and floor cleaner</p> <p><b>Grade 4 2<sup>nd</sup> year</b></p> <ul style="list-style-type: none"> <li>Identify and remove potential hazards.</li> <li>Practice safety routines.</li> <li>Practice relevant safety routines</li> <li>Practice safe handling and use of tools and equipment.</li> <li>Identify and remove potential hazards.</li> <li>Understand the implications of exposure to hazardous substances and hazards.</li> <li>Report faulty equipment.</li> </ul>	<p><b>Grade 4 2<sup>nd</sup> year</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses hazards, safety routines etc. with the learners.</li> <li>Shows relevant movies, slides, magazines, books, worksheets and poster to learners.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Participate in cleaning activities within the workshop and practice what the teacher has discussed.</li> <li>Identify defective or faulty equipment.</li> </ul>
2	<b>Basic metalwork skills.</b>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Identify, use and care when using basic hand</li> <li>Use millimetres and metres to measure items.</li> <li>Identify different types of metals</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year</b></p> <ul style="list-style-type: none"> <li>Identify, use and care of metalwork tools</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses and demonstrate use and care of basic hand tools</li> <li>Discusses the necessity of using S.I. units to measure items.</li> <li>Uses a ruler and a measuring tape to measure items, lines etc.</li> <li>Demonstrates how to identify the different types of metals</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Identify, use and care for basic hand tools</li> <li>Mark - off a piece of sheet metal, cut, punch holes and fabricate a box.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <p>The teacher:</p>

Grade 4 Term 1			
	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
		<ul style="list-style-type: none"> <li>• Cut, shape and fabricate sheet metal.</li> <li>• Punch large holes in metals.</li> </ul>	<ul style="list-style-type: none"> <li>• Discusses and demonstrate the use and care of metalwork tools</li> <li>• Discusses safety precautions when cutting, shaping and fabricating sheet metal.</li> <li>• Discusses how to cut, shape and fabricate sheet metal.</li> <li>• Discusses how to punch large holes in metal.</li> <li>• Demonstrates how to cut, shape and fabricate sheet metal.</li> <li>• Demonstrates how to punch holes in metals.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• Observe safety precautions when cutting, shaping and fabricating sheet metal and punching holes in metal.</li> <li>• Mark - off a piece of sheet metal, cut, punch holes and fabricate a box.</li> </ul>
3	Basic metalwork skills	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Identify basic hand tools in metalwork.</li> <li>• Use basic equipment in metalwork</li> <li>• Care for basic hand tools</li> <li>• Demonstrates the safe use of hand tools</li> <li>• Produce a sketch of one tool.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions to be observed when using basic hand tools and equipment in metalwork.</li> <li>• Demonstrates the basic hand tools and equipment to learners.</li> <li>• Allows the learners to hold and practice use and care of them under supervision.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• Choose one tool of their choice and make a rough sketch of the tool.</li> <li>• Use the tool on old parts.</li> <li>• Identify basic tools and equipment in metal work.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p>



Grade 4 Term 1			
	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
		<ul style="list-style-type: none"> <li>Identify and use welding tools and equipment</li> <li>Observe safety rules when welding.</li> <li>Grind metal using a small grinding tool.</li> </ul>	<p>The teacher :</p> <ul style="list-style-type: none"> <li>Explains safety when welding.</li> <li>Demonstrates use of welding equipment.</li> <li>Demonstrates grinding techniques.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Identify and use welding tools.</li> <li>Observe safety rules when welding.</li> <li>Measure, cuts and weld two pieces of flat bars.</li> <li>Use a small hand held grinder and grind the welded metal bar.</li> </ul>
4	<b>Basic metalwork skills</b>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Mark off metal.</li> <li>Cut the metal with a hacksaw.</li> <li>File the metal using cross filing methods.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Repair and replace safety gates and burglar bars.</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions when marking off and cutting metal.</li> <li>Demonstrates how to measure</li> <li>Demonstrates how to use a hacksaw.</li> <li>Demonstrates filing techniques.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Measure a short length of round bar about 20 mm</li> <li>Cut the round bar</li> <li>File it square, using cross filing methods.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions when repairing and replacing safety gates</li> </ul>

Grade 4 Term 1			
	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
			<p>and burglar bars.</p> <ul style="list-style-type: none"> <li>• Discusses how to repair and replace safety gates and burglar bars.</li> <li>• Demonstrates how to repair safety gates and burglar bars.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• Observe safety precautions when repairing and replacing safety gates and burglar bars.</li> <li>• Remove, repair and replace safety gates and burglar bars.</li> </ul>
5	<b>Basic metalwork skills</b>	<b>Grade 4 1<sup>st</sup> year:</b> <ul style="list-style-type: none"> <li>• Mark off the work piece.</li> <li>• Cut the metal with a hacksaw.</li> <li>• File the metal using cross filing methods.</li> <li>• Prevent metal from rusting</li> </ul>	<b>Grade 4 1<sup>st</sup> year.</b> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions to be observed when marking off, cutting and filing metal.</li> <li>• Discusses filing methods.</li> <li>• Discusses the reasons for preventing metal from rusting.</li> <li>• Demonstrates how to mark off metal.</li> <li>• Demonstrates how to use a hacksaw to cut metal.</li> <li>• Demonstrates cross filing methods.</li> <li>• Demonstrates how to prevent metal from rusting.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• Observe safety precautions when marking off, cutting and filing metal.</li> <li>• Use the project from week 4 or start a new work piece.</li> <li>• File the metal using cross filing methods.</li> <li>• Use primer and paint to prevent the metal from rusting.</li> </ul>

Grade 4 Term 1			
	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
		<b>Grade 4 2<sup>nd</sup> year.</b> <ul style="list-style-type: none"> <li>Complete all metalwork projects and practice welding techniques.</li> </ul>	<b>Grade 4 2<sup>nd</sup> year.</b> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Allows the learners to complete metalwork projects and practice welding techniques.</li> <li>Carries out enrichment programmes.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Complete all metalwork projects.</li> <li>Practice welding techniques.</li> <li>Participate in enrichment programmes.</li> </ul>
6	Maintenance on mechanical devices	<b>Grade 4 1<sup>st</sup> year.</b> <ul style="list-style-type: none"> <li>State safety rules when working on a vehicle.</li> <li>Practice safety rules when working on a vehicle.</li> <li>Know when and how to start a vehicle and machinery.</li> </ul> <b>Grade 4 2<sup>nd</sup> year.</b> <ul style="list-style-type: none"> <li>Mix two stroke oil and petrol.</li> <li>Remove trimmer lines, blades and chains.</li> <li>Replace trimmer lines, blades and chains.</li> </ul>	<b>Grade 4 1<sup>st</sup> year.</b> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety rules when working on a vehicle.</li> <li>Demonstrates safety rules when starting and working on a vehicle.</li> <li>Demonstrates how to start and switch off vehicles and machinery.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Practice safety rules when working on a vehicle.</li> <li>Start and switch off a vehicle and machinery.</li> </ul> <b>Grade 4 2<sup>nd</sup> year.</b> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions when mixing two stroke oil and petrol.</li> <li>Discusses safety precautions when removing and replacing trimmer lines, blades and chains.</li> <li>Demonstrates how to mix two oil and petrol.</li> </ul>

Grade 4 Term 1			
	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
			<ul style="list-style-type: none"> <li>• Demonstrates how to remove and replace trimmer lines, blades and chains.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• Observe safety precautions when removing and replacing trimmer lines, blades and chains.</li> <li>• Mix two stroke oil and petrol.</li> <li>• Remove and replace trimmer lines, blades and chains.</li> </ul>
7	Maintenance on mechanical devices	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Know the different types of small engines ( 2 stroke and 4 stroke; weed eaters and lawnmowers; petrol and diesel)</li> <li>• Identify the different types of engine oils for a two stroke and four stroke engine</li> <li>• Identify a 2 stroke petrol engine.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Identify and/or name the different parts of a bicycle.</li> <li>• Use a bicycle pump to pump up a</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses the different types of small engines.</li> <li>• Discusses the different types of two stroke and ordinary oils.</li> <li>• Discusses the different types of two stroke and ordinary engines.</li> <li>• Demonstrates the working and purpose of different types of small engines.</li> <li>• Demonstrates how to identify a two stroke and a four stroke engine.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• Identify the different types of engines.</li> <li>• Identify the different types of oils.</li> <li>• State the use of different types of equipment.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions when pumping up a bicycle tyre.</li> <li>• Discusses the different parts of a bicycle.</li> </ul>

Grade 4 Term 1			
	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
		bicycle tyre.	<ul style="list-style-type: none"> <li>Discusses the use of a bicycle tyre pump.</li> <li>Demonstrates how to pump up a bicycle tyre.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Identify the different parts of a bicycle.</li> <li>Use a bicycle pump to pump up a bicycle tyre.</li> </ul>
8	Maintenance on mechanical devices	<p><b>Grade 4 1<sup>st</sup> year:</b></p> <ul style="list-style-type: none"> <li>Wash a vehicle.</li> <li>Polish a vehicle.</li> <li>Vacuum a vehicle.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Perform a basic service on a vehicle.</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions when washing, polishing and vacuuming a vehicle.</li> <li>Discusses washing, polishing and vacuuming a vehicle.</li> <li>Demonstrates how to wash, polish and vacuum a vehicle.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Practice washing, polishing and vacuuming cars at school.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions when performing a basic service on a vehicle.</li> <li>Discusses the reasons for performing a basic service on a vehicle.</li> <li>Demonstrates how to perform a basic service on a vehicle.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Observe safety precautions when performing a basic service on a vehicle.</li> <li>Perform a basic service on a vehicle as per the check list.</li> </ul>

Grade 4 Term 1			
	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
9	Maintenance on mechanical devices	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Identify the most common mechanical components/ parts of a vehicle.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Remove a spark plug.</li> <li>Gap a spark plug.</li> <li>Fit a spark plug.</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher;</p> <ul style="list-style-type: none"> <li>Discusses the most common components/ parts on a vehicle.</li> <li>Identifies the most common components/parts on a vehicle.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Identify the most common component/ parts on a vehicle.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions when removing and refitting a spark plug.</li> <li>Discusses how and why we remove, gap and replace a spark plug.</li> <li>Demonstrates how to remove, gap and replace a spark plug.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Remove, gap and refit a spark plug. The feeler gauge will be set by the teacher.</li> </ul>

**Assessment: Term 1.**

Assessment is formally recorded during four (4) practical sessions with a minimum of four (4) skills reported. Learners, regardless of abilities, shall be assessed on the same skill. The following serves as suggestion of skills to record and report on.

The learner must be able to:

<b>Week</b>	<b>Grade 4 1<sup>st</sup> year</b>	<b>Grade 4 2<sup>nd</sup> year</b>
2	<ol style="list-style-type: none"><li>1. Measure 2 lengths of different metal in millimetres.</li><li>2. Measure a person's height in metres</li></ol>	<ol style="list-style-type: none"><li>1. Punch large holes in a sheet metal.</li><li>2. Cut and bend a piece of sheet metal.</li></ol>
3	<ol style="list-style-type: none"><li>1. Open a small part using a spanner.</li><li>2. Make a simple sketch of a spanner he has used.</li></ol>	<ol style="list-style-type: none"><li>1. Weld two pieces of flat bars together.</li><li>2. Use an angle grinder to grind the welded bars flat.</li></ol>
4	<ol style="list-style-type: none"><li>1. Mark off and cuts a round bar.</li><li>2. Use the cross filing method to file the round bar square.</li></ol>	<ol style="list-style-type: none"><li>1. Remove and repairs a safety gate.</li><li>2. Replace the repaired gate.</li></ol>
5	<ol style="list-style-type: none"><li>1. Mark off, cut and cross file a piece of flat bar.</li><li>2. Use primer and paint to prevent the metal from rusting.</li></ol>	<ol style="list-style-type: none"><li>1. Complete repairs and fitment of gate.</li><li>2. Practice butt welding.</li></ol>
6	<ol style="list-style-type: none"><li>1. Start a vehicle using all the safety rules learnt.</li><li>2. Start a brush cutter/ lawn mover using all the safety rules learnt.</li></ol>	<ol style="list-style-type: none"><li>1. Mix the correct amount of two stroke oil and petrol.</li><li>2. Replace trimmer lines on a brush cutter.</li></ol>
7	<ol style="list-style-type: none"><li>1. Identify the different types of small engines.</li><li>2. Identify the different type of oil used on vehicles and mechanical devices.</li></ol>	<ol style="list-style-type: none"><li>1. Identify the different parts of a bicycle.</li><li>2. Use a bicycle pump to pump up a bicycle tyre.</li></ol>
8	<ol style="list-style-type: none"><li>1. Wash and polish car.</li><li>2. Vacuum a car.</li></ol>	<ol style="list-style-type: none"><li>1. Change the spark plugs on a vehicle.</li><li>2. Replace the oil and oil filter on a vehicle.</li></ol>
9	<ol style="list-style-type: none"><li>1. Identify the engine and the gear box in a vehicle.</li><li>2. Identify the brake parts in a vehicle.</li></ol>	<ol style="list-style-type: none"><li>1. Remove and gap a spark plug using a feeler gauge.</li><li>2. Fit a spark plug and tighten to the correct torque setting.</li></ol>

**Theoretical assessment: Term 1.**

Four theoretical activities are assessed and recorded, however, a minimum of 1 theoretical activity is reported on. The following serves as suggestions of theoretical activities to report on.

The learner must be able to:

<b>Week</b>	<b>Grade 4 1<sup>st</sup> year</b>	<b>Grade 4 2<sup>nd</sup> year</b>
2	Identify one type of metal	Identify and/or name the tool used to cut sheet metal
3	State how you care for basic hand tools	State safety rules practiced when welding.
4	Measure 3 different lines drawn on a A4 page in millimetres.	State the purpose of safety gates and burglar bars.
5	State the reasons for rust proofing metals.	Identify and/or name the different types of welding techniques used thus far.
6	State the reasons for using safety rules when working on a vehicle or machinery.	State the reasons for mixing two stroke oil with petrol when using a two stroke engine.
7	Identify the different types of oils used in engines.	Identify the different parts of a bicycle.
8	Give reasons for washing, polishing and vacuuming a vehicle.	State reason for servicing a vehicle.
9	State the reason for an engine in a vehicle.	State the reason for gapping a spark plug.



### 3.2.2 Grade 4 1st and 2nd year Term 2

Grade 4 Term 2			
Week	Topic	Content The learner must be able to;	Teaching tips, techniques, activities and resources.
1	Good housekeeping practices	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Practice safe handling of tools and equipment.</li> <li>Practice use of tools and equipment.</li> <li>Practice care of tools.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Practice relevant safety routines.</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses how to practice safe handling of tools and equipment.</li> <li>Discusses use and care of tools and equipment.</li> <li>Demonstrates handling, care and use of tools and equipment.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Use basic tools, the drill press and bench grinder while observing all safety rules.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <p>The teacher :</p> <ul style="list-style-type: none"> <li>Discusses relevant safety routines.</li> <li>Demonstrates safety routines.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State and observe safety rules and regulations in the workshop as per the OSH Act.</li> </ul>
2	Maintenance – electrical.	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Carry out safety procedures when working on a vehicle.</li> <li>Identify the different electrical components on a motor vehicle.</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions when working on a vehicle.</li> <li>Discusses the different electrical components on a motor vehicle.</li> <li>Demonstrates safety procedures when working on a vehicle.</li> </ul>

Grade 4 Term 2			
Week	Topic	Content The learner must be able to;	Teaching tips, techniques, activities and resources.
		<p><b>Grade 4 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Change bulbs on a vehicle.</li> </ul>	<p>The learners complete the following tasks:</p> <ul style="list-style-type: none"> <li>• Disconnect a battery while working on a vehicle.</li> <li>• Identify the battery, starter, alternator, fuse box and globes in a vehicle.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses the different types of bulbs on a vehicle.</li> <li>• Demonstrates how to change bulbs on a vehicle.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• Identify burnt out bulbs and remove the cover in order to remove the bulb.</li> </ul>
3	Maintenance electrical.	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Identify safety rules when working with electricity.</li> <li>• Identify the different electrical materials.</li> <li>• Identify the different bulbs.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• State the function of a DB board</li> <li>• Know the working system of a basic</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety rules when working with electricity.</li> <li>• Discusses the different types of electrical materials.</li> <li>• Discusses the different types of bulbs.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State safety rules when working with electricity.</li> <li>• Identify different types of wires, fuses and connectors.</li> <li>• Identify the different types of bulbs used in a motor vehicle.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses the function of a DB board.</li> </ul>

Grade 4 Term 2			
Week	Topic	Content The learner must be able to;	Teaching tips, techniques, activities and resources.
		switch	<ul style="list-style-type: none"> <li>Discusses the working system of a basic switch.</li> <li>Demonstrates how a basic switch works.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Identify and state the function of the DB board.</li> <li>Know how a basic switch operates and wire a basic switch.</li> </ul>
4	Maintenance – electrical.	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Identify and/or name the colour codes on different accessories.</li> <li>Identify and/or name the different tools of electrical work.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year</b></p> <ul style="list-style-type: none"> <li>Replace electrical fittings.</li> <li>Fix a broken extension lead.</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the colour codes on different accessories.</li> <li>Discusses the different tools of electrical work.</li> <li>Demonstrates how to use and care for different electrical tools.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State the colour codes when wiring electrical appliances.</li> <li>Identify and be able to use the basic electrical tools.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses electrical fittings.</li> <li>Discusses how to fix a broken extension lead.</li> <li>Demonstrates how to replace electrical fittings.</li> <li>Demonstrates how to fix a broken extension.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Replace electrical fittings.</li> <li>Test and repair a broken electrical lead.</li> </ul>

Grade 4 Term 2			
Week	Topic	Content The learner must be able to;	Teaching tips, techniques, activities and resources.
5	Maintenance – electrical.	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Identify and/or name the basic electrical equipment</li> <li>Replace a three pin plug.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year</b></p> <ul style="list-style-type: none"> <li>Identify and/or name different electrical devices.</li> <li>Know about connection blocks.</li> <li>Know the system on bulb fittings.</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses basic electrical equipment.</li> <li>Discusses how to replace a three pin plug.</li> <li>Demonstrates how to use basic electrical equipment.</li> <li>Demonstrates how to replace a three pin plug.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Identify and name basic electrical equipment.</li> <li>Rewire and replace a 3 pin plug.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses different electrical devices.</li> <li>Discusses connection blocks.</li> <li>Discusses the system on bulb fittings.</li> <li>Demonstrates how to use connection blocks.</li> <li>Identify/name different electrical devices.</li> <li>Demonstrates how to wire a bulb fitting.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Identify and/or name different electrical devices at home.</li> <li>Identify and be able to use a connection block.</li> <li>Understand how a bulb fitting works and be able to wire a bulb fitting.</li> </ul>
6	Basic plumbing	<b>Grade 4 1<sup>st</sup> year.</b>	<b>Grade 4 1<sup>st</sup> year.</b>

Grade 4 Term 2			
Week	Topic	Content The learner must be able to;	Teaching tips, techniques, activities and resources.
	<b>maintenance skills.</b>	<ul style="list-style-type: none"> <li>Identify, use and care for plumbing tools.</li> <li>State the safety precautions with regards to plumbing.</li> </ul> <b>Grade 4 2<sup>nd</sup> year.</b> <ul style="list-style-type: none"> <li>Identify, care and use of the tools for fixing a blocked drain.</li> </ul>	<p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses care, use and care of plumbing tools.</li> <li>Discusses safety precautions with regards to plumbing.</li> <li>Demonstrates how to use basic plumbing tools.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Identify, use and care for basic plumbing tools</li> <li>Take necessary safety precautions when carrying out plumbing repairs.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses care and use of tools used for fixing drains.</li> <li>Demonstrates how to use tools for fixing drains.</li> </ul> <p>The learner completes the following tasks:</p> <ul style="list-style-type: none"> <li>Identify, use and care for tools that are used to fix a blocked drain.</li> </ul>
7	<b>Basic plumbing maintenance skills.</b>	<b>Grade 4 1<sup>st</sup> year.</b> <ul style="list-style-type: none"> <li>Identify water mains shut off and other pipe shut off points.</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses how to identify water mains shut off and other pipe shut off points.</li> <li>Demonstrates how to shut off water mains and other pipe shut off points.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Identify and shut off the water mains tap as well as be able to shut off other shut off points.</li> </ul>

Grade 4 Term 2			
Week	Topic	Content The learner must be able to;	Teaching tips, techniques, activities and resources.
		<b>Grade 4 2<sup>nd</sup> year.</b> <ul style="list-style-type: none"> <li>State the methods of unblocking a drain.</li> </ul>	<b>Grade 4 2<sup>nd</sup> year.</b> The teacher: <ul style="list-style-type: none"> <li>Discusses the methods of unblocking a drain.</li> <li>Demonstrates how to unblock a drain.</li> </ul> The learners complete the following tasks: <ul style="list-style-type: none"> <li>State the methods of unblocking a drain and use the appropriate tools to unblock a drain.</li> </ul>
8	<b>Basic plumbing maintenance skills.</b>	<b>Grade 4 1<sup>st</sup> year.</b> <ul style="list-style-type: none"> <li>Identify and/or name the different types of plumbing pipes: e.g. Copper, polycop, PVC, galvanised mild steel</li> </ul> <b>Grade 4 2<sup>nd</sup> year.</b> <ul style="list-style-type: none"> <li>Identify, use and care of tools for fixing gutters and downpipes.</li> </ul>	<b>Grade 4 1<sup>st</sup> year.</b> The teacher: <ul style="list-style-type: none"> <li>Discusses the different types of plumbing pipes.</li> </ul> The learners complete the following activities: <ul style="list-style-type: none"> <li>Identify the different types of plumbing pipes that are mounted on a display board.</li> </ul> <b>Grade 4 2<sup>nd</sup> year.</b> The teacher: <ul style="list-style-type: none"> <li>Discusses use and care of tools used to fix gutters and downpipes.</li> </ul> The learners complete the following activities: <ul style="list-style-type: none"> <li>Identify, use and care for the different types of tools that are used to fix gutters and downpipes.</li> <li>Take all necessary safety precautions.</li> </ul>
9	<b>Basic plumbing maintenance skills.</b>	<b>Grade 4 1<sup>st</sup> year.</b> <ul style="list-style-type: none"> <li>Measure pipe lengths.</li> </ul>	<b>Grade 4 1<sup>st</sup> year.</b> The teacher: <ul style="list-style-type: none"> <li>Discusses how to measure pipe lengths.</li> </ul>

Grade 4 Term 2			
Week	Topic	Content The learner must be able to;	Teaching tips, techniques, activities and resources.
		<ul style="list-style-type: none"> <li>Identify different types of pipes and sizes.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Identify different fittings for gutters and downpipes.</li> </ul>	<ul style="list-style-type: none"> <li>Discusses how to identify sizes and types of pipes.</li> <li>Demonstrates how to measure pipes.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Use a measuring tape to measure pipes in millimetres, centimetres and metres.</li> <li>Identify the different pipes of feed and drainage pipes as well identify the different sizes of pipes.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <p>The teacher :</p> <ul style="list-style-type: none"> <li>Discusses the different fittings for gutters and downpipes.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Identify and fit the different fittings for gutters and downpipes.</li> </ul>

**Practical Assessments: Term 2.**

Assessment is formally recorded during four (4) practical sessions with a minimum of four (4) skills reported. Learners, regardless of abilities, shall be assessed on the same skill. The following serves as suggestion of skills to record and report on.

The learner must be able to:

<b>Week</b>	<b>Grade 4 1<sup>st</sup> year</b>	<b>Grade 4 2<sup>nd</sup> year.</b>
2	<ol style="list-style-type: none"><li>1. Disconnect a negative terminal on the battery.</li><li>2. Point out at least 5 electrical components.</li></ol>	<ol style="list-style-type: none"><li>1. Remove the covers of the different bulbs.</li><li>2. Change the different bulbs on a vehicle.</li></ol>
3	<ol style="list-style-type: none"><li>1. Practice the different safety rules when working with electricity.</li><li>2. Identify the different types of bulbs.</li></ol>	<ol style="list-style-type: none"><li>1. Identify the positive, negative and neutral wires on a DB board.</li><li>2. Connect up a basic switch.</li></ol>
4	<ol style="list-style-type: none"><li>1. Identify the different colour codes on electrical equipment.</li><li>2. Use the different tools in electrical work.</li></ol>	<ol style="list-style-type: none"><li>1. Replace a light fitting.</li><li>2. Fix a broken extension cord.</li></ol>
5	<ol style="list-style-type: none"><li>1. Identify and use a soldering iron.</li><li>2. Change a 3 pin plug.</li></ol>	<ol style="list-style-type: none"><li>1. Use a connection block.</li><li>2. Fix a faulty bulb fitting.</li></ol>
6	<ol style="list-style-type: none"><li>1. Use and care of basic plumbing tools.</li><li>2. Shut off the geyser.</li></ol>	<ol style="list-style-type: none"><li>1. Use and care for tools used in unblocking drains.</li><li>2. Open manhole covers.</li></ol>
7	<ol style="list-style-type: none"><li>1. Shut off the water mains.</li><li>2. Close and open in-line shut off valves.</li></ol>	<ol style="list-style-type: none"><li>1. Remove the excess water from a drain or manhole.</li><li>2. Use a drain unblocking tool to clear a drain.</li></ol>
8	<ol style="list-style-type: none"><li>1. Identify supply water pipes.</li><li>2. Identify waste water pipes.</li></ol>	<ol style="list-style-type: none"><li>1. Identify, care and use the tools used to repair gutters.</li><li>2. Identify, care and use tools for fixing downpipes.</li></ol>
9	<ol style="list-style-type: none"><li>1. Measure pipe lengths in millimetres, centimetres and metres.</li><li>2. Identify different types of pipes and measure and identify different pipe sizes.</li></ol>	<ol style="list-style-type: none"><li>1. Identify different gutter fittings.</li><li>2. Identify different downpipe fittings.</li></ol>



**Theoretical assessment: Term 2.**

Four theoretical activities are assessed and recorded, however, a minimum of 1 theoretical activity is reported on. The following serves as suggestions of theoretical activities to report on.

The learner must be able to:

<b>Week</b>	<b>Grade 4 1<sup>st</sup> year</b>	<b>Grade 4 2<sup>nd</sup> year.</b>
2	State the two most important safety precautions when working on the electrical system of a vehicle.	State the reasons for changing bulbs on a vehicle.
3	State the reasons for observing safety rules when working on electricity.	State the function of a DB board.
4	Identify the different colour codes in wiring.	Draw a simple light circuit diagram.
5	Draw and label a simple diagram of a 3 pin plug.	Identify three electrical devices.
6	State basic safety precautions when carrying out plumbing repairs.	Identify the two main tools used in unblocking drains.
7	Draw a simple sketch of a water cycle.	State 3 main reasons as to why drains get blocked.
8	Identify the common water supply pipes used.	State the reasons for using angles when installing gutters.
9	Use a measuring tape.	Identify the different types of materials used for gutters and downpipes.

### 3.2.3 Grade 4: 1st and 2nd year: Term 3.

Grade 4 Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
1	Good housekeeping practices.	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Practice cleanliness and tidiness of workshop.</li> <li>Observe correct use of cleaning equipment and materials.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Observe statutory requirements.</li> <li>Keep the workshop clean.</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses cleanliness and tidiness of a workshop.</li> <li>Discusses the correct use of cleaning equipment and materials.</li> <li>Demonstrates how to clean and keep a workshop tidy.</li> <li>Demonstrates the correct use of cleaning equipment and materials.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Practice cleanliness of the workshop by sweeping, washing and setting the workshop. Learners are divided into different groups to achieve this.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the OSH Act with the learners.</li> <li>Discusses how to keep the workshop clean.</li> <li>Demonstrates cleaning procedures in the workshop.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Sweep, wash and reset the workshop.</li> </ul>
2	Building and construction skills:	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Apply safety regulations regarding</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p>

Grade 4 Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	<b>Painting, Glazing and water proofing.</b>	<p>paintwork.</p> <ul style="list-style-type: none"> <li>Identify, use and care for different tools of paintwork.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Know the different types and workings of water proofing materials.</li> </ul>	<ul style="list-style-type: none"> <li>Discusses safety regulations with regards to paintwork.</li> <li>Discusses the different tools of paintwork.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Use protective clothing when painting and set up ladders for painting.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the different types of water proofing materials.</li> <li>Discusses the workings of water proofing materials.</li> <li>Demonstrates how to apply water proofing materials.</li> </ul> <p>The learner complete the following activities:</p> <ul style="list-style-type: none"> <li>Identify the different types of waterproofing materials and how to apply them.</li> </ul>
3	<b>Building and construction skills: Painting, Glazing and water proofing.</b>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Identify the different types of paints and how to clean brushes and paint spillages.</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses how to identify different types of paints and how to clean up spillages and paint brushes.</li> <li>Demonstrates how to clean up paint brushes and paint spillages.</li> </ul> <p>The learner complete the following activities:</p> <ul style="list-style-type: none"> <li>Identify oil based and water based paints.</li> <li>Use different solvents or water to clean paint brushes and paint spillages.</li> </ul>

Grade 4 Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
		<b>Grade 4 2<sup>nd</sup> year.</b> <ul style="list-style-type: none"> <li>Identify, use and care of the tools in waterproofing.</li> </ul>	<b>Grade 4 2<sup>nd</sup> year.</b> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses care and use of water proofing tools.</li> <li>Demonstrates how to clean water proofing tools.</li> </ul> <p>The learner complete the following activities:</p> <ul style="list-style-type: none"> <li>Identify, use and care for the tools used in waterproofing.</li> <li>Understand drying times of water proofing materials and wash tools immediately after use.</li> </ul>
4	<b>Building and construction skills: Painting, Glazing and water proofing.</b>	<b>Grade 4 1<sup>st</sup> year.</b> <ul style="list-style-type: none"> <li>Prepare different surfaces e.g. wood, aluminium, steel, brick.</li> </ul> <b>Grade 4 2<sup>nd</sup> year.</b> <ul style="list-style-type: none"> <li>Identify, care and use of tools when working with glass.</li> </ul>	<b>Grade 4 1<sup>st</sup> year.</b> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses how to prepare different surfaces for painting.</li> <li>Demonstrates how to prepare different surfaces for painting.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Prepare surfaces before painting. (The learner is able to understand that preparation determines the quality of the finished job.)</li> </ul> <b>Grade 4 2<sup>nd</sup> year.</b> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses how to care and use tolls used to cut glass.</li> <li>Demonstrates how to care for glass cutters.</li> </ul> <p>The learner complete the following activities:</p> <ul style="list-style-type: none"> <li>Identify, care and use glass cutting tools.</li> </ul>

Grade 4 Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
			<ul style="list-style-type: none"> <li>Carry out all safety precautions when working with glass.</li> </ul>
5	<b>Building and construction skills: Painting, Glazing and water proofing.</b>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Adhere to safety regulations regarding glass.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Measure glass and glass frame.</li> <li>Identify different glass types.</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety regulations regarding glass.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State safety regulations when working with glass</li> <li>Observe the safety regulations.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses how to measure glass and glass frames.</li> <li>Discusses the different types of glass.</li> <li>Demonstrates how to measure frame rebate and glass.</li> </ul> <p>The learner complete the following tasks:</p> <ul style="list-style-type: none"> <li>Use a measuring tape to measure glass frames and to measure glass for cutting.</li> <li>State the 3 main types of glass used in households.</li> </ul>
6	<b>Building and construction skills: Woodwork</b>	<p><b>Grade 4 1<sup>st</sup> year</b></p> <ul style="list-style-type: none"> <li>Measure and mark off materials.</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses how to measure and mark off materials.</li> <li>Demonstrates how to measure and mark off materials.</li> </ul> <p>The learner complete the following activities:</p> <ul style="list-style-type: none"> <li>Use a measuring tape to measure and mark off wood.</li> </ul>

Grade 4 Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
		<b>Grade 4 2<sup>nd</sup> year</b> <ul style="list-style-type: none"> <li>State and practice safety precautions when working with electrical tools.</li> </ul>	<b>Grade 4 2<sup>nd</sup> year.</b> The teacher: <ul style="list-style-type: none"> <li>Discusses safety precautions when working with electrical tools,</li> <li>Demonstrates how to use and care for electrical tools.</li> </ul> The learner complete the following activities: <ul style="list-style-type: none"> <li>Start and switch off electrical appliances.</li> <li>Use safety equipment and apparel when working with electrical tools.</li> </ul>
7	<b>Building and construction skills: Woodwork.</b>	<b>Grade 4 1<sup>st</sup> year.</b> <ul style="list-style-type: none"> <li>State the rules and practice safety when using tools.</li> </ul> <b>Grade 4 2<sup>nd</sup> year.</b> <ul style="list-style-type: none"> <li>Identify the different types of timber framework and fittings.</li> </ul>	<b>Grade 4 1<sup>st</sup> year.</b> The teacher: <ul style="list-style-type: none"> <li>Discusses rules and safety practices when using basic woodwork tools.</li> <li>Demonstrates how to use woodwork tools safely.</li> </ul> The learner completes the following tasks: <ul style="list-style-type: none"> <li>State safety rules when using basic woodwork tools.</li> <li>Carry out safety practices when using basic tools.</li> </ul> <b>Grade 4 2<sup>nd</sup> year.</b> The teacher: <ul style="list-style-type: none"> <li>Discusses the different types of timber framework and fittings.</li> </ul> The learners complete the following activities: <ul style="list-style-type: none"> <li>Identify the door and window frames and the fittings that go with it.</li> </ul>

Grade 4 Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
8	<b>Building and construction skills: Woodwork.</b>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Work with woodwork tools.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Identify different lock types( able to fit door locks)</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses how to work with woodwork tools.</li> <li>Demonstrates how to work safely and care for woodwork tools.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Use and care for basic woodwork tools.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the different door lock types.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Identify and fit different types of door locks.</li> <li>Use wood chisels to prepare the door for fitment of locks.</li> </ul>
9	<b>Building and construction skills: Woodwork.</b>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Identify, care and use of basic carpentry tools.</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses care and use of basic carpentry tools.</li> <li>Demonstrates how to use basic carpentry tools.</li> </ul> <p>The learner completes the following tasks:</p> <ul style="list-style-type: none"> <li>Identify, care and use basic carpentry tools to carry out basic woodwork procedures.</li> <li>Use a jack plane, different types of saws and sash clamps to carry out basic woodwork procedures.</li> </ul>

Grade 4 Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
		<b>Grade 4 2<sup>nd</sup> year.</b> <ul style="list-style-type: none"> <li>Identify different lock types( able to fit hinges and window fittings)</li> </ul>	<b>Grade 4 2<sup>nd</sup> year.</b> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the different lock types.</li> <li>Demonstrates how to fit hinges.</li> <li>Demonstrates how to fit door locks.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Fit windows and doors.</li> <li>Fit door hinges and window fittings.</li> </ul>



**Practical assessments: Term 3.**

Assessment is formally recorded during four (4) practical sessions with a minimum of four (4) skills reported. Learners, regardless of abilities, shall be assessed on the same skill. The following serves as suggestion of skills to record and report on.

The learner must be able to:

<b>Week</b>	<b>Grade 4 1<sup>st</sup> year.</b>	<b>Grade 4 2<sup>nd</sup> year</b>
2	<ol style="list-style-type: none"><li>1. Use different types of safety equipment.</li><li>2. Set up and use a ladder.</li></ol>	<ol style="list-style-type: none"><li>1. Cut and use fibre glass membrane for waterproofing roofs.</li><li>2. Use water proofing paint on fibre glass membrane.</li></ol>
3	<ol style="list-style-type: none"><li>1. Identify water based and oil based paints.</li><li>2. Clean paint and roller brushes after use.</li></ol>	<ol style="list-style-type: none"><li>1. Use and care for scrapers and wire brushes.</li><li>2. Use and care for paint and roller brushes.</li></ol>
4	<ol style="list-style-type: none"><li>1. Scrape a wall and sandpaper different surfaces.</li><li>2. Fill cracks on walls and sand down.</li></ol>	<ol style="list-style-type: none"><li>1. Care and use for a glass cutter.</li><li>2. Care and use for a putty knife and scraper.</li></ol>
5	<ol style="list-style-type: none"><li>1. Remove broken glass using safety equipment.</li><li>2. Handle glass using safety equipment.</li></ol>	<ol style="list-style-type: none"><li>1. Use a measuring tape to measure accurately.</li><li>2. Identify the different types of glass i.e. plated glass, frosted glass and window panes.</li></ol>
6	<ol style="list-style-type: none"><li>1. Use a measuring tape to measure timber.</li><li>2. Use marking off equipment to mark off wood.</li></ol>	<ol style="list-style-type: none"><li>1. Switch an electric tool on and off.</li><li>2. Use tools without injury to the learner by observing all safety rules.</li></ol>
7	<ol style="list-style-type: none"><li>1. Use and safety precaution when using a claw hammer.</li><li>2. Use safety equipment when doing woodwork.</li></ol>	<ol style="list-style-type: none"><li>1. Identify different doors (inside and outside doors) and windows.</li><li>2. Identify and fit different types of door handles.</li></ol>
8	<ol style="list-style-type: none"><li>1. Care and use of a sash clamp.</li><li>2. Care and use the woodwork bench vice.</li></ol>	<ol style="list-style-type: none"><li>1. Drill and chisel out wood in door for fitment of a door lock.</li><li>2. Fit a door lock and handles.</li></ol>
9	<ol style="list-style-type: none"><li>1. Use and care for a jack plane.</li><li>2. Use and care of wood chisels.</li></ol>	<ol style="list-style-type: none"><li>1. Replace door hinges.</li><li>2. Replace window hinges and locking mechanisms.</li></ol>

**Theoretical assessment: Term 3.**

Four theoretical activities are assessed and recorded, however, a minimum of 1 theoretical activity is reported on. The following serves as suggestions of theoretical activities to report on.

The learner must be able to:

<b>Week</b>	<b>Grade 4 1<sup>st</sup> year</b>	<b>Grade 4 2<sup>nd</sup> year</b>
2	State the main safety regulation when painting.	State the purpose of water proofing roofs.
3	Differentiate between oil and water based paint.	State the purpose of preparing a surface for water proofing.
4	State the main reason for preparing surfaces for painting.	State the purpose of a glass cutter.
5	State safety regulations when working with glass.	Identify the 3 different types of glass used when glazing.
6	State why we measure and mark off materials.	State the safety rules observed when using electric tools.
7	State the rules when using basic hand tools.	State the main differences between external doors and internal doors.
8	State the purpose of a sash clamp.	State the purpose of door locks.
9	State the purpose of wood chisels.	State how you would repair a loose door hinge.

### 3.2.4 Grade 4: 1st and 2nd year - Term 4.

Grade 4 Term 4			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, Activities and resource.
1	Good housekeeping practices.	<p><b>Grade 4: 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Keep the workshop clean.</li> </ul> <p><b>Grade 4: 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Practice relevant safety routines.</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses cleanliness of the workshop.</li> <li>Demonstrates how to clean a workshop.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Sweep, wash and reset the workshop.</li> <li>Carry out good housekeeping practices.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses how to practice relevant safety routines.</li> <li>Demonstrates how to practice safety routines.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Follow a fire drill and evacuation procedures.</li> </ul>
2	Building and construction skills: Bricklaying and plastering.	<p><b>Grade 4: 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>State safety rules.</li> <li>Identify, care and use of building tools.</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety rules.</li> <li>Discusses care and use of building tools.</li> <li>Demonstrates care and use of building tools.</li> </ul> <p>The learners complete the following activities:</p>

Grade 4 Term 4			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, Activities and resource.
		<p><b>Grade 4 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Identify the material used in basic brick and plaster work.</li> </ul>	<ul style="list-style-type: none"> <li>State and practices safety rules in the workshop.</li> <li>Identify, care and use building tools.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses how to identify materials used in basic brick and plaster work.</li> <li>Demonstrates the basic materials used in brick and plaster work.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State/identify the materials used in basic brick and plaster work.</li> </ul>
3	<b>Building and construction skills: Bricklaying and plastering.</b>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Construct ladders safely.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Mix concrete.</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses how to construct ladders safely.</li> <li>Demonstrates how to construct ladders safely.</li> </ul> <p>The learner complete the following activities:</p> <ul style="list-style-type: none"> <li>Construct a ladder safely.</li> <li>Use a safety harness while on the ladder.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses how to mix concrete.</li> <li>Demonstrates how to mix concrete.</li> </ul> <p>The learners complete the following activities:</p>

Grade 4 Term 4			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, Activities and resource.
			<ul style="list-style-type: none"> <li>Make a dry mix concrete and then a wet mix concrete. (The learner will not use cement for the mix, the learner will use lime).</li> </ul>
4	<b>Building and construction skills: Bricklaying and plastering.</b>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Construct scaffoldings</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Mix mortar.</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses how to construct scaffoldings.</li> <li>Demonstrates how to construct scaffoldings.</li> </ul> <p>The learner complete the following activities:</p> <ul style="list-style-type: none"> <li>Construct and dismantle a basic scaffold.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses how to mix mortar.</li> <li>Demonstrates how to mix mortar.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Make a dry mix of mortar and then a wet mix of mortar. (The learner will not use cement for the mix, the learner will use lime).</li> </ul>
5	<b>Building and construction skills: Bricklaying and plastering.</b>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Prepare the area where repair will be done.</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses how to prepare the area where repair will be done.</li> <li>Demonstrates how to prepare the area where repairs will be done.</li> </ul> <p>The learner complete the following activities:</p> <ul style="list-style-type: none"> <li>Prepares the area where building repairs is to take place.</li> </ul>

Grade 4 Term 4			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, Activities and resource.
		<b>Grade 4 2<sup>nd</sup> year.</b> <ul style="list-style-type: none"> <li>Mix plaster</li> </ul>	<b>Grade 4 2<sup>nd</sup> year.</b> The teacher: <ul style="list-style-type: none"> <li>Discusses how to mix plaster.</li> <li>Demonstrates how to mix plaster.</li> </ul> The learners complete the following activities: <ul style="list-style-type: none"> <li>Make a dry plaster mix and then a wet plaster mix. (The learner will not use cement for the mix, the learner will use lime.)</li> </ul>
6	<b>Building and construction skills: Floor and wall finishes - tiling</b>	<b>Grade 4 1<sup>st</sup> year</b> <ul style="list-style-type: none"> <li>Identify, care and use of tiling tools.</li> </ul> <b>Grade 4 2<sup>nd</sup> year.</b> <ul style="list-style-type: none"> <li>Mix tile adhesive.</li> </ul>	<b>Grade 4 1<sup>st</sup> year.</b> The teacher: <ul style="list-style-type: none"> <li>Discusses care and use of tiling tools.</li> <li>Demonstrates how to use tiling tools.</li> </ul> The learners complete the following activities: <ul style="list-style-type: none"> <li>Identify, cares and uses basic tiling tools. i.e. Tile cutter, pinchers, spacers, try square and level.</li> </ul> <b>Grade 4 2<sup>nd</sup> year.</b> The teacher: <ul style="list-style-type: none"> <li>Discusses how to mix tile adhesive.</li> <li>Demonstrates how to mix tile adhesive.</li> </ul> The learners complete the following tasks: <ul style="list-style-type: none"> <li>Mix the required amount of tile adhesive to the correct consistencies for use.</li> </ul>
7	<b>Building and</b>	<b>Grade 4 1<sup>st</sup> year.</b>	<b>Grade 4 1<sup>st</sup> year.</b>

Grade 4 Term 4			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, Activities and resource.
	<b>construction skills: Floor and wall finishes - tiling</b>	<ul style="list-style-type: none"> <li>State safety precautions when using tiling tools.</li> </ul> <b>Grade 4 2<sup>nd</sup> year.</b> <ul style="list-style-type: none"> <li>Measure tiles, floor surfaces and wall surfaces.</li> </ul>	<p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions when using tiling tools.</li> <li>Demonstrates safety precautions when using tiling tools.</li> </ul> <p>The learner complete the following activities:</p> <ul style="list-style-type: none"> <li>Follow safety precautions when using a tile cutter</li> <li>Follow safety precautions when using a angle grinder,</li> </ul> <b>Grade 4 2<sup>nd</sup> year.</b> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses how to measure tiles, floor surfaces and wall surfaces.</li> <li>Demonstrates how to measure tiles, floor surfaces and wall surfaces.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Measure floor and wall space and calculate the amount of tiles required.</li> </ul>
8	<b>Building and construction skills: Floor and wall finishes - Carpet laying</b>	<b>Grade 4 1<sup>st</sup> year.</b> <ul style="list-style-type: none"> <li>Identify, care and use of basic carpet laying tools.</li> </ul> <b>Grade 4 2<sup>nd</sup> year.</b> <ul style="list-style-type: none"> <li>Name the different types of carpets.</li> </ul>	<b>Grade 4 1<sup>st</sup> year.</b> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses care and use of basic carpet laying tools.</li> <li>Demonstrates care and use of carpet laying tools.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Identify, care and use basic carpet laying tools.</li> </ul> <b>Grade 4 2<sup>nd</sup> year.</b> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the different types of carpets and under felt.</li> </ul>

Grade 4 Term 4			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, Activities and resource.
			<ul style="list-style-type: none"> <li>Discusses how to lay carpet tiles.</li> <li>Demonstrates how to lay carpet tiles.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Identify the different types of carpets and under felt..</li> <li>Lay carpet tiles.</li> </ul>
9	<p><b>Building and construction skills:</b> <b>Floor and wall finishes - Carpet laying</b></p> <p><b>Building and construction skills:</b> <b>Floor and wall finishes - Laminating floors</b></p>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>State the safety precautions when carpet laying.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Know the different types of laminated floors.</li> </ul>	<p><b>Grade 4 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions when carpet laying.</li> <li>Demonstrates safe carpet laying.</li> <li>Demonstrates how to use a Stanley knife safely.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State safety precautions, especially when using a Stanley knife when laying carpet.</li> <li>Lay a carpet safely.</li> </ul> <p><b>Grade 4 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the different types of laminate floor.</li> <li>Demonstrates basic laying of laminate strips.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State and identify the different types of laminated floors.</li> <li>Carry out basic laying of laminate strips.</li> </ul>



**Practical assessment: Term 4.**

Assessment is formally recorded during four (4) practical sessions with a minimum of four (4) skills reported. Learners, regardless of abilities, shall be assessed on the same skill. The following serves as suggestion of skills to record and report on.

The learner must be able to:

<b>Week</b>	<b>Grade 4 1<sup>st</sup> year</b>	<b>Grade 4 2<sup>nd</sup> year.</b>
2	<ol style="list-style-type: none"><li>1. Use a spirit level.</li><li>2. Use the different types of trowels.</li></ol>	<ol style="list-style-type: none"><li>1. Identify bricks and blocks.</li><li>2. Identify different types of sand, stone and cement.</li></ol>
3	<ol style="list-style-type: none"><li>1. Inspect a ladder for safety and repair where possible.</li><li>2. Construct ladders safely.</li></ol>	<ol style="list-style-type: none"><li>1. Make a dry concrete mix.</li><li>2. Make a wet concrete mix.</li></ol>
4	<ol style="list-style-type: none"><li>1. Erect scaffolding.</li><li>2. Dismantle scaffolding.</li></ol>	<ol style="list-style-type: none"><li>1. Make a dry mortar mix.</li><li>2. Make a wet mortar mix.</li></ol>
5	<ol style="list-style-type: none"><li>1. Chip and prepare a wall or floor for tiling.</li><li>2. Apply Keycote and other bonding liquids to walls.</li></ol>	<ol style="list-style-type: none"><li>1. Make a dry plaster mix.</li><li>2. Make a wet plaster mix.</li></ol>
6	<ol style="list-style-type: none"><li>1. Use a tile cutter.</li><li>2. Use a pincher to nibble tiles.</li></ol>	<ol style="list-style-type: none"><li>1. Mix tile adhesive.</li><li>2. Apply tile adhesive.</li></ol>
7	<ol style="list-style-type: none"><li>1. Use goggles when using a hand held grinder to cut tiles.</li><li>2. Use goggles when chipping walls.</li></ol>	<ol style="list-style-type: none"><li>1. Measure tiles for cutting.</li><li>2. Measure floor and wall surfaces.</li></ol>
8	<ol style="list-style-type: none"><li>1. Use a carpet fitter's bolster and a carpet stretcher.</li><li>2. Use a measuring tape and a Stanley knife.</li></ol>	<ol style="list-style-type: none"><li>1. Fit the different types of under felt.</li><li>2. Fit the different types of carpets.</li></ol>
9	<ol style="list-style-type: none"><li>1. Use a Stanley knife safely.</li><li>2. Fit the nail gripper strip on the floor.</li></ol>	<ol style="list-style-type: none"><li>1. Prepare a floor for fitting laminate strips.</li><li>2. Lay the laminate strips.</li></ol>

**Theoretical Assessment: Term 4.**

Four theoretical activities are assessed and recorded, however, a minimum of 1 theoretical activity is reported on. The following serves as suggestions of theoretical activities to report on.

The learner must be able to:

<b>Week</b>	<b>Grade 4 1<sup>st</sup> year.</b>	<b>Grade 4 2<sup>nd</sup> year.</b>
2	State one use of a spirit level.	Name the basic material used for concrete work, brickwork and plastering.
3	State 3 safety rules when using a ladder.	Know the materials used in concrete work and state the steps when mixing concrete.
4	State the basic safety steps when erecting scaffoldings.	Know the materials used in a mortar mix and state the steps when mixing mortar.
5	State the reasons for preparing a surface before tiling.	Know the materials used for a plaster mix and state the steps when making a plaster mix.
6	Identify the basic tiling tools and state the use thereof.	State the reason for using tile adhesive when fixing tiles.
7	State the safety rules when using tiling tools.	Name the different types and grades of tiles.
8	Identify basic carpet laying tools.	Name the different types of carpets.
9	State the safety rules when carpet laying.	State the basic steps when laying laminated floors.

### 3.2.5 Grade 5: 1st, 2nd and 3rd year - Term 1.

		Grade 5	Term 1
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
1	Health and safety.	<p><b>Grade 5 1<sup>st</sup> year:</b></p> <ul style="list-style-type: none"> <li>Identify and remove potential hazards.</li> <li>Understand the implications of exposure to hazardous substances and hazards and prevention thereof.</li> <li>Implement health and safety plans</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year:</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses health and safety issues with regards to hazardous substances.</li> <li>Discusses health and safety plans.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Remove all potential hazards from the workshop.</li> <li>Practice safety in the workshop.</li> <li>Sweep, clean and wash the workshop.</li> <li>Reset the workshop and tool room.</li> </ul>
	World of work	<p><b>Grade 5 2<sup>nd</sup> year</b></p> <ul style="list-style-type: none"> <li>Identify the criteria for the learner work experience programme (LWEP).</li> <li>Participate in the learner work experience programme.</li> </ul>	<p><b>Grade 5 2<sup>nd</sup> year:</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Inform the learners of the student work experience programme (LWEP) and the criteria for placement in LWEP.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State if they want to be in LWEP.</li> <li>State the advantages of being in LWEP.</li> <li>State the criteria for placement in LWEP.</li> <li>Discuss the LWEP.</li> </ul>
	Good housekeeping	<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Practice cleanliness and tidiness of the workshop.</li> </ul>	<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the reason for good housekeeping.</li> </ul>

Grade 5 Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
	practices.	<ul style="list-style-type: none"> <li>Store tools and equipment correctly after use.</li> <li>Understand the responsibilities of employees with regards to good housekeeping in the workplace.</li> </ul>	<ul style="list-style-type: none"> <li>Discusses good housekeeping practices.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State/ Discusses good housekeeping practices.</li> <li>Clean, wash and reset workshop and tool room.</li> </ul>
2	Basic metalwork skills	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Identify different metals and applications of the metal.</li> <li>Identify, care and use of basic hand, electric tools and equipment.</li> <li>Observe safety rules when using hand tools, electrical tools and equipment.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Grind metal using an industrial grinding tool.</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the different types of metals and their uses.</li> <li>Discusses care and safety precautions when using basic hand tools, electric tools and equipment.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Identify/name different metals and Discusses their use.</li> <li>Identify/name basic hand tools, electric tools and equipment.</li> <li>State safety precautions when using these tools.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year:</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Introduces the grinding tool and Discusses safety precautions when using an industrial grinding tool.</li> <li>Discusses the reason for grinding metal.</li> <li>Demonstrates how to grind metal using an industrial grinding tool.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Discuss safety when using an industrial grinding tool.</li> <li>Discuss the reason for grinding metal.</li> </ul>

Grade 5 Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Identify, care and use of welding tools and equipment.</li> <li>Identify, care and use of a gas torch.</li> </ul>	<ul style="list-style-type: none"> <li>Operate an industrial grinding tool, switching it on and off.</li> <li>Use an industrial grinding tool to grind metal, using necessary safety precautions.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year:</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Introduces welding tools and equipment.</li> <li>Discusses the reason for using welding tools and equipment.</li> <li>Demonstrates operation of welding equipment.</li> <li>Demonstrates operation of gas welding equipment.</li> </ul> <p>The learners complete the following activities.</p> <ul style="list-style-type: none"> <li>Identify/name welding equipment.</li> <li>Demonstrates/state safety precautions when using welding equipment.</li> <li>State/name how one would care for welding equipment.</li> <li>Light up a gas torch.</li> <li>Switch off gas torch.</li> <li>Clean gas nozzle.</li> </ul>
3	Basic metalwork skills	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Mark off metal accurately.</li> <li>Punch all types of holes in metals.</li> <li>Identify and interpret components as per job requirements.</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Demonstrates use of a measuring tape.</li> <li>Demonstrates how to mark off metal accurately.</li> <li>Demonstrates the punching of holes in metal.</li> <li>Discusses how to read a simple drawing, identify and interpret components in the drawing.</li> </ul>

Grade 5 Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
		<p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Treat rusted metal.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Demonstrates use of soldering iron and soldering process.</li> </ul>	<p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• Use a measuring tape to measure metal.</li> <li>• Mark off metal accurately.</li> <li>• Punch holes in metal.</li> <li>• Identify/name components in a simple drawing.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses why metal rust and precautions that must be taken when working with rusted metal.</li> <li>• Discusses and Demonstrates how to stop metal from rusting.</li> <li>• Discusses and Demonstrates how to treat rusted metal.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State/name precautions to take when working with rusted metal.</li> <li>• Demonstrates how to treat rusted metal.</li> <li>• State/show how to prevent metal from rusting.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses the different methods of soldering (gas and electric).</li> <li>• Discusses the purpose of soldering.</li> <li>• Safety precaution when soldering.</li> <li>• Demonstrates gas soldering.</li> <li>• Demonstrates electric soldering with soldering wire.</li> </ul> <p>The learners complete the following activities:</p>

Grade 5 Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
			<ul style="list-style-type: none"> <li>State/name the two methods of soldering.</li> <li>State the safety precautions taken when soldering.</li> <li>Solder two pieces of wire using the electric welding method.</li> </ul>
4	Basic metalwork skills	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Demonstrates how to cut metal using a cut off saw.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Mark, cut and bend sheet metal.</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the reason for using a cut off saw.</li> <li>Discusses safety precautions observed when using a cut off saw.</li> <li>Demonstrates how to use a cut off saw on a straight cut.</li> <li>Demonstrates how to cut metal at an angle using the cut off saw.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State the reason for using a cut off saw.</li> <li>State/ name the safety precautions that must be observed when using a cut off saw.</li> <li>Cut a piece of small scrap metal using the cut off saw (straight cut).</li> <li>Cut metal at an angle using the cut off saw.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the use of sheet metal in metalwork.</li> <li>Discusses safety precautions when using sheet metal.</li> <li>Demonstrates how to mark off a piece of sheet metal.</li> <li>Demonstrates how to cut sheet metal</li> <li>Demonstrates how to bend sheet metal.</li> </ul> <p>The learners complete the following activities:</p>

Grade 5 Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Demonstrates drilling processes.</li> <li>• Use a riveting gun.</li> </ul>	<ul style="list-style-type: none"> <li>• State/name safety precautions when working with sheet metal.</li> <li>• Mark off a piece of sheet metal.</li> <li>• Cut the piece of sheet metal.</li> <li>• Bend the sheet metal.</li> <li>• Make a metal box out of sheet metal.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions when drilling and riveting.</li> <li>• Demonstrates how to use a hand drill.</li> <li>• Demonstrates how to use a drill press.</li> <li>• Demonstrates how to fit and remove a drill bit.</li> <li>• Demonstrates how to use a riveting gun.</li> <li>• Demonstrates how to match a drill bit to a rivet.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State the safety precautions to be observed when drilling and riveting.</li> <li>• Use a hand drill.</li> <li>• Use a drill press.</li> <li>• Fit and remove a drill bit to a hand drill or a drill</li> <li>• Use a riveting gun.</li> <li>• Join two pieces of off cut metal using a riveting gun.</li> </ul>
5	Basic metalwork skills	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>• File metal using the draw filing method.</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses the two methods of filing.</li> </ul>



Grade 5 Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
		<p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Replace a new gate.</li> </ul>	<ul style="list-style-type: none"> <li>Explain the reason for draw filing metal.</li> <li>Discusses the different types of files.</li> <li>Discusses safety precautions when filing.</li> <li>Demonstrates the draw filing method.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State the safety precautions observed when filing.</li> <li>State the reason for draw filing.</li> <li>Identify/name the different types of files.</li> <li>Use the draw filing method to file a flat piece of metal.</li> <li>Clean a hand file.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p><b>The teacher:</b></p> <ul style="list-style-type: none"> <li>Discusses safety precautions when installing a new gate.</li> <li>Discusses measurement and installation of a new gate.</li> <li>Discusses methods of installing a new gate.</li> <li>Discusses how to drill holes using a masonry drill bit.</li> <li>Demonstrates how to mark out fitment holes in wall.</li> <li>Demonstrates how to mount the gate onto wall using rawl bolts.</li> <li>Demonstrates how to mount locking mechanism onto wall.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State/name the safety precautions when installing a new gate.</li> <li>Measure gate size to match doorway.</li> <li>Drill a hole in wall or floor using a masonry drill bit.</li> </ul>

Grade 5 Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Use different method of to weld and connect metal.</li> </ul>	<ul style="list-style-type: none"> <li>State method of fitting gate.</li> <li>Measure gate and door width.</li> <li>State reason for lining up locking mechanism.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions when welding.</li> <li>Discusses safety equipment used when welding.</li> <li>Discusses the different methods of welding, soldering, riveting and bolting or screwing metal together.</li> <li>Demonstrates arc and gas welding.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State the different methods of welding, soldering and riveting.</li> <li>State the safety precautions used when welding.</li> <li>State/name the safety equipment used when welding.</li> <li>Use an inverter welding machine and strikes an arc and runs a 20 mm bead of weld.</li> </ul>
6	<b>Maintenance - mechanical, bicycle and motor vehicles</b>	<p><b>Grade 5 1<sup>st</sup> year</b></p> <ul style="list-style-type: none"> <li>Name the tools to sharpen grass cutters and lawnmowers blades.</li> <li>Sharpen a blade or chain with a file or electric tool.</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions when removing and sharpening blades on a lawn mower or grass cutting machine.</li> <li>Name the tools used to sharpen lawn mower and grass cutting machine blades.</li> </ul>

Grade 5 Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
		<p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Replace bicycle brake pads.</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates how to remove the blades of the lawn mower and grass cutting machine.</li> <li>Demonstrates how to secure the blades in a bench vice.</li> <li>Demonstrates how to sharpen the blade using a rotary tool with a grinding wheel or a metal file.</li> <li>Demonstrates how balance the blade after sharpening it.</li> <li>Demonstrates how to fit the blade back into the machine.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State the safety precautions when sharpening lawn mower and grass cutters blade.</li> <li>Remove the blade off the lawn mower or grass cutting machine.</li> <li>Secure the blade in a bench vice.</li> <li>Sharpen the blade using a metal file.</li> <li>Check the blade for balance and file if necessary.</li> <li>Fit and secure the blade back onto the lawn mower or grass cutting machine.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the different types of braking system used on bicycles.</li> <li>Discusses when one would replace bicycle brake pads.</li> <li>Demonstrates how to remove and refit bicycle brake pads.</li> <li>Demonstrates how to adjust the brake pad.</li> </ul> <p>The learners complete the following activities:</p>

Grade 5 Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Top up and/or replace engine oil, gearbox oil, diff oil, brake fluid, clutch fluid, power steering fluid, battery fluid, radiator fluid and windscreen water.</li> </ul>	<ul style="list-style-type: none"> <li>Identify the brake pads on a bicycle.</li> <li>State when one would replace brake pads on a bicycle.</li> <li>Remove and refit the brake pads on a bicycle.</li> <li>Adjust the brake pad on a bicycle.</li> <li>Adjust the brake cable.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the reasons for topping and/or replacing, engine oil, gearbox, diff oil, brake fluid, clutch fluid, power steering fluid, battery fluid, radiator fluid and windscreen water.</li> <li>Explain the reason for topping up fluid at different levels.</li> <li>Explain the consequences of filling fluid in the wrong reservoirs or filler port.</li> <li>Demonstrates how to drain fluids and how to top up fluids.</li> </ul> <p>The learners completes the following activities:</p> <ul style="list-style-type: none"> <li>Point out where the different fluids are filled.</li> <li>Point out the different fluid levels and indicates where the level should be.</li> <li>Demonstrate how to check the different fluid levels.</li> <li>Demonstrate how to top up or lower the fluid level.</li> <li>Demonstrate how to drain fluid and oils.</li> </ul>
7	Maintenance - mechanical, bicycle	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Operate a fuel or electric driven</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p>

Grade 5 Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
	and motor vehicles.	<p>gardening equipment.</p> <ul style="list-style-type: none"> <li>Replace a spark plug on petrol gardening equipment.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Repair a puncture on a bicycle tyre.</li> <li>Change a bicycle tyre.</li> </ul>	<ul style="list-style-type: none"> <li>Discusses the different types of fuel and electric driven gardening equipment.</li> <li>Discusses the safety precautions to be observed when operating gardening equipment.</li> <li>Discusses the safety apparel to be used when operating gardening equipment.</li> <li>Demonstrates how to start and switch off the different types of gardening equipment.</li> <li>Demonstrates how to harness or hold the gardening equipment.</li> <li>Demonstrates how to remove, gap and replace a spark plug on petrol engine gardening equipment.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Identify/name the different types of gardening equipment.</li> <li>State the safety precautions that are observed when operating gardening equipment.</li> <li>State/name the safety apparel that is used when operating gardening equipment.</li> <li>Harness or hold gardening equipment.</li> <li>Start and switch off gardening equipment.</li> <li>Remove, gap and refit a spark plug on a petrol gardening equipment.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the five main causes of punctures.</li> </ul>

Grade 5 Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Charge a car battery.</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates how to repair a puncture.</li> <li>Demonstrates how to check for air leaks on a tyre and tyre valve.</li> <li>Discusses the reasons for changing a tyre.</li> <li>Demonstrates how to remove a tyre from a rim.</li> <li>Demonstrates how to fit a tyre onto a rim.</li> <li>Demonstrates how to inflate a tyre.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Name the different causes of bicycle tyre punctures.</li> <li>Repair a tyre puncture.</li> <li>Inflate the tyre to correct pressure using a bicycle pump.</li> <li>Check for air leaks in the tyre and valve.</li> <li>Remove a tyre from the rim. Refits a tyre onto the rim.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the reasons for a battery being discharged.</li> <li>Discusses how and why we charge a battery.</li> <li>Discusses safety precautions when charging a battery.</li> <li>Demonstrates pre-checks when charging a battery.</li> <li>Demonstrates how to use a battery charger.</li> <li>Demonstrates how to charge a battery.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>States/ names safety precautions to be taken when charging a battery.</li> <li>Carry out pre-checks before charging the battery.</li> </ul>

Grade 5 Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
			<ul style="list-style-type: none"> <li>Set up a battery charger.</li> <li>Charge the battery.</li> </ul>
8	Maintenance - mechanical, bicycle and motor vehicles.	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>State the basic workings of a bicycle i.e. brakes, gears etc.</li> <li>Maintain and service a bicycle.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Name the parts that should be replaced when servicing a vehicle.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Change a tyre.</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the workings of the brake system, gear system, drive system, chain sets and bearing and wheels.</li> <li>Discusses the need to maintain and service a bicycle.</li> <li>Demonstrates basic maintenance and service of a bicycle.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Identify/name the different working of a bicycle.</li> <li>State the need to maintain and service a bicycle.</li> <li>Carry out basic maintenance and service on a bicycle.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the reason for servicing a vehicle.</li> <li>Discusses a minor and major service.</li> <li>Name the parts that should be replaced when servicing a vehicle.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State the reason for servicing a vehicle.</li> <li>State the reasons for a minor and major service.</li> <li>Identify parts to be replaced in a minor service.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p>

Grade 5 Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
		<ul style="list-style-type: none"> <li>Fix a leaking tyre.</li> </ul>	<ul style="list-style-type: none"> <li>Discusses safety precautions when changing a tire and fixing leaking tyres.</li> <li>Discusses how to jack up a vehicle and remove and refit a tyre.</li> <li>Demonstrates how to jack up a vehicle and fit axle stands.</li> <li>Demonstrates how to remove, and refit a tyre and tighten the wheel nuts.</li> <li>Demonstrates how to fix a leaking tyre.</li> <li>Demonstrates how to inflate the tyre and check for leaks.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State the safety precautions to be taken when changing a tyre and fixing a leaking tyre.</li> <li>Jack up a vehicle.</li> <li>Fit axle stands.</li> <li>Remove and refit a tyre.</li> <li>Tighten the wheel nuts.</li> <li>Fix a leaking tyre.</li> <li>Inflate the tyre to the correct pressure and check for leaks.</li> </ul>
9	Maintenance - mechanical, bicycle and motor vehicles.	<p>Grade 5 1<sup>st</sup> year.</p> <ul style="list-style-type: none"> <li>Replace a chain on a bicycle.</li> </ul>	<p>Grade 5 1<sup>st</sup> year</p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the reasons for replacing a chain.</li> <li>Discusses the purpose of the master link on a chain.</li> <li>Demonstrates how to remove and fit a new chain.</li> <li>Demonstrates the setting of correct chain length.</li> </ul>



Grade 5 Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
		<p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Remove and replace defective parts on a motor vehicle.</li> <li>Perform basic and slightly advanced servicing in a motor vehicle.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Change disc pads on a vehicle.</li> </ul>	<p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State the reasons for replacing a chain.</li> <li>State the reason for a master link on a chain.</li> <li>Remove chain.</li> <li>Fit new chain.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the reasons for servicing a vehicle and removing and replacing parts.</li> <li>Demonstrates how to remove and replace defective parts.</li> <li>Demonstrates how to carry out a minor service and parts of a major service.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State the reasons to carry out a service on a vehicle and replacing defective parts.</li> <li>Remove and replaces defective parts.</li> <li>Carry out an engine oil change on a vehicle or an engine.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the reasons for changing disc pads on a vehicle.</li> <li>Discusses safety precautions to be taken when changing disc pads on a vehicle.</li> </ul>

Grade 5 Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
			<ul style="list-style-type: none"> <li>• Demonstrates how to remove disc pads on a vehicle.</li> <li>• Demonstrates how to replace disc pads on a vehicle.</li> <li>• Demonstrates, if necessary, how to bleed the brakes on the vehicle.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State the reasons for replacing disc pads on a vehicle.</li> <li>• State the safety precautions to be taken when changing disc pads on a vehicle.</li> <li>• Remove disc pads on a vehicle.</li> <li>• Replace disc pads on a vehicle.</li> </ul>

**Practical assessment: Term 1.**

Assessment is formally recorded during four (4) practical sessions with a minimum of four (4) skills reported. Learners, regardless of abilities, shall be assessed on the same skill. The following serves as suggestion of skills to record and report on.

**The learner must be able to:**

<b>Week</b>	<b>Grade 5 1<sup>st</sup> year</b>	<b>Grade 5 2<sup>nd</sup> year</b>	<b>Grade 5 3<sup>rd</sup> year</b>
<b>2</b>	1. Use a hand drill. 2. Use a hand held angle grinder.	1. Switch an industrial angle grinder on and off. 2. Use an industrial angle grinder.	1. Connect up an inverter welding machine. 2. Light up a gas torch with a welding flame.
<b>3.</b>	1. Mark off a piece of metal. 2. Punch one hole in a sheet metal.	1. Sand down rusted metal 2. Primer the sanded down metal.	1. Connect up a soldering iron. 2. Use a soldering iron to solder two wires.
<b>4</b>	1. Cut a straight piece of metal using a cut off saw. 2. Cut an angled piece of metal using a cut off saw.	1. Cut a small piece of sheet metal.. 2. Bend the piece of sheet metal.	1. Use a hand drill. 2. Use a riveting gun.
<b>5</b>	1. File a piece of metal using draw filing methods. 2. Clean the metal hand file.	1. Drill a hole using a masonry drill bit. 2. Measure gate size to match doorway.	1. Strike an arc with a welding rod. 2. Run a 20 mm bead of weld.
<b>6</b>	1. Remove and refit a lawn mower blade. 2. Sharpen a lawn mower blade.	1. Remove a bicycle brake pad. 2. Replace a bicycle brake pad.	1. Check radiator fluid and engine oil levels. 2. Drain and fill engine oil.
<b>7</b>	1. Start and switch off gardening equipment. 2. Remove, gap and replace a spark plug.	1. Remove a bicycle from the rim. 2. Replace bicycle onto the rim.	1. Check electrolyte level. 2. Charge a battery.
<b>8</b>	1. Clean a bicycle chain. 2. Lubricate linkages on a bicycle.	1. Identify parts for replacement. 2. State when a minor service should be	1. Jack up a vehicle. 2. Remove and refit a car tyre.

		done.	
9	1. Remove bicycle chain. 2. Fit new bicycle chain.	1. Remove and replace one defective part. 2. Replace oil filter.	1. Remove car disc pad. 2. Replace car disc pad.

### Theoretical assessment: Term 1.

Four theoretical activities are assessed and recorded, however, a minimum of 1 theoretical activity is reported on. The following serves as suggestions of theoretical activities to report on.

### The learner must be able to:

Week	Grade 5 1 <sup>st</sup> year	Grade 5 2 <sup>nd</sup> year.	Grade 5 with different 3 <sup>rd</sup> year.
2	State two different uses of mild steel.	Name the equipment used to protect the eye when using an angle grinder.	Name the equipment used to protect the eye when arc welding.
3	Name the unit of measurement in a measuring tape.	Give one reason why metal rusts.	State the two methods of soldering.
4	Give one reason for using a cut off saw.	State one use of sheet metal.	State one precaution you would take when drilling.
5	State one reason for draw filing.	State one method of installing a new gate.	State the two methods of welding.
6	Name one tool used to sharpen lawn mower blades.	State the purpose of brake pads on a bicycle.	State one reason why engine oil must be at the correct levels.
7	State what happens if a spark plug is not gapped or replaced.	Name one cause of a tyre puncture.	State the purpose of a battery charger.
8	State why a service is done on a bicycle.	State why a service is done on a motor vehicle.	State the purpose of an axle stand.
9	State one reason for replacing a bicycle chain.	State one reason for replacing defective parts.	State one reason for replacing disc pads on a vehicle.

### 3.2.6 Grade 5: 1st, 2nd and 3rd year - Term 2.

Grade 5 Term 2			
Week	Topic	Content. The learner must be able to:	Teaching tips, techniques, activities and resources.
1	<p><b>Health and safety</b></p> <p><b>Good housekeeping.</b></p> <p><b>World of work.</b></p>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Identify, care and use of protective clothing.</li> <li>Implement statutory requirements.</li> <li>Identify the location of fire extinguishers, hose and alarms.</li> <li>Identify, care and use of fire extinguishers.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Report faulty equipment</li> <li>Ensure cleanliness of workshop and self.</li> <li>Check tools and equipment for safety and effectiveness.</li> <li>Set tools and equipment in sequence in tool room.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the different types of protective clothing and safety apparel.</li> <li>Discusses statutory requirements in a workshop.</li> <li>Discusses: types, location, care and use of fire extinguishers.</li> <li>Demonstrates the use of a fire extinguisher.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State the different protective clothing and safety apparel used.</li> <li>Identify, care and use of fire extinguishers.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses checking of tools and equipment for safety and effectiveness.</li> <li>Discusses reporting of faulty equipment and tools.</li> <li>Discusses cleanliness of workshop and self.</li> <li>Discusses good housekeeping of tools and equipment.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Check for safety and effectiveness of tools and equipment.</li> <li>Report faulty tools and equipment.</li> <li>Clean up workshop.</li> <li>Clean and set up tools and equipment.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p>

Grade 5 Term 2			
Week	Topic	Content. The learner must be able to:	Teaching tips, techniques, activities and resources.
		<ul style="list-style-type: none"> <li>• Work with competence</li> <li>• Have good work tolerances.</li> </ul>	<p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses ways to be a competent worker.</li> <li>• Discusses ways to have good work tolerance.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• Understand how to be a competent worker.</li> <li>• Learn good work tolerance.</li> </ul>
2.	<p><b>Maintenance – basic electrical. motor vehicle. Basic electrical-Home</b></p> <p><b>Basic electrical-Home.</b></p>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Replace a car battery.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Repair household appliances.</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses the reasons for replacing a car battery.</li> <li>• Discusses the checks involved before replacing a car battery.</li> <li>• Discusses the different types of battery and fitment of appropriate battery.</li> <li>• Demonstrates how to remove and replace a car battery.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State the reason for replacing a car battery.</li> <li>• Carry out tests on battery before replacing the battery.</li> <li>• Replace the correct type of car battery.</li> <li>• Remove and replace the car battery.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses the different types of household appliances that can be repaired.</li> <li>• Discusses simple repairs that can be done with no test equipment.</li> </ul>

Grade 5 Term 2			
Week	Topic	Content. The learner must be able to:	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Replace a fuse on a stove.</li> </ul>	<ul style="list-style-type: none"> <li>Discusses how to repair household appliances with a multi-meter.</li> <li>Discusses safety precautions when repairing household equipment.</li> <li>Demonstrates how to repair household appliances without test equipment.</li> <li>Demonstrates how to repair household appliances with a multi- meter.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Name the different types of household appliances that can be repaired.</li> <li>State the safety precautions that must be observed when repairing household appliances.</li> <li>Carry out a repair on a household appliance without test equipment.</li> <li>Carry out a repair on a household appliance with a multi- meter.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the safety precautions when working with a stove.</li> <li>Discusses the purpose of a fuse in a stove.</li> <li>Discusses the different types of fuses that are used on stoves.</li> <li>Discusses testing procedures before replacing a fuse on a stove.</li> <li>Demonstrates how to test a fuse on a stove.</li> <li>Demonstrates how to remove and refit different fuses on stoves.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State the safety precautions that must be taken when working on a stove.</li> <li>Identify/name the different types of fuses that are used on stoves.</li> </ul>

Grade 5 Term 2			
Week	Topic	Content. The learner must be able to:	Teaching tips, techniques, activities and resources.
			<ul style="list-style-type: none"> <li>• Use a multi-meter to test for a defective fuse on a stove.</li> <li>• Remove and replace a defective fuse on a stove.</li> </ul>
3	Maintenance – basic electrical. motor vehicle.	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Replace fuses on a vehicle.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year</b></p> <ul style="list-style-type: none"> <li>• Solder and insulate wires.</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions when working on the electrical system of a vehicle.</li> <li>• Discusses the purpose of a fuse in a vehicle.</li> <li>• Discusses the different types of fuses and amperage.</li> <li>• Discusses testing procedures of a fuse.</li> <li>• Demonstrates how to test for a defective fuse.</li> <li>• Demonstrates how to remove and replace a fuse.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State the safety precautions to be observed when working on the electric system on a vehicle.</li> <li>• State the purpose of a fuse.</li> <li>• Test for a defective fuse.</li> <li>• Remove and replace a defective fuse.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions to be observed when soldering wires.</li> <li>• Discusses how to use an electric soldering iron.</li> <li>• Discusses the reasons for soldering wires.</li> <li>• Discusses the two types of soldering wires.</li> </ul>



Grade 5 Term 2			
Week	Topic	Content. The learner must be able to:	Teaching tips, techniques, activities and resources.
	Basic electrical- Home.	<p>Grade 5 3<sup>rd</sup> year.</p> <ul style="list-style-type: none"> <li>Change defective plug on a extension cord..</li> </ul>	<ul style="list-style-type: none"> <li>Discusses the reasons for insulating wires and types of insulation used.</li> <li>Demonstrates how to insulate and solder a wire using an electric soldering iron.</li> </ul> <p>The learner completes the following activities.</p> <ul style="list-style-type: none"> <li>State/ name safety precautions that are observed when soldering wires.</li> <li>State the reason for soldering wires.</li> <li>State the reasons for insulating wires.</li> <li>Connect up an electric soldering iron.</li> <li>Solder a wire using an electric soldering iron.</li> <li>Insulate a wire.</li> </ul> <p>Grade 5 3<sup>rd</sup> year.</p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions observed when changing a plug on an extension cord.</li> <li>Discusses how to test for a defective plug on an extension cord.</li> <li>Discusses the colour codes on the wires.</li> <li>Demonstrates how to test for a defective plug.</li> <li>Demonstrates how to change a defective plug on an extension cord.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State the safety precautions to be observed when changing a defective plug on an extension cord.</li> <li>State/name the different colour wire and where they fit on a plug.</li> <li>Test for a defective plug.</li> </ul>

Grade 5 Term 2			
Week	Topic	Content. The learner must be able to:	Teaching tips, techniques, activities and resources.
			<ul style="list-style-type: none"> <li>Change a defective plug on an extension cord.</li> </ul>
4	Maintenance – basic electrical. - Home	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Use a multi meter.</li> <li>Trouble- shoot basic electrical faults.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Replace a light fitting.</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precaution when using a multi-meter and trouble shooting for electrical faults.</li> <li>Discusses how to use a multi-meter.</li> <li>Discusses trouble shooting for electrical faults.</li> <li>Demonstrates how to use a multi- meter.</li> <li>Demonstrates fault finding of basic electrical faults.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State safety precautions to observe when using a multi-meter and trouble shooting for basic electrical faults.</li> <li>State the purpose of a multi-meter.</li> <li>Operate a multi-meter.</li> <li>Use a multi-meter to test for basic electric faults.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions observed when replacing a light fitting.</li> <li>Discusses the different types of light fittings.</li> <li>Discusses the reasons for replacing a light fitting.</li> <li>Demonstrates how to shut off power when removing a light fitting.</li> <li>Demonstrates how to remove a light fitting.</li> <li>Demonstrates how to replace a light fitting.</li> </ul>

Grade 5 Term 2			
Week	Topic	Content. The learner must be able to:	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Wire a bed lamp switch.</li> </ul>	<p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State safety precautions to be observed when replacing a light fitting.</li> <li>• State/name the different types of light fittings.</li> <li>• Shuts off power source to the light fitting.</li> <li>• Remove a light fitting.</li> <li>• Replace a light fitting.</li> <li>• Reconnects the power supply to the light fitting.</li> <li>• Test the light fitting.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions when wiring a bed side lamp switch.</li> <li>• Discusses the wiring of a simple bed lamp switch.</li> <li>• Demonstrates how to strip a bed lamp switch.</li> <li>• Demonstrates how to wire a bed lamp switch.</li> <li>• Demonstrates how to re assemble a bed lamp switch.</li> <li>• Demonstrates how to test a bed lamp switch.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State safety precautions observed when wiring a bed lamp switch.</li> <li>• Identify a simple bed lamp switch.</li> <li>• Strips a simple bed lamp switch.</li> <li>• Wire a simple bed lamp switch.</li> <li>• Re-assembles a simple bed lamp switch.</li> <li>• Test the simple bed lamp switch.</li> </ul>

Grade 5 Term 2			
Week	Topic	Content. The learner must be able to:	Teaching tips, techniques, activities and resources.
5	Maintenance – basic electrical. Home.	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Replace different bulbs.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Replace basic electrical switches.</li> <li>Assist with repairs of appliances.</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions when replacing different bulbs.</li> <li>Discusses the different Bulb types.</li> <li>Discusses the different bulb wattage.</li> <li>Discusses energy saving bulbs.</li> <li>Demonstrates how to remove a bulb.</li> <li>Demonstrates how to refit a bulb.</li> <li>Demonstrates how to remove and replace a lamp shade (to reach a bulb).</li> <li>Demonstrates how to remove a broken bulb.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State safety precautions observed when replacing different bulbs.</li> <li>Name/state different bulb types.</li> <li>Name/state the different wattage of bulbs.</li> <li>State the different types/names of energy saving bulbs.</li> <li>Remove a bulb.</li> <li>Replace a bulb.</li> <li>Remove and replace a lamp shade.</li> <li>Remove a broken bulb.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions when replacing basic electric switches</li> </ul>

Grade 5 Term 2			
Week	Topic	Content. The learner must be able to:	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Wire a bulb fitting.</li> </ul>	<p>and repairing appliances.</p> <ul style="list-style-type: none"> <li>Discusses how to replace a light switch.</li> <li>Demonstrates how to replace a light switch.</li> <li>Discusses how to replace a one way Switch.</li> <li>Demonstrates how to replace a one way switch.</li> <li>Discusses how to assist with repairs of electric appliances.</li> <li>Demonstrates how to assist with repairs with electric appliances.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State safety precautions that are observed when replacing basic electrical switches and assisting with repairs on electrical appliances.</li> <li>Replace a light switch.</li> <li>Replace a one way switch.</li> <li>Assist with repairs of electrical appliances.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions when wiring a bulb fitting.</li> <li>Discusses how to wire a bulb fitting.</li> <li>Demonstrates how to wire a bulb fitting.</li> <li>Discusses how to wire a fluorescent light fitting.</li> <li>Demonstrates how to wire a fluorescent light fitting.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State the safety precautions when wiring a bulb fitting.</li> <li>Wire a bulb fitting.</li> </ul>

Grade 5 Term 2			
Week	Topic	Content. The learner must be able to:	Teaching tips, techniques, activities and resources.
			<ul style="list-style-type: none"> <li>Wire a fluorescent light fitting.</li> </ul>
6	Basic plumbing maintenance skills	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Connect PVC pipes.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Replace a tap.</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Safety precautions when connecting PVC pipes.</li> <li>Discusses the purpose of PVC pipes.</li> <li>Discusses how to measure PVC pipes.</li> <li>Discusses how to cut PVC pipes.</li> <li>Discusses how to connect PVC pipes using compression fittings.</li> <li>Discusses how to check for and repair water leaks after connecting PVC pipes.</li> <li>Discusses the use of thread tape when connecting PVC pipes.</li> <li>Demonstrates how to measure and cut PVC pipes.</li> <li>Demonstrates how to connect PVC pipes.</li> <li>Demonstrates how to check and repair water leaks after connecting PVC pipes.</li> </ul> <p>The learner completes the following activities.</p> <ul style="list-style-type: none"> <li>State safety precautions observed when connecting PVC pipes.</li> <li>Measure and cut PVC pipes.</li> <li>Connect PVC pipes.</li> <li>Check and repair water leaks after connecting PVC pipes.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions when replacing a tap.</li> </ul>

Grade 5 Term 2			
Week	Topic	Content. The learner must be able to:	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Unblock a toilet .</li> </ul>	<ul style="list-style-type: none"> <li>• Discusses how to shut off water supply to the tap.</li> <li>• Discusses how to replace a tap.</li> <li>• Demonstrates how to shut off water to the tap.</li> <li>• Demonstrates how to replace a tap.</li> </ul> <p>The learner completes the following activities.</p> <ul style="list-style-type: none"> <li>• State the safety precautions to be observed when replacing a tap.</li> <li>• Shut off water supply to the tap to be replaced.</li> <li>• Replace a tap.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety and health precautions when unblocking a toilet.</li> <li>• Discusses the tools used to unblock a toilet.</li> <li>• Discusses how to unblock a toilet using different tools.</li> <li>• Discusses the use of a plunger and a WC auger to unblock a toilet.</li> <li>• Demonstrates the use of a WC auger.</li> <li>• Demonstrates how to unblock a toilet.</li> </ul> <p>The learner completes the following activities.</p> <ul style="list-style-type: none"> <li>• State the safety and health precautions when unblocking a toilet.</li> <li>• Name/identify the different types of tools used in unblocking a toilet.</li> <li>• Demonstrate the use of a WC auger.</li> <li>• Demonstrate how to unblock a toilet.</li> </ul>
7	Basic plumbing maintenance skills	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Connect pipes with compression fittings.</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p>

Grade 5 Term 2			
Week	Topic	Content. The learner must be able to:	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Demonstrates how to unblock a drain.</li> </ul>	<ul style="list-style-type: none"> <li>Discusses safety precautions when connecting pipes with compression fittings.</li> <li>Discusses how to measure and cut PVC pipes.</li> <li>Discusses the principles of compression fittings.</li> <li>Discusses methods of using thread tape to prevent water leaks.</li> <li>Demonstrates how to measure and cut PVC pipes.</li> <li>Demonstrates how to measure and cut copper pipes.</li> <li>Demonstrates how to connect pipes a with compression fittings.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State safety precautions to be observed when connecting pipes with compression fittings.</li> <li>Measure and cut PVC pipes.</li> <li>Measure and cut copper pipes.</li> <li>Connect pipes with a compression fitting.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions when unblocking drains.</li> <li>Discusses the tools used to unblock a drain.</li> <li>Discusses how to locate a blockage.</li> <li>Discusses how to clean out the hopper and drainpipe.</li> <li>Discusses how to unblock a yard gully.</li> <li>Discusses how to unblock a soil pipe.</li> <li>Discusses the rodding of a drainpipe.</li> </ul>



Grade 5 Term 2			
Week	Topic	Content. The learner must be able to:	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Connect gutters.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrates how to locate a blockage.</li> <li>• Demonstrates how to clean out the hopper.</li> <li>• Demonstrates how to unblock a yard gulley.</li> <li>• Demonstrates how to unblock a soil pipe.</li> <li>• Demonstrates the rodding of a drainpipe.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State the safety precautions taken when unblocking a drain.</li> <li>• Name/identify the tools used to unblock a drain.</li> <li>• Unblock a blockage.</li> <li>• Clean out the hopper.</li> <li>• Unblock a yard gulley.</li> <li>• Unblock a soil pipe.</li> <li>• Carry out the rodding of a drainpipe.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions when connecting gutters.</li> <li>• Discusses roof drainage.</li> <li>• Discusses types of guttering.</li> <li>• Discusses guttering material.</li> <li>• Discusses how to install guttering.</li> <li>• Demonstrates how to measure and cut guttering material.</li> <li>• Demonstrates how to install guttering.</li> </ul> <p>The learners complete the following activities:</p>

Grade 5 Term 2			
Week	Topic	Content. The learner must be able to:	Teaching tips, techniques, activities and resources.
			<ul style="list-style-type: none"> <li>• State the safety precautions to be observed when connecting gutters.</li> <li>• State/identify the different types of guttering.</li> <li>• Measure and cut guttering material.</li> <li>• Install guttering.</li> </ul>
8	Basic plumbing maintenance skills	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Connect copper pipes with gas soldered methods.</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions when connecting copper pipes with gas soldered methods.</li> <li>• Discusses capillary fittings.</li> <li>• Discusses how to operate gas soldering equipment.</li> <li>• Discusses how to connect copper pipes with gas soldered methods.</li> <li>• Discusses how to check for leaks after gas soldering copper pipes.</li> <li>• Demonstrates how to operate gas soldering equipment.</li> <li>• Demonstrates how to connect copper pipes using gas soldering methods.</li> <li>• Demonstrates how to check for leaks after gas soldering.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State safety precautions to be observed when connecting copper pipes using gas soldered methods.</li> <li>• Operate gas soldering equipment.</li> <li>• Connect pipes using gas soldering equipment.</li> <li>• Check for leaks after gas soldering copper pipes.</li> </ul>

Grade 5 Term 2			
Week	Topic	Content. The learner must be able to:	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Unblock a basin.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Connect downpipes.</li> </ul>	<p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions when unblocking a basin.</li> <li>• Discusses what causes blockage of drains.</li> <li>• Discusses the tools used when unblocking a basin.</li> <li>• Discusses the different methods of unblocking a basin.</li> <li>• Demonstrates how to unblock a basin using a plunger.</li> <li>• Demonstrates how to unblock a drain using industrial solvents.</li> <li>• Demonstrates how to unblock a drain by using hot water.</li> <li>• Demonstrates how to unblock the basin by removing and cleaning the water trap.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions observed when unblocking drains.</li> <li>• State/ name the causes of blocked basins.</li> <li>• Name/state the tools used for unblocking basins.</li> <li>• Unblock a basin using hot water.</li> <li>• Unblock a drain using industrial solvents.</li> <li>• Unblock a drain using a plunger.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions when connecting downpipes.</li> <li>• Discusses and to set up a ladder safely.</li> <li>• Discusses how to measure and cut downpipes.</li> </ul>

Grade 5 Term 2			
Week	Topic	Content. The learner must be able to:	Teaching tips, techniques, activities and resources.
			<ul style="list-style-type: none"> <li>• Discusses how to connect a downpipe to the gutter.</li> <li>• Discusses the different components of the downpipes.</li> <li>• Discusses the different ways of fixing a downpipe.</li> <li>• Discusses how to fit a downpipe into a gully.</li> <li>• Demonstrates how to set up a ladder safely.</li> <li>• Demonstrates how to measure and cut up a downpipe.</li> <li>• Demonstrates how to connect a downpipe to the gutter.</li> <li>• Demonstrates how to drill holes in the wall and fit plugs to fix downpipe to wall.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State safety precautions observed when connecting downpipes.</li> <li>• Set up a ladder to connect downpipe.</li> <li>• Measure and cut up a downpipe.</li> <li>• Connect a downpipe to the gutter.</li> <li>• Connect the downpipe and fix to wall.</li> </ul>
9	Basic plumbing maintenance skills	<p>Grade 5 1<sup>st</sup> year.</p> <ul style="list-style-type: none"> <li>• Replace tap washer.</li> <li>• Reseat a tap.</li> </ul>	<p>Grade 5 1<sup>st</sup> year.</p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions when replacing a tap washer and reseating a tap.</li> <li>• Discusses how to turn off water supply to the tap.</li> <li>• Discusses reasons for replacing tap washer and reseating tap seat.</li> <li>• Discusses the different types and sizes of tap washers.</li> <li>• Discusses how to replace a tap washer.</li> </ul>

Grade 5 Term 2			
Week	Topic	Content. The learner must be able to:	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Unblock a bath or shower.</li> </ul>	<ul style="list-style-type: none"> <li>• Discusses how to reseal a tap seat.</li> <li>• Demonstrates how to shut off water supply to the tap.               <ul style="list-style-type: none"> <li>• Demonstrates how to replace a tap washer.</li> </ul> </li> <li>• Demonstrates how to reseal a tap seat.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State safety precautions observed when replacing a tap washer and resealing a tap seat.</li> <li>• Turn off the water supply to the tap.</li> <li>• Replace a tap washer.</li> <li>• Reseal a tap seat.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions when unblocking a bath or shower.</li> <li>• Discusses reasons why a bath or shower gets blocked.</li> <li>• Discusses the different methods of unblocking a bath or shower.</li> <li>• Demonstrates how to clean a bath or shower draining outlet.</li> <li>• Demonstrates how to use an industrial solvent to unblock a bath or shower.</li> <li>• Demonstrates how to use a plunger to unblock a bath or shower.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State the safety precautions observed when unblocking a bath or shower.</li> <li>• State the reasons as to why a bath or shower gets blocked.</li> </ul>

Grade 5 Term 2			
Week	Topic	Content. The learner must be able to:	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Fix and fit downpipes and fittings.</li> </ul>	<ul style="list-style-type: none"> <li>• Clean the bath or shower drain outlet.</li> <li>• Use an industrial solvent to unblock a bath or shower.</li> <li>• Use a plunger to unblock a bath or shower.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions when fixing and fitting downpipes.</li> <li>• Discusses the different parts and fitment of a downpipe.</li> <li>• Discusses the pipe clips to fix a downpipe in place.</li> <li>• Discusses the reasons for a downpipe shoe.</li> <li>• Demonstrates how to fit a downpipe to the guttering system.</li> <li>• Demonstrates how to connect pipe clips.</li> <li>• Demonstrates how to drill holes and install wall plugs.</li> <li>• Demonstrates how to connect a shoe to a downpipe.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State safety precautions observed when connecting up a downpipe.</li> <li>• Drills holes and fit wall plugs.</li> <li>• Connect a pipe clip.</li> <li>• Connect the down pipe to the guttering system.</li> <li>• Connect a shoe to the downpipe.</li> </ul>

**Practical assessment: Term 2.**

Assessment is formally recorded during four (4) practical sessions with a minimum of four (4) skills reported. Learners, regardless of abilities, shall be assessed on the same skill. The following serves as suggestion of skills to record and report on.

**The learner must be able to:**

<b>Week</b>	<b>Grade 5 1<sup>st</sup> year</b>	<b>Grade 5 2<sup>nd</sup> year</b>	<b>Grade 5 3<sup>rd</sup> year</b>
<b>2</b>	1. Test a battery. 2. Replace a battery.	1. Repair household appliances without using a multi-meter. 2. Repair household appliances using a multi-meter.	1. Test for a defective fuse in a stove. 2. Remove and replace a fuse in a stove.
<b>3</b>	1. Test for a defective fuse in a vehicle. 2. Replace a defective fuse in a vehicle.	1. Solder a wire. 2. Insulate a wire.	1. Test for a defective plug. 2. Replace a defective plug.
<b>4</b>	1. Operate a multi-meter. 2. Use a multi-meter to test for faults.	1. Test a light fitting. 2. Replace a light fitting.	1. Wire a bed lamp switch. 2. Test a bed lamp with a multi-meter.
<b>5</b>	1. Replace a bulb. 2. Replace a broken bulb.	1. Replace a light switch. 2. Repair an electric appliance.	1. Wire a bulb fitting. 2. Wire a fluorescent fitting.
<b>6</b>	1. Measure and cut PVC pipes. 2. Connect PVC pipes.	1. Shut off the water supply to a tap. 2. Replace a tap.	1. Unblock a toilet with a plunger. 2. Unblock a toilet with an auger.
<b>7</b>	1. Measure and cut a copper pipe. 2. Connect two copper pipes with a compression fitting.	1. Clean out the hopper. 2. Carry out rodding of a drain pipe.	1. Measure and cut guttering. 2. Install guttering.
<b>8</b>	1. Use gas soldering equipment. 2. Connect pipes using gas soldering.	1. Unblock a basin using hot water. 2. Unblock a basin using a plunger.	1. Connect a downpipe to a gutter. 2. Connect the downpipe and fix to the wall.
<b>9</b>	1. Replace a tap	1. Clean out the bath or	1. Connect a pipe clip.

	washer. 2. Reseat a tap seat.	shower drain outlet. 2. Use a plunger to unblock a bath or shower.	2. Connect a shoe to a downpipe.
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### Theoretical assessment: Term 2.

Four theoretical activities are assessed and recorded, however, a minimum of 1 theoretical activity is reported on. The following serves as suggestions of theoretical activities to report on.

### The learner must be able to:

Week	Grade 5 1 <sup>st</sup> year	Grade 5 2 <sup>nd</sup> year	Grade 5 3 <sup>rd</sup> year
2	State a reason for replacing a battery.	State what are household appliances.	State the purpose of a fuse.
3	State the different amperages of fuses.	State the reason for soldering a wire.	State the purpose of an extension lead.
4	State the purpose of a multi-meter.	Name 2 types of light fittings.	State the purpose of a switch.
5	State 1 reason for using energy saving bulbs.	State the main safety precaution taken when replacing a light switch.	State the purpose of a bulb fitting.
6	State the purpose of PVC water pipes.	State the purpose of a tap.	Name the tools used to unblock a toilet.
7	Name 3 types of compression fittings.	Name the tools used to unblock a drain.	State the purpose of gutters.
8	State the reasons for using capillary pipe fittings.	Name the tools used to unblock a basin.	State the purpose of a downpipe.
9	State the purpose of a tap washer.	Name the tools used to unblock a shower or bath.	Name the part used to support a downpipe.



### 3.2.7 Grade 5: 1st, 2nd and 3rd year - Term 3.

[illegible]

Grade 5 Term 3			
Week	Topic	Content The learner is able to:	Teaching tips, techniques, activities and resources.
	<b>World of work</b>	<b>Grade 5 3<sup>rd</sup> year.</b> <ul style="list-style-type: none"> <li>Practice appropriate social skills training.</li> <li>Be orientated to the open labour market.</li> </ul>	<ul style="list-style-type: none"> <li>State the reasons for placing tools and equipment in sequence.</li> <li>State the reasons for good housekeeping practices.</li> <li>Set tools and equipment in the workshop.</li> <li>Clean up and reset the workshop and tool room.</li> </ul> <b>Grade 5 3<sup>rd</sup> year.</b> The teacher: <ul style="list-style-type: none"> <li>Discusses appropriate social skills in the work environment.</li> <li>Discusses how to be orientated to the open labour market.</li> <li>Discusses the Learner work experience programme (LWEP).</li> <li>Demonstrates appropriate social skills in the workplace.</li> </ul> The learners complete the following activities: <ul style="list-style-type: none"> <li>State the appropriate social skills practiced in the work environment.</li> <li>State ways to be orientated in the open labour market.</li> <li>Demonstrate appropriate social skills practices in the work environment.</li> <li>Compile a CV.</li> <li>Participate in a work experience programme.</li> </ul>
<b>2</b>	<b>Building and construction skills: Painting, glazing and water proofing.</b>	<b>Grade 5 1<sup>st</sup> year.</b> <ul style="list-style-type: none"> <li>Prepare different surfaces e.g. wood, aluminium, steel, brick etc.</li> </ul>	<b>Grade 5 1<sup>st</sup> year.</b> The teacher: <ul style="list-style-type: none"> <li>Discusses the reasons for preparing different surfaces e.g. wood, aluminium, steel, brick etc for painting.</li> <li>Discusses the safety precautions when preparing different surfaces for painting.</li> <li>Discusses the tools used when preparing different surfaces for</li> </ul>

Grade 5 Term 3			
Week	Topic	Content The learner is able to:	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Apply water based paints with roller/brush on all surfaces.</li> <li>• Get a high quality finish on all surfaces.</li> </ul>	<p>paintings.</p> <ul style="list-style-type: none"> <li>• Discusses how to prepare different surfaces for painting.</li> <li>• Demonstrates how to scrape off old paint with a scraper.</li> <li>• Demonstrates how to remove paint using an industrial paint remover.</li> <li>• Demonstrates how to fill cracks and smooth out.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State the reasons for preparing different surfaces for painting.</li> <li>• State the safety precautions observed when preparing different surfaces for painting.</li> <li>• Name the tools used when preparing different surfaces for painting.</li> <li>• State how to prepare different surfaces for painting.</li> <li>• Scrape off old paint from different surfaces.</li> <li>• Remove old paint by using industrial paint remover.</li> <li>• Fill cracks and smooth out.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions when using water based paints</li> <li>• Discusses preparation of area to be painted.</li> <li>• Discusses properties of water based paints.</li> <li>• Discusses how to open the tin of paint and mix the paint before application.</li> <li>• Discusses application of water based paints.</li> <li>• Discusses cleaning up of self and brushes after use.</li> </ul>

Grade 5 Term 3			
Week	Topic	Content The learner is able to:	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Remove glass and putty from frame.</li> <li>Handle glass.</li> </ul>	<ul style="list-style-type: none"> <li>Discusses how to get a high quality finish on all surfaces.</li> <li>Demonstrates how to prepare the area before painting.</li> <li>Demonstrates how to open the tin of paint and mix the paint.</li> <li>Demonstrates application of the paint.</li> <li>Demonstrates cleaning of brushes and self.</li> <li>Demonstrates how to get high quality of finish.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State the safety precautions observed when using water based paints.</li> <li>Prepare area for painting.</li> <li>Open the container of paint and mix the paint.</li> <li>Apply the paint with a roller and a brush.</li> <li>Clean up brushes and self.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions when carrying out glazing procedures.</li> <li>Discusses different ways of removing glass from frame.</li> <li>Discusses cleaning of frame.</li> <li>Discusses measuring of glass.</li> <li>Discusses handling of glass.</li> <li>Demonstrates the different ways of removing glass from frame.</li> <li>Demonstrates how to clean a frame of old putty and old sprigs.</li> <li>Demonstrates how to measure frame and allowed clearances.</li> <li>Demonstrates how to handle glass.</li> </ul>

Grade 5 Term 3			
Week	Topic	Content The learner is able to:	Teaching tips, techniques, activities and resources.
			<p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State safety precautions observed when carrying out glazing procedures.</li> <li>• Remove glass from window using different methods.</li> <li>• Clean a frame of old putty and remove old sprigs.</li> <li>• Measure frame for new glass.</li> <li>• Handle glass.</li> </ul>
3	<b>Building and construction skills: Painting, glazing and water proofing.</b>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Apply primer to prepared surfaces.</li> <li>• Apply undercoat to prepared surfaces.</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions when applying primer and undercoat to surfaces.</li> <li>• Discusses the need for applying primer and undercoat to different prepared surfaces.</li> <li>• Discusses how to mix the primer and undercoat.</li> <li>• Discusses drying times when applying primer and undercoat.</li> <li>• Discusses the different types of primers and undercoat for different types of surfaces.</li> <li>• Demonstrates how to apply primer to different prepared surfaces.</li> <li>• Demonstrates how to apply undercoat to different prepared surfaces.</li> <li>• Demonstrates how to clean brushes, equipment and self after applying primer and undercoat.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State the safety precautions to be observed when applying primer and</li> </ul>

Grade 5 Term 3			
Week	Topic	Content The learner is able to:	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 2<sup>nd</sup> year</b></p> <ul style="list-style-type: none"> <li>• Apply oil based paint/varnish with a brush/roller on all surfaces.</li> <li>• Get a high quality finish on all surfaces.</li> </ul>	<p>undercoat to different prepared surfaces.</p> <ul style="list-style-type: none"> <li>• State the purpose of primer and undercoat.</li> <li>• Apply primer to different prepared surfaces.</li> <li>• Apply undercoat to different prepared surfaces.</li> <li>• Clean brushes, equipment and self after completing tasks.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions when applying oil based paint /varnish with a brush /roller on all surfaces.</li> <li>• Discusses preparation of surfaces before painting/varnishing.</li> <li>• Discusses how to prepare paint and varnish.</li> <li>• Discusses how to apply oil based paint/varnish with a brush to all surfaces.</li> <li>• Discusses how to apply oil based paint/varnish with a roller to all surfaces.</li> <li>• Discusses different techniques of painting/varnishing.</li> <li>• Discusses drying times of oil based paint and varnish.</li> <li>• Discusses interior and exterior paints.</li> <li>• Discusses cleaning of brush, self and equipment after use.</li> <li>• Demonstrates how to prepare surfaces before painting/varnishing.</li> <li>• Demonstrates how to cut corners and edges.</li> <li>• Demonstrates how to apply paint/varnish to surfaces with a brush.</li> <li>• Demonstrates how to apply paint/varnish to surfaces with a roller.</li> </ul>

Grade 5 Term 3			
Week	Topic	Content The learner is able to:	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Cut glass.</li> <li>• Observe safety precautions when cutting glass.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrates cleaning of brush/roller, self and equipment after use.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State the safety precautions observed when applying paint/varnish with a roller/brush to all surfaces.</li> <li>• Prepare surfaces before painting/varnishing.</li> <li>• Cut corners and edges with a brush.</li> <li>• Apply paint/varnish to all surfaces with a brush.</li> <li>• Apply paint/varnish to all surfaces with a roller.</li> <li>• Clean brush/rollers, self and equipment after use.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions when cutting and handling glass.</li> <li>• Discusses types and thickness of glass.</li> <li>• Discusses the tools used to cut glass.</li> <li>• Discusses preparation of glass before cutting glass.</li> <li>• Discusses how to measure and cut glass with allow for tolerances.</li> <li>• Discusses how to cut /nibble a thin strip of glass.</li> <li>• Discusses how to smooth the edges of cut glass.</li> <li>• Discusses care of glass cutting tool.</li> <li>• Demonstrates how to measure glass and allow for tolerances.</li> <li>• Demonstrates how clean glass before cutting.</li> <li>• Demonstrates how to mark off glass.</li> <li>• Demonstrates how to cut glass with a glass cutting tools.</li> </ul>

Grade 5 Term 3			
Week	Topic	Content The learner is able to:	Teaching tips, techniques, activities and resources.
			<ul style="list-style-type: none"> <li>• Demonstrates how to cut off a thin strip of glass.</li> <li>• Demonstrates how to smooth down the edges of cut glass.</li> <li>• Demonstrates how to take care of the glass cutting tool.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State safety precautions observed when cutting and handling glass.</li> <li>• Name/identify the tool used to cut glass.</li> <li>• Measure glass to be cut,</li> <li>• Clean glass to be cut.</li> <li>• Mark glass to be cut.</li> <li>• Cut glass using glass cutters.</li> <li>• Smooth down the edges of cut glass.</li> <li>• Care for the glass cutting tool.</li> <li>• Handle glass safely.</li> </ul>
4	<b>Building and construction skills: Painting, glazing and water proofing.</b>	<b>Grade 5 1<sup>st</sup> year.</b> <ul style="list-style-type: none"> <li>• Know how to dilute and mix paints/varnish.</li> </ul>	<b>Grade 5 1<sup>st</sup> year.</b> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions when diluting and mixing paints /varnish.</li> <li>• Discusses how to strain old paint/varnish.</li> <li>• Discusses how to dilute water based and oil based paint.</li> <li>• Discusses how to dilute varnish.</li> <li>• Discusses how to mix paints /varnish.</li> <li>• Demonstrates how to strain old paint.</li> <li>• Demonstrates how to dilute water based and oil based paints.</li> <li>• Demonstrates how to mix paint/varnish.</li> </ul>



Grade 5 Term 3			
Week	Topic	Content The learner is able to:	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Prepare surfaces for water proofing.</li> </ul>	<p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State safety precautions observed when diluting and mixing paints/varnish.</li> <li>• Strain old paint/varnish</li> <li>• Dilute water based and oil based paint/varnish.</li> <li>• Dilute varnish.</li> <li>• Mix paint.</li> <li>• Mix varnish.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions when preparing surfaces for water proofing.</li> <li>• Discusses how to set up a ladder or scaffold.</li> <li>• Discusses the causes of water leaks dampness.</li> <li>• Discusses how to clean up roof areas and prepare area for water proofing.</li> <li>• Discusses the different methods of cleaning up roof areas.</li> <li>• Discusses drying times before applying damp proof materials.</li> <li>• Demonstrates how to set up a ladder or scaffold.</li> <li>• Demonstrates how to clean up area for damp proofing using different methods.</li> <li>• Demonstrates how to prepare area for damp proofing.</li> </ul> <p>The learners complete the following activities:</p>

Grade 5 Term 3			
Week	Topic	Content The learner is able to:	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Glaze a window, doors and frames.</li> </ul>	<ul style="list-style-type: none"> <li>State safety precautions observed when preparing an area for damp proofing.</li> <li>Set up a ladder against a wall.</li> <li>Clean up an area by using a wire brush and hand broom.</li> <li>Clean up an area using a hose pipe or pressure hose.</li> <li>Prepare the area for damp proofing.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions when glazing a window, door and frame.</li> <li>Discusses the preparation and use of putty.</li> <li>Discusses how to soften up putty.</li> <li>Discusses how to put putty in rebate before fitting glass.</li> <li>Discusses how to place in new glass in rebate.</li> <li>Discusses how to fit new sprigs after fitting glass.</li> <li>Discusses how to apply more putty after fitting sprigs.</li> <li>Discusses how to wet putty knife and shape the putty.</li> <li>Demonstrates how to soften up putty.</li> <li>Demonstrates how to put a thin bead of putty in rebate before putting glass in place.</li> <li>Demonstrates how to fit glass in rebate.</li> <li>Demonstrates how to fit new sprigs.</li> <li>Demonstrates how to put more putty on glass and smooth out the putty.</li> </ul> <p>The learners complete the following activities:</p>

Grade 5 Term 3			
Week	Topic	Content The learner is able to:	Teaching tips, techniques, activities and resources.
			<ul style="list-style-type: none"> <li>• State safety precautions observed when glazing a window, door or frame.</li> <li>• Soften putty.</li> <li>• Put putty and glass onto rebate.</li> <li>• Fit new sprigs in rebate.</li> <li>• Put putty and smooth out.</li> </ul>
5	<b>Building and construction skills: Painting, glazing and water proofing.</b>	<b>Grade 5 1<sup>st</sup> year.</b> <ul style="list-style-type: none"> <li>• Stain doors and frames.</li> </ul>	<b>Grade 5 1<sup>st</sup> year.</b> The teacher: <ul style="list-style-type: none"> <li>• Discusses safety precautions when staining doors and frames.</li> <li>• Discusses preparation of doors and frames for staining.</li> <li>• Discusses test strips before staining.</li> <li>• Discusses working with wood dyes.</li> <li>• Discusses how to apply wood dye.</li> <li>• Discusses staining a door and frame.</li> <li>• Demonstrates how to prepare doors and frames for staining.</li> <li>• Demonstrates the making of a test strip.</li> <li>• Demonstrates how to apply wood dye.</li> <li>• Demonstrates staining a door and frame.</li> </ul> The learners complete the following activities: <ul style="list-style-type: none"> <li>• State safety precautions observed when staining a door and frame.</li> <li>• Prepare a door and frame for staining.</li> <li>• Make a test strip.</li> <li>• Apply wood dye.</li> </ul>

Grade 5 Term 3			
Week	Topic	Content The learner is able to:	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Work with water proofing, installing and replace.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Apply the correct finish after glazing.</li> </ul>	<ul style="list-style-type: none"> <li>• Stain a door and frame.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions when working with water proofing, installing and replace.</li> <li>• Discusses reasons for water proofing.</li> <li>• Discusses how to work with water proofing materials.</li> <li>• Demonstrates how to cut and apply water proofing membrane.</li> <li>• Demonstrates how to apply water proofing materials.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State safety precautions when water proofing.</li> <li>• Demonstrate how to cut and apply water proofing membrane.</li> <li>• Demonstrate how to apply water proofing membrane.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses the waiting period to apply correct finish to glazed windows.</li> <li>• Discusses how to clean up after glazing.</li> <li>• Discusses how to paint so that window and glass is water proofed against rain.</li> <li>• Demonstrates how to clean up after glazing.</li> <li>• Demonstrates how to paint window so that glass and putty is water proofed against rain.</li> </ul> <p>The learners complete the following activities:</p>

Grade 5 Term 3			
Week	Topic	Content The learner is able to:	Teaching tips, techniques, activities and resources.
			<ul style="list-style-type: none"> <li>State the waiting period before finishing the job.</li> <li>Clean up glass and window.</li> <li>Paint/varnish window so that there is a water proof seal between glass and putty</li> </ul>
6	<b>Building and construction skills: Woodwork</b>	<b>Grade 5 1<sup>st</sup> year.</b> <ul style="list-style-type: none"> <li>Fit a door.</li> </ul>	<b>Grade 5 1<sup>st</sup> year.</b> The teacher: <ul style="list-style-type: none"> <li>Discusses safety precautions when fitting a door.</li> <li>Discusses how to measure the height and width of door and depth of frame rebate.</li> <li>Discusses how to choose the right size door.</li> <li>Discusses how to cut the door to size.</li> <li>Discusses how to fit hinges.</li> <li>Discusses how to adjust and align door. Discusses floor clearance of door.</li> <li>Discusses how to adjust butt hinges.</li> <li>Demonstrates how to measure a door.</li> <li>Demonstrates how to choose the right size door.</li> <li>Demonstrates how to cut the door to size.</li> <li>Demonstrates how to fit hinges to door.</li> <li>Demonstrates how to adjust and align door.</li> <li>Demonstrates how to adjust butt hinges.</li> </ul> The learners complete the following activities: <ul style="list-style-type: none"> <li>State the safety precautions observed when fitting a door.</li> </ul>

Grade 5 Term 3			
Week	Topic	Content The learner is able to:	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• State the basic measurement of units (cupboard etc.).</li> <li>• Use a jig saw.</li> <li>• Use a table saw.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Perform basic woodwork.</li> </ul>	<ul style="list-style-type: none"> <li>• Measure a door and frame.</li> <li>• Choose the right size door.</li> <li>• Cut a door to size.</li> <li>• Fit hinges to a door.</li> <li>• Adjust and align door.</li> <li>• Adjust butt hinges.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses the need for a basic measurement of cupboard units.</li> <li>• Discusses the basic measurements of cupboard units.</li> <li>• Discusses safety precautions and care when using a jig saw.</li> <li>• Demonstrates how to use a jig saw.</li> <li>• Discusses safety precautions and care when using a table saw.</li> <li>• Demonstrates how to use a table saw.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State the need for basic measurement of cupboard units.</li> <li>• State safety precautions observed when using a jigsaw.</li> <li>• Use a jigsaw.</li> <li>• State safety precautions observed when using a table saw.</li> <li>• Use a table saw.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety when performing basic woodwork.</li> </ul>

Grade 5 Term 3			
Week	Topic	Content The learner is able to:	Teaching tips, techniques, activities and resources.
			<ul style="list-style-type: none"> <li>• Discusses how to fabricate a bathroom wall cabinet.</li> <li>• Discusses fabrication methods.</li> <li>• Demonstrates how to measure boards to be cut.</li> <li>• Cut boards to size.</li> <li>• Sand boards.</li> <li>• Prepare boards for assembly.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State safety precautions observed when performing basic woodworking.</li> <li>• Use a measuring tape.</li> <li>• Measure and mark off material.</li> <li>• Use a circular saw and cut boards to size.</li> <li>• Sand boards.</li> <li>• Prepare boards for assembly.</li> </ul>
7	<b>Building and construction skills: Woodwork</b>	<b>Grade 5 1<sup>st</sup> year.</b> <ul style="list-style-type: none"> <li>• Fit a door frame.</li> </ul>	<b>Grade 5 1<sup>st</sup> year.</b> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions when fitting a door frame.</li> <li>• Discusses how to measure door frame to fit entrance.</li> <li>• Discusses how to square and brace frame before fitment.</li> <li>• Discusses how to set and align frame in entrance.</li> <li>• Discusses how to secure frame onto entrance.</li> <li>• Discusses how to finish fitment of door frame.</li> <li>• Demonstrates how to measure door frame for entrance.</li> <li>• Demonstrates how to square and brace door frame.</li> </ul>

Grade 5 Term 3			
Week	Topic	Content The learner is able to:	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Replace cupboard fittings (fit cupboard hinges, fit or replace handles, use corner block and replace door runners).</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates how to set and align frame in entrance.</li> <li>Demonstrates how to secure door frame onto entrance.</li> <li>Demonstrates how to finish fitment of door frame.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>States the safety precautions observed during fitment of door frame.</li> <li>Measure door frame for entrance.</li> <li>Square and brace door frame.</li> <li>Set and align door frame to entrance.</li> <li>Secure door frame to entrance.</li> <li>Finish fitment of door frame to entrance.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses reasons for replacing door hinges, handles and door runners.</li> <li>Discusses how to replace cupboard hinges.</li> <li>Discusses how to fit and replace door handles.</li> <li>Discusses how to install corner blocks.</li> <li>Discusses how to replace door runners and align.</li> <li>Demonstrates how to replace door hinges.</li> <li>Demonstrates how to fit and replace door handles.</li> <li>Demonstrates how to install corner blocks.</li> <li>Demonstrates how to replace and align door runners.</li> </ul> <p>The learners complete the following activities:</p>



Grade 5 Term 3			
Week	Topic	Content The learner is able to:	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Perform basic assembly.</li> </ul>	<ul style="list-style-type: none"> <li>State the reasons for replacing door hinges, handles and door runners.</li> <li>Replace door hinges.</li> <li>Fit and replace door handles.</li> <li>Install corner blocks.</li> <li>Replace and align door runners.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses how to read a diagram or sketch.</li> <li>Discusses assembly techniques.</li> <li>Discusses how to use cold glue, screws and panel pins.</li> <li>Demonstrates assembly techniques.</li> <li>Demonstrates finishing techniques.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Read and understands a diagram or sketch.</li> <li>Uses cold glue, screws and panel pins appropriately.</li> <li>Assemble bathroom wall cabinet.</li> <li>Finishes bathroom wall cabinet.</li> </ul>
8	<b>Building and construction skills: Woodwork</b>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Fit door handle and lock to door.</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions when fitting door handles and locks to doors.</li> <li>Discusses how to mark off door handle and lock to door.</li> <li>Discusses how to drill holes and chisel door handle and lock space.</li> </ul>

Grade 5 Term 3			
Week	Topic	Content The learner is able to:	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Replace cupboard sections.</li> <li>• Replace and hang cupboard door.</li> <li>• Replace drawer front.</li> </ul>	<ul style="list-style-type: none"> <li>• Discusses how to fit and align door handle and lock to door.</li> <li>• Demonstrates how to mark off door handle and lock to door.</li> <li>• Demonstrates how to drill holes and chisel door handle and lock space.</li> <li>• Demonstrates how to fit and align door handle and lock to door.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State safety precautions observed when fitting door handles and locks to doors.</li> <li>• Mark off door handle and lock to door.</li> <li>• Drill holes and chisel door handle and lock space.</li> <li>• Fit and align door handle and lock to door.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses reasons for replacing various cupboard sections.</li> <li>• Discusses how to replace a cupboard section.</li> <li>• Demonstrates how to replace a cupboard section.</li> <li>• Discusses how to replace and hang a cupboard door.</li> <li>• Demonstrates how to replace and hang a cupboard door.</li> <li>• Discusses how to replace a drawer front.</li> <li>• Demonstrates how to replace a drawer front.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State the reasons for replacing various cupboard sections.</li> <li>• Replace a cupboard section.</li> <li>• Replace and hang a cupboard door.</li> </ul>

Grade 5 Term 3			
Week	Topic	Content The learner is able to:	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Solve basic defects.</li> </ul>	<ul style="list-style-type: none"> <li>Replace a cupboard front.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses how to repair loose cupboards door screws.</li> <li>Demonstrates how to repair loose cupboard door screws.</li> <li>Discusses how to replace cupboard door hinges.</li> <li>Demonstrates how to replace cupboard door hinges.</li> <li>Discusses how to replace door cupboards door handles.</li> <li>Demonstrates how to replace cupboard door handles.</li> <li>Discusses how to repair loose table/chair legs.</li> <li>Demonstrates how to repair loose table/chair legs.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Repair loose cupboard screws.</li> <li>Replace cupboard door hinges.</li> <li>Replace cupboard door handles.</li> <li>Repair loose table/chair legs.</li> </ul>
9	<p><b>Building and construction skills:</b></p> <p><b>Woodwork</b></p>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Perform basic cupboard construction.</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions to be observed when performing basic cupboard construction (mini bookshelf).</li> <li>Discusses how to construct a mini bookshelf using hand and power tools.</li> <li>Demonstrates how to cut up boards to construct a mini bookshelf.</li> </ul>

Grade 5 Term 3			
Week	Topic	Content The learner is able to:	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Replace door edgings.</li> <li>• Replace a sink top.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Repair breakages in furniture with the use of different methods.</li> </ul>	<ul style="list-style-type: none"> <li>• Assembles a mini bookshelf.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State safety precautions to be observed when constructing a mini bookshelf.</li> <li>• Cut up boards to construct a mini bookshelf.</li> <li>• Assemble a mini bookshelf.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses how to replace door edgings.</li> <li>• Demonstrates how to remove door edgings.</li> <li>• Discusses how to replace a sink top.</li> <li>• Removes a sink top.</li> <li>• Replaces a sink top.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• Replace door edgings.</li> <li>• Remove a sink top.</li> <li>• Replace a sink top.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses different methods of repairing breakages in furniture.</li> <li>• Discusses how to repair different types of breakages.</li> <li>• Discusses how to repair a broken chair.</li> <li>• Discusses how to repair a broken coffee table.</li> </ul>

Grade 5 Term 3			
Week	Topic	Content The learner is able to:	Teaching tips, techniques, activities and resources.
			<ul style="list-style-type: none"> <li>• Discusses how to repair a broken or damaged table.</li> <li>• Demonstrates how to repair a broken chair.</li> <li>• Demonstrates how to repair a broken coffee table.</li> </ul> <p>The learner completes the following activities.</p> <ul style="list-style-type: none"> <li>• State different methods of repairing broken furniture.</li> <li>• Repair a broken chair.</li> <li>• Repair a broken table.</li> </ul>

**Practical assessment: Term 3.**

Assessment is formally recorded during four (4) practical sessions with a minimum of four (4) skills reported. Learners, regardless of abilities, shall be assessed on the same skill. The following serves as suggestion of skills to record and report on.

**The learner must be able to:**

<b>Week</b>	<b>Grade 5 1<sup>st</sup> year.</b>	<b>Grade 5 2<sup>nd</sup> year.</b>	<b>Grade 5 3<sup>rd</sup> year.</b>
2	1. Remove old paint. 2. Fill cracks and smooth out surface.	1. Mix water based paint. 2. Apply water based paint with roller.	1. Remove glass from window frame. 2. Clean old putty from frame.
3	1. Apply primer. 2. Apply undercoat.	1. Cut corners with brush. 2. Apply oil paint with brush.	1. Measure glass. 2. Cut glass to size.
4	1. Strain old paint. 2. Mix oil paint.	1. Set ladder to work. 2. Clean up area for water proofing.	1. Soften putty. 2. Put putty onto frame rebate.
5	1. Prepare door for staining. 2. Stain door.	1. Cut water proofing membrane. 2. Apply water proofing.	1. Clean up glass and frame. 2. Paint putty and seal glass.
6	1. Cut door to size. 2. Fit hinges.	1. Use a jigsaw. 2. Use a table saw.	1. Mark off board. 2. Cut board to size.
7	1. Square and brace door frame. 2. Secure frame to wall.	1. Replace door hinges. 2. Replace door handles.	1. Read a sketch/diagram. 2. Cut board to size.
8	1. Mark off door handles to door. 2. Drill holes and chisel out to fit door locks and handles.	1. Replace cupboard door. 2. Replace cupboard.	1. Repair a loose cupboard door screws. 2. Replace cupboard door hinges.
9	1. Cut board to size. 2. Assemble mini bookshelf.	1. Remove sink top. 2. Replace sink top.	1. Repair broken door. 2. Repair broken table.

**Theoretical assessment. Term 3.**

Four theoretical activities are assessed and recorded, however, a minimum of 1 theoretical activity is reported on. The following serves as suggestions of theoretical activities to report on.

**The learner must be able to:**

<b>Week</b>	<b>Grade 5 1<sup>st</sup> year</b>	<b>Grade 5 2<sup>nd</sup> year.</b>	<b>Grade 5 3<sup>rd</sup> year.</b>
2	State a reason for preparing the surface for painting.	State the reason for using water based paints.	State a safety precaution when removing glass.
3	State the purpose for using primer.	State a reason for using oil based paint.	Name the tool used to cut glass.
4	State a reason for diluting paint.	State a cause of water leaks.	State what is used to soften putty.
5	State a reason for staining doors.	State a reason for water proofing roofs.	State the drying time for putty.
6	State how to choose the correct size door.	State the purpose of a table saw.	State the purpose of a cut off saw.
7	State the reason for squaring and bracing a door frame.	Name two types of door hinges.	State the reason for using cold glue when assembling work pieces.
8	State a reason for aligning locks on doors.	State a reason for replacing cupboard sections.	State one method of repairing loose cupboard screws,
9	Interpret a sketch into a constructed item.	State the reason for door edgings.	State one method of repairing broken furniture.

### 3.2.8 Grade 5: 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> - Term 4.

Grade 5 Term 4			
Week	Topic	Content.	Teaching tips, techniques, activities and resources.
1	Good housekeeping practices	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Practice good housekeeping routines.</li> <li>Realise the impact of poor housekeeping routines.</li> <li>Practice cleanliness and care of equipment.</li> <li>Carry out correct and safe use of cleaning equipment and materials.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Comply with relevant safety routines.</li> <li>Ensure that workstations conform to health and safety requirements.</li> <li>Know how to isolate and replace faulty equipment.</li> <li>Practice safe handling, use and care of tools and equipment.</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses how to practice good housekeeping routines.</li> <li>Discusses the impact of poor housekeeping routines.</li> <li>Discusses cleanliness and how to care for equipment.</li> <li>Demonstrates good housekeeping routines.</li> <li>Demonstrates how to practice cleanliness and care of equipment.</li> <li>Demonstrates how to use and care for equipment and materials.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State the reasons for good housekeeping routines.</li> <li>Clean the workshop.</li> <li>Carry out good housekeeping practices.</li> <li>Clean and care for equipment.</li> <li>Set and record material.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the OSH Act.</li> <li>Discusses relevant safety routines.</li> <li>Discusses the reasons for workstations complying with health and safety requirements.</li> <li>Discusses how to isolate and replace faulty equipment.</li> <li>Discusses safe handling, use and care of equipment.</li> </ul>



Grade 5 Term 4			
Week	Topic	Content.	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Perform personal management/activities for daily living.</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates safety routines.</li> <li>Demonstrates how to isolate and replace faulty equipment.</li> <li>Demonstrates safe handling, use and care of equipment.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State why the one must comply with the OSH Act.</li> <li>State the reasons for workstations complying with health and safety requirements.</li> <li>Carry out safety routines.</li> <li>Isolate and replace faulty equipment.</li> <li>Handle, use and care for equipment safely.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses how to perform personal management/activities for daily living.</li> <li>Discusses how to be prepared for job interviews.</li> <li>Discusses how to conduct oneself in a workplace.</li> <li>Discusses personal grooming and hygiene.</li> <li>Discusses employer expectations and standards at the workplace.</li> <li>Discusses personal communications skills.</li> <li>Discusses timekeeping and compliance with rules and regulations at the workplace.</li> <li>Discusses personal finance, opening a bank account and how to save money.</li> </ul>

Grade 5 Term 4			
Week	Topic	Content.	Teaching tips, techniques, activities and resources.
			<ul style="list-style-type: none"> <li>• Discusses healthy living.</li> <li>• Demonstrates by role playing, communication skills.</li> <li>• Demonstrates how to open a bank account.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• Prepare for an interview by grooming.</li> <li>• Carry out mock interviews.</li> <li>• Role- plays different communication scenarios.</li> <li>• Open a bank account.</li> <li>• Carry out a travelling exercise in public transport.</li> <li>• Go to work from home using public transport.</li> </ul>
2	<b>Building and construction skills: Bricklaying and plastering</b>	<b>Grade 5 1<sup>st</sup> year.</b> <ul style="list-style-type: none"> <li>• Carry out basic bricklaying techniques (Part 1).</li> </ul>	<b>Grade 5 1<sup>st</sup> year.</b> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety when carrying basic bricklaying techniques.</li> <li>• Discusses basic building tools, care and use.</li> <li>• Discusses bricks and blocks.</li> <li>• Discusses how to set up a profile board.</li> <li>• Discusses basic bricklaying techniques.</li> <li>• Discusses the stretcher bond.</li> <li>• Demonstrates how to set up a profile board.</li> <li>• Demonstrates how to build a stretcher bond.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State safety precautions observed when carrying out basic building techniques.</li> </ul>

Grade 5 Term 4			
Week	Topic	Content.	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Repair basic brickwork.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Identify, care and use paving tools.</li> </ul>	<ul style="list-style-type: none"> <li>Identify, care and use basic building tools.</li> <li>Set up a profile board.</li> <li>Carry out basic bricklaying techniques.</li> <li>Build two lines of a stretcher bond.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions when carrying out basic repair on brickwork.</li> <li>Discusses how to re-point mortar between bricks.</li> <li>Discusses how to remove and replace spalled bricks.</li> <li>Discusses the use of a chisel in removing bricks.</li> <li>Demonstrates how to re-point mortar between bricks.</li> <li>Demonstrates how to remove and replace spalled bricks.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State safety procedures observed during basic brickwork repairs.</li> <li>Re-point mortar between bricks.</li> <li>Remove and replace spalled bricks.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety when carrying out paving procedures.</li> <li>Discusses paving tools used and care of paving tools.</li> <li>Demonstrates how to use paving tools.</li> </ul> <p>The learners complete the following activities:</p>

Grade 5 Term 4			
Week	Topic	Content.	Teaching tips, techniques, activities and resources.
			<ul style="list-style-type: none"> <li>State safety procedures observed during paving.</li> <li>Identify and care of paving tools.</li> <li>Use paving tools.</li> </ul>
3	<b>Building and construction skills: Bricklaying and plastering</b>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>Carry out basic bricklaying techniques (Part 2).</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Repair concrete floors.</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses basic bricklaying techniques.</li> <li>Discusses how to lay a stretcher bond.</li> <li>Discusses how to shape the mortar joints.</li> <li>Discusses how to set up and build a corner.</li> <li>Demonstrates basic bricklaying techniques.</li> <li>Demonstrates how to lay a stretcher bond.</li> <li>Demonstrates how to shape the mortar joints.</li> <li>Demonstrates how to set up and build a corner.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Lay a stretcher bond.</li> <li>Shape the mortar joints.</li> <li>Set up and builds a corner.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses safety precautions when repairing concrete floors.</li> <li>Discusses how to prepare concrete floors for repairs.</li> <li>Discusses how to prime the repaired area.</li> <li>Discusses how to fill and smooth repaired area with new concrete.</li> </ul>

Grade 5 Term 4			
Week	Topic	Content.	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Prepare the surface for paving.</li> </ul>	<ul style="list-style-type: none"> <li>• Discusses drying times of concrete.</li> <li>• Demonstrates how to prepare damaged area for repairs.</li> <li>• Demonstrates how to prime damaged areas.</li> <li>• Demonstrates how to fill and smooth out damaged area with new concrete.</li> <li>• Demonstrates how to slow down drying times.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State safety precautions observed when repairing concrete floors.</li> <li>• Prepare damaged concrete area for repairs.</li> <li>• Prime prepared area.</li> <li>• Concrete damaged area and smooth out.</li> <li>• Prepare repaired area for proper curing.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions when preparing the surface for paving.</li> <li>• Discusses how to set out the area for paving.</li> <li>• Discusses how to prepare a base for paving.</li> <li>• Demonstrates how to set the area for paving.</li> </ul> <p><b>The learners complete the following activities:</b></p> <ul style="list-style-type: none"> <li>• Set the area for paving.</li> <li>• Prepare a base for paving.</li> </ul>
4	<b>Building and construction skills:</b>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Carry out basic plastering techniques</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p>

Grade 5 Term 4			
Week	Topic	Content.	Teaching tips, techniques, activities and resources.
	Bricklaying and plastering	<p>(Part 1).</p> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Repair cracks /damaged plaster work.</li> </ul>	<ul style="list-style-type: none"> <li>Discusses the different types of plaster.</li> <li>Discusses preparation of different types of surfaces.</li> <li>Discusses mixing and carrying of plaster.</li> <li>Discusses picking up plaster.</li> <li>Discusses applying of plaster.</li> <li>Discusses levelling up of plaster.</li> <li>Discusses finishing the plaster.</li> <li>Demonstrates how to prepare different types of surfaces.</li> <li>Demonstrates mixing and carrying of plaster.</li> <li>Demonstrates picking up and applying of plaster.</li> <li>Demonstrates levelling of plaster.</li> <li>Demonstrates how to finish plaster.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Prepare different surfaces for plastering.</li> <li>Mix and picks up plaster.</li> <li>Pick up plaster and applies plaster.</li> <li>Level plaster.</li> <li>Finish plaster.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses how to repair damaged plaster.</li> <li>Discusses how to prepare the damaged area for repairs.</li> <li>Discusses how to repair cracks/damaged plaster.</li> </ul>

Grade 5 Term 4			
Week	Topic	Content.	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Carry out paving techniques.</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates how to prepare damaged area for repairs.</li> <li>Demonstrates how to repair cracks/damaged plaster.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Prepare the damaged area for repairs.</li> <li>Repair cracks/damaged areas.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses paving techniques.</li> <li>Discusses setting up of string lines.</li> <li>Discusses how to lay paving slabs with mortar.</li> <li>Discusses how to level slabs.</li> <li>Discusses how to check the fall with a spirit level.</li> <li>Discusses how to fill the joints.</li> <li>Discusses how to lay paving bricks.</li> <li>Demonstrates how to set up string lines.</li> <li>Demonstrates how to lay paving slabs with mortar.</li> <li>Demonstrates how to level slabs.</li> <li>Demonstrates how to check fall with spirit level.</li> <li>Demonstrates how to fill joints.</li> <li>Demonstrates how to lay paving bricks.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Set up string lines.</li> <li>Lay paving slabs with mortar.</li> </ul>

Grade 5 Term 4			
Week	Topic	Content.	Teaching tips, techniques, activities and resources.
			<ul style="list-style-type: none"> <li>• Level slabs.</li> <li>• Check fall with spirit level.</li> <li>• Fill joints.</li> <li>• Lay paving bricks.</li> </ul>
5	<b>Building and construction skills: Bricklaying and plastering</b>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Carry out plastering techniques (Part 2).</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• State or know the theory of paving.</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses applying of plaster.</li> <li>• Discusses levelling up of plaster.</li> <li>• Discusses finishing off of plaster.</li> <li>• Discusses wetting and drying times of plaster.</li> <li>• Discusses how to finish off corners.</li> <li>• Discusses how to avoid problems when plastering.</li> <li>• Demonstrates how to apply plaster.</li> <li>• Demonstrates how to level plaster.</li> <li>• Demonstrates how to finish off plaster.</li> <li>• Demonstrates how to finish off corners.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• Apply plaster.</li> <li>• Level off plaster.</li> <li>• Finish off plaster.</li> <li>• Finish off a corner.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p>



Grade 5 Term 4			
Week	Topic	Content.	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Perform asphalt work for pothole repairs.</li> </ul>	<p><b>Discusses the theory of paving.</b></p> <ul style="list-style-type: none"> <li>Discusses colours and textures of paving slabs and paving bricks.</li> <li>Discusses shapes and sizes of paving slabs and paving bricks.</li> <li>Discusses the different designs using paving slabs and paving bricks.</li> <li>Demonstrates the different designs using paving slabs.</li> <li>Demonstrates the different designs using paving bricks.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State/identify the colours and textures of paving slabs and bricks.</li> <li>State/identify the different shapes and sizes of paving slabs and bricks.</li> <li>Lay out different designs using paving slabs.</li> <li>Lay out different designs using paving bricks.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses how to perform asphalt work for pothole repairs.</li> <li>Discusses safety precautions when performing asphalt work for potholes repairs.</li> <li>Discusses how to clean and prepare a pothole.</li> <li>Discusses how to prime the pothole.</li> <li>Discusses how to fill the pothole with a cold asphalt mix.</li> <li>Demonstrates how to clean out and prepare a pothole.</li> <li>Demonstrates how to prime a pothole.</li> <li>Demonstrates how to fill a pothole with a cold asphalt mix.</li> <li>Demonstrates how to compress and finish the cold asphalt.</li> </ul>

Grade 5 Term 4			
Week	Topic	Content.	Teaching tips, techniques, activities and resources.
			<p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• Observe safety precautions.</li> <li>• Clean and prepare a pothole.</li> <li>• Prime a pothole.</li> <li>• Fill a pothole with a cold asphalt mix.</li> <li>• Compress the cold asphalt.</li> <li>• Finish the repairs to the pothole.</li> </ul>
6	<b>Building and construction skills: Floor and wall finishes</b>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Prepare different surfaces for tiling( e.g. concrete, brick and wood)</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Fit tile edgings.</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses how to prepare different surfaces for tiling.</li> <li>• Discusses how to remove paint from surfaces.</li> <li>• Discusses how to chip the wall with a chisel.</li> <li>• Discusses how to apply Keykote to wall and drying times.</li> <li>• Demonstrates how to remove paint from walls.</li> <li>• Demonstrates how to chip wall with chisel.</li> <li>• Demonstrates how to apply Keykote to wall.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• Remove paint from wall.</li> <li>• Chip wall with chisel.</li> <li>• Apply Keykote to wall.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses the different types of tile edgings.</li> </ul>

Grade 5 Term 4			
Week	Topic	Content.	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Prepare floor for carpet laying.</li> </ul>	<ul style="list-style-type: none"> <li>• Discusses how to measure and cut tile edgings.</li> <li>• Discusses how to fit tile edgings.</li> <li>• Demonstrates how to measure and cut tile edgings.</li> <li>• Demonstrates how to fit tile edgings.</li> </ul> <p>The learner completes the following activities.</p> <ul style="list-style-type: none"> <li>• State/identify the different types of tile edgings.</li> <li>• Measure and cut tile edgings.</li> <li>• Fit tile edgings.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses how to prepare a floor for carpet laying.</li> <li>• Discusses deep cleaning of floors.</li> <li>• Discusses drying times.</li> <li>• Discusses the importance of underlay.</li> <li>• Discusses choosing a carpet.</li> <li>• Demonstrates how to prepare the floor for carpeting.</li> <li>• Demonstrates deep cleaning of floors.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State the reasons for preparing the floor for carpeting.</li> <li>• State the reasons for underlay.</li> <li>• State how to choose a carpet.</li> <li>• Deep cleans the floor.</li> </ul>
7	Building and	Grade 5 1 <sup>st</sup> year.	Grade 5 1 <sup>st</sup> year.



Grade 5 Term 4			
Week	Topic	Content.	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Cut carpet to fit rooms.</li> <li>• Repair a carpet defect.</li> </ul>	<ul style="list-style-type: none"> <li>• Discusses when and how to clean grout.</li> <li>• Demonstrates how to mix grout.</li> <li>• Demonstrates how to apply grout.</li> <li>• Demonstrates when and how to clean grout.</li> </ul> <p>The learners do the following activity:</p> <ul style="list-style-type: none"> <li>• State/identify the different types and colours of grout.</li> <li>• Mix grout.</li> <li>• Apply grout.</li> <li>• Clean grout.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses how to cut carpet to fit room.</li> <li>• Discusses laying standard width carpets.</li> <li>• Discusses how to join carpets.</li> <li>• Discusses methods of fixing.</li> <li>• Discusses how to repair a carpet defect.</li> <li>• Demonstrates how to cut carpet for room.</li> <li>• Demonstrates how to join carpets.</li> <li>• Demonstrates different methods of fixing.</li> <li>• Demonstrates how to repair a carpet defect.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• Cut carpet to fit room.</li> <li>• Join carpet.</li> </ul>

Grade 5 Term 4			
Week	Topic	Content.	Teaching tips, techniques, activities and resources.
			<ul style="list-style-type: none"> <li>• Fix carpet to floor.</li> <li>• Repair carpet defects.</li> </ul>
8	<b>Building and construction skills: Floor and wall finishes</b>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Cut tiles.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• Replace wall tiles.</li> </ul>	<p><b>Grade 5 1<sup>st</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses safety precautions when cutting tiles.</li> <li>• Discusses how to measure, mark and cut tiles.</li> <li>• Discusses how to use a tile cutter.</li> <li>• Discusses how to use an angle grinder.</li> <li>• Discusses how to use a tile nibbler.</li> <li>• Demonstrates how to measure, mark and cut tiles.</li> <li>• Demonstrates how to use a tile cutter.</li> <li>• Demonstrates how to use an angle grinder.</li> <li>• Demonstrates how to use a tile nibbler.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• State safety precautions observed when cutting tiles.</li> <li>• Measure, mark and cut tiles.</li> <li>• Use a tile cutter.</li> <li>• Use an angle grinder.</li> <li>• Use a tile nibbler.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses how to replace wall tiles.</li> <li>• Discusses safety precautions when replacing wall tiles.</li> </ul>

Grade 5 Term 4			
Week	Topic	Content.	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Use appropriate tools to lay laminate flooring.</li> </ul>	<ul style="list-style-type: none"> <li>Discusses how to remove grout from around wall tiles to be replaced.</li> <li>Discusses how to use a cold chisel to chip and remove wall tile.</li> <li>Discusses how to clean out recess.</li> <li>Discusses how to fit new tile and grout.</li> <li>Demonstrates how to remove grout from wall tile.</li> <li>Demonstrates how to use a cold chisel to chip and remove wall tile.</li> <li>Demonstrates how to clean out recess.</li> <li>Demonstrates how to measure new tile, apply tile fix and place on wall.</li> <li>Demonstrates how to grout tile.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>State safety precautions observed when replacing a wall tiles.</li> <li>Remove grout from wall tile.</li> <li>Use a cold chisel to chip and remove wall tile.</li> <li>Clean out recess.</li> <li>Measure new tile, butter with tile fix and place on wall.</li> <li>Grout tile.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses the tools used in laying laminate flooring.</li> <li>Discusses preparation of floor.</li> <li>Discusses how to lay special cushioned underlay.</li> <li>Discusses preparation of boards by fitting special metal clip joints.</li> <li>Discusses how to lay the boards.</li> </ul>

Grade 5 Term 4			
Week	Topic	Content.	Teaching tips, techniques, activities and resources.
			<ul style="list-style-type: none"> <li>• Discusses how to replace skirting or quadrant beading for final finish.</li> <li>• Demonstrates how to prepare floor.</li> <li>• Demonstrates how to lay out underlay.</li> <li>• Demonstrates how to fit clips onto boards.</li> <li>• Demonstrates how to lay boards.</li> <li>• Demonstrates how to fit replace skirting or quadrant beading.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• Prepare the floor.</li> <li>• Lay out the underlay.</li> <li>• Fit metal clips onto board.</li> <li>• Lay boards.</li> <li>• Fit skirting or quadrant beading.</li> </ul>
9	<b>Building and construction skills: Floor and wall finishes</b>	<b>Grade 5 1<sup>st</sup> year.</b> <ul style="list-style-type: none"> <li>• Replace tiles using spacers.</li> </ul>	<b>Grade 5 1<sup>st</sup> year.</b> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses how to replace tiles using spacers.</li> <li>• Discusses safety precautions when replacing tiles using spacers.</li> <li>• Discusses how to remove tiles using a cold chisel.</li> <li>• Discusses how to clean up area of tiles being replaced.</li> <li>• Discusses how to replace tiles using spacers.</li> <li>• Discusses how to grout tiles.</li> <li>• Demonstrates how to remove tiles using a cold chisel.</li> <li>• Demonstrates how to clean up area.</li> <li>• Demonstrates how to replace tiles using spacers.</li> </ul>



Grade 5 Term 4			
Week	Topic	Content.	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 2<sup>nd</sup> year.</b></p> <ul style="list-style-type: none"> <li>Replace tiles around corners.</li> </ul>	<ul style="list-style-type: none"> <li>Demonstrates how to grout tiles.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>Remove tiles using a cold chisel.</li> <li>Clean up area.</li> <li>Replace tiles using spacers.</li> <li>Grout tiles.</li> </ul> <p><b>Grade 5 2<sup>nd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>Discusses how to replace tiles around corners.</li> <li>Discusses safety precautions observed when replacing tiles around corners.</li> <li>Discusses how to remove tiles around corners.</li> <li>Discusses how to clean up areas around corners.</li> <li>Discusses how to measure and cut tiles.</li> <li>Discusses how to set out tiles around corners with the correct overlap.</li> <li>Discusses how to grout tiles around corners.</li> <li>Discusses how to replace tiles around corners with a plastic edge or corner trim.</li> <li>Demonstrates how to remove tiles around a corner using a cold chisel and hammer.</li> <li>Demonstrates how clean up area.</li> <li>Demonstrates how to measure and cut tiles.</li> <li>Demonstrates how to set out tiles around corners with the correct</li> </ul>

Grade 5 Term 4			
Week	Topic	Content.	Teaching tips, techniques, activities and resources.
		<p><b>Grade 5 3<sup>rd</sup> year.</b></p> <ul style="list-style-type: none"> <li>• State the effects of expansion and contraction on laminated flooring.</li> <li>• Repair a damp/damaged laminated floor.</li> </ul>	<p>overlap.</p> <ul style="list-style-type: none"> <li>• Demonstrates how to replace tiles around corners that have a plastic edge or corner trim.</li> <li>• Demonstrates how to grout tiles around corners.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• Remove tiles around a corner using a cold chisel.</li> <li>• Clean up area.</li> <li>• Measure and cut tiles.</li> <li>• Set out tiles around corner with correct overlap.</li> <li>• Replace tiles around corners that have a plastic edge or corner trim.</li> <li>• Grout tiles around corners.</li> </ul> <p><b>Grade 5 3<sup>rd</sup> year.</b></p> <p>The teacher:</p> <ul style="list-style-type: none"> <li>• Discusses the effects of expansion and contraction on laminated flooring.</li> <li>• Discusses how to overcome the effects of expansion and contraction on laminated flooring.</li> <li>• Discusses how to repair damp/damaged laminated flooring.</li> <li>• Demonstrates how to repair a damp/damaged laminated floor.</li> <li>• Demonstrates how to remove and replace skirting and edging.</li> <li>• Demonstrates how to replace damaged/damp laminated floor.</li> </ul> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> <li>• Repair a damp/damaged laminated floor.</li> </ul>

Grade 5 Term 4			
Week	Topic	Content.	Teaching tips, techniques, activities and resources.
			<ul style="list-style-type: none"> <li>• Remove and replace skirting and edging.</li> <li>• Replace damaged/damp laminated floors.</li> </ul>

**Practical assessment: Term 4.**

Assessment is formally recorded during four (4) practical sessions with a minimum of four (4) skills reported. Learners, regardless of abilities, shall be assessed on the same skill. The following serves as suggestion of skills to record and report on.

The learner must be able to:

<b>Week</b>	<b>Grade 5 1<sup>st</sup> year</b>	<b>Grade 5 2<sup>nd</sup> year</b>	<b>Grade 5 3<sup>rd</sup> year</b>
2	1. Set up a profile board. 2. Build a stretcher bond.	1. Re-point mortar between bricks. 2. Replace a spalled brick.	1. Use paving tools correctly. 2. Use a level.
3	1. Shape a mortar joint. 2. Build a corner pillar.	1. Prime a damaged area. 2. Fill/smooth out concrete.	1. Prepare a base for paving. 2. Set up area for paving.
4	1. Apply plaster. 2. Levels out plaster,	1. Prepare damaged area for repairs. 2. Repair cracks/damaged areas.	1. Lay paving slab with mortar. 2. Fills joints.
5	1. Finish off plaster. 2. Finish off corner.	1. Lays out a design using paving slabs. 2. Lays out a design using paving bricks.	1. Fill a pothole with cold asphalt. 2. Compress and finish cold asphalt.
6	1. Remove paint from a wall. 2. Apply Keykote to wall.	1. Measure and cut edgings. 2. Fit edgings.	1. Vacuum the floor. 2. Deep cleans the floor.
7	1. Remove grout from floor tile. 2. Remove floor tile.	1. Mix grout. 2. Apply grout.	1. Fit carpet to floor. 2. Repair carpet defects.
8	1. Measure and mark tile. 2. Cut tile with a tile cutter.	1. Fit wall tile. 2. Grout wall tile.	1. Fit clips to laminate board. 2. Lay laminate board.
9	1. Clean up tile area. 2. Replace tiles using spacers.	1. Set tiles around corners with correct overlap. 2. Replace tiles around corner that have a corner trim.	1. Remove skirting or edging. 2. Replace damaged laminated floor.

**Theoretical assessment: Term 4.**

Four theoretical activities are assessed and recorded, however, a minimum of 1 theoretical activity is reported on. The following serves as suggestions of theoretical activities to report on.

The learner must be able to:

<b>Week</b>	<b>Grade 5 1<sup>st</sup> year</b>	<b>Grade 5 2<sup>nd</sup> year</b>	<b>Grade 5 3<sup>rd</sup> year</b>
2	State the purpose of a profile board.	State one reason for re-pointing mortar between bricks.	State one reason for using a level when paving.
3	Name two kinds of bricklaying bonds.	State the purpose of priming a concrete hole.	State a reason for preparing a base for paving.
4	State one reason for plastering.	State one reason why plaster have cracks.	State one reason for filling joints when paving.
5	State one reason for spraying water on plaster when plastering.	Name two types of paving materials.	State one reason for priming concrete holes.
6	State a reason for applying Keykote to a surface.	State a reason for fitting tile edgings.	State a reason for using underlay when fitting carpets.
7	State a reason for removing grout from tiles when replacing tiles.	State one reason for grouting.	State a method of securing carpets to floors.
8	State the purpose of a tile cutter.	State the purpose of cleaning out tile recess when replacing wall tiles.	State the purpose of fitting clips to laminate boards.
9	State the purpose of tile spacers.	State how we remove damaged tiles.	State the effects of expansion and contraction on laminated flooring.

## 4 SECTION 4: ASSESSMENT

### 4.1 Introduction

This section on assessment *standardises* the recording and reporting processes for the CAPS Grades R to 5 for learners with Severe Intellectual Disability. It also provides a policy framework for the management of School Based Assessment (SBA) and School Assessment Records.

It is required of teachers to offer a differentiated form of assessment, as learners with moderate to severe intellectual disability and learning difficulties also have diverse learning styles and support needs. Since a learner or learners may be functioning on different levels, the assessment / recording / reporting system must make provision for reflecting the level(s) of each individual learner. These different levels should be outlined in the Individual Support Plan which should be developed at the beginning of the year in accordance with the procedures contained in the *Policy on Screening, Identification, Assessment and Support* (SIAS). Each learner, regardless of his/her number of years in the school, must have access to various forms of assessment best suited to his/her competences, learning styles, strengths and needs. The targets set for each learner in terms of attainment of knowledge and skills outlined in each Subject Statement will always strive to take a learner to the next level and should never set a ceiling on learning potential. Individualised adaptation is required in terms of content, methods of presentation, classroom pedagogy, pacing of instruction and accommodations in assessment. The principle is to have high expectations for each learner, to identify and address barriers to learning so as to ensure fairness in assessment (See Chapter 9 of the National Protocol for Assessment, 2011).

Assessment does not imply that after every lesson the learners must complete a worksheet/assignment or project, but will be based on observation and recording of progress steps attained during the lesson or a series of lessons. Formal assessment can be done in a format which would be suitable for each learner, e.g. through written or oral assessments, or by making use of a range of accommodations measures, e.g. a reader and a scribe. The main aim is to be able to develop a report which is based on definable attainment (even through the smallest of steps) as prescribed in each subject and can be shared with parents and care-givers on at least a

quarterly basis so as to elicit their participation and co-operation in the support programme of the learner. At the end of the year a Statement of Achievement/Report card must be made available on which the Individual Support Plan for the following year will be based. There will be no learner retention, as the Individual Support Plan and the Curriculum Schedule (see SIAS Form 124) will indicate at which grade level learners are working in each subject.

## 4.2 Assessment principles

### 4.2.1 Definition

Assessment is a continuous planned process of identifying, gathering and interpreting information about the performance of learners, using various forms of assessment. It involves four steps: generating and collecting evidence of achievement; evaluating this evidence; recording the findings and using this information to understand and thereby assist the learner's development in order to improve the process of learning and teaching. Assessment should be both informal (Assessment for Learning) and formal (Assessment of Learning). In both cases regular feedback should be provided to learners to enhance the learning experience.

Assessment is a process that measures individual learners' attainment of knowledge (content and concepts) and skills by collecting, analysing and interpreting the data and information obtained from this process to:

- enable the teacher to assess a learner's progress in a reliable way.
- inform learners of their strengths, areas to be developed and progress.
- assist teachers, parents and other stakeholders in making decisions about the learning process, the progress of learners and the planning for their individualised support.

Assessment should be mapped against the content, skills, intended goals and topics specified in the learning programme. In both informal and formal assessments it is important to ensure that in the course of a school year:

- all of the topics and content are covered.
- the full range of skills is included.
- a variety of different forms of assessment are used.

#### 4.2.2 Informal Assessment or Daily Assessment

Assessment **for** learning has the purpose of continuously collecting information on a learner's achievement that can be used to improve their learning. Informal assessment is a daily monitoring of learners' progress. This is done through observations, discussions, practical demonstrations, learner-teacher conferences, informal classroom interactions, etc. Informal assessment may be as simple as stopping during the lesson to observe learners or to discuss with learners how learning is progressing. Informal assessment should be used to provide feedback to the learners and to inform planning for teaching but need not be recorded. It should not be seen as separate from learning activities taking place in the classroom.

Learners or teachers can assess their performance in the tasks. Self-assessment and peer assessment actively involves learners in assessment. This is important as it allows learners to learn from and reflect on their own performance. The results of all the informal daily assessment tasks may be recorded based on assessment instruments used such as rubrics and checklists. This may serve to give feedback to the learners, their parents and the school management team.

Informal, on-going assessments should be used to scaffold the acquisition of knowledge and skills and should be the stepping stones leading up to formal assessment.

#### 4.2.3 Formal Assessment

All assessment tasks that make up a formal programme of assessment for the year are regarded as formal assessment. Formal assessment tasks are marked and results are formally recorded by the teacher. All formal assessment tasks are subject to internal moderation for the purpose of quality assurance and to ensure that appropriate standards are maintained in the school. Assessment tasks should always set high expectations for learners.

To implement formal assessment the teacher should:



- Ensure that the formal assessment task coincides with the practical skills and theoretical work embedded in the practical skill corresponding with the tasks performed on that day or within the previous week;
- Explain the task to guide the learner, show an example of the completed task in order for the learner to know exactly what to do and what is expected;
- Divide the class, according to abilities, in more than one group and give a task with similar content, but differentiated in terms of level of difficulty, abstractness or method of questioning, to all the learners. The way in which the assessment task is set should be in reach of the learners' level of development whilst also setting targets for the next step of development;
- Written tests could be set to assess theoretical knowledge within a set time, allowing for assessment accommodations in line with learners' individual needs;
- Write the date of expected completion of the task in the learner's book;
- Compile a suitable assessment tool; and
- Formal assessment should reflect 20 % theoretical knowledge embedded in practical work. Eighty percent (80%) should be practical work.

The formal assessment requirements are indicated in the formal School-Based Assessments table. In the three core subjects, the ratio may be adapted to the needs of the learners. The focus however must be on practical skills and not on the written tasks.

Formal School-Based Assessments			
Term 1	Term 2	Term 3	Term 4
Minimum of 1 worksheet/test/activity per term in order for 20 % of rating codes to reflect on theoretical knowledge	Minimum of 1 worksheet/test/activity per term in order for 20 % of rating codes to reflect on theoretical knowledge	Minimum of 1 worksheet/test/activity per term in order for 20 % of rating codes to reflect on theoretical knowledge	Minimum of 1 worksheet/test/activity per term in order for 20 % of rating codes to reflect on theoretical knowledge
Minimum of 4 practical assessment tasks or activities in order for	Minimum of 4 practical assessment tasks or activities in order for 80%	Minimum of 4 practical assessment tasks or activities in order for 80%	Minimum of 4 practical assessment tasks or activities in order for 80%

80% of rating codes to reflect on different practical skills	of rating codes to reflect on different practical skills	of rating codes to reflect on different practical skills	of rating codes to reflect on different practical skills
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In Creative Arts and Art and Crafts, the above table is not applicable. In these two subjects, a minimum of 4 practical assessment tasks should be completed. Theoretical content will not be assessed. Refer to the learning programme for assessment requirements.

In Physical Education assessment, the above tables does not apply. Refer to the learning programme for assessment.

Assessment in the CAPS Grades R to 5 for learners with Severe Intellectual Disability is underpinned by the objectives of the National Qualifications Framework (NQF). These objectives are to:

- Create an integrated national framework for learning achievements;
- Facilitate access to and progression within education, training and career paths;
- Enhance the quality of education and training;
- Redress unfair discrimination and past imbalances and thereby accelerate employment opportunities;
- Contribute to the holistic development of the learner and preparation for the world of work by addressing:
  - social adjustment and responsibility;
  - moral accountability and ethical work orientation;
  - resilience and adaptability;
  - economic participation and entrepreneurial skills; and
  - nation-building.

The principles that drive these objectives are:

- ***Integration***

To adopt a unified approach to education and training that will strengthen the capacity of learners to adapt to the requirements of the workplace.

- ***Relevance***

To be dynamic and responsive to workplace needs and a range of employment fields.

- ***Credibility***

To demonstrate national and international values and recognition of qualification and acquired competencies and skills.

- ***Coherence***

To work within a consistent framework of principles.

- ***Flexibility***

To allow for creativity and resourcefulness when achieving skills to cater for different learning styles and use a range of assessment methods, instruments and techniques.

- ***Participation***

To enable stakeholders to participate in setting standards and co-ordinating the achievement of the qualification.

- ***Access***

To address barriers to learning at each level to facilitate learners' progress.

- ***Progression***

To ensure that the qualification framework permits individuals to move through the levels of the national qualification via different, appropriate combinations of the components of the delivery system.

- ***Articulation***

To allow for vertical and horizontal mobility in the education system when accredited pre-requisites have been successfully completed.

- ***Validity of assessments***

To ensure assessment covers a broad range of knowledge, skills, values and attitudes to demonstrate applied competency. This is achieved through:

- clearly stating the skill to be assessed;
  - selecting the appropriate or suitable evidence;
  - matching the evidence with a compatible or appropriate method of assessment; and
  - selecting and constructing an instrument(s) of assessment.
- ***Reliability***

To assure assessment practices are consistent so that the same result or judgment is arrived at if the assessment is replicated in the same context. This demands consistency in the interpretation of evidence; therefore, careful monitoring of assessment is vital.

- ***Fairness and transparency***

To verify that no assessment process or method(s) hinders or unfairly advantages any learner. The following could constitute unfairness in assessment:

- Inequality of opportunities, resources or teaching and learning approaches
  - Bias based on ethnicity, race, gender, age, disability or social class
  - Lack of clarity regarding topic, content or skill being assessed
  - Comparison of learners' work with that of other learners, without taking into account differences in learning styles, language and culture.
- ***Practicability and cost-effectiveness***

To integrate assessment practices within the teaching and learning process and strive for cost and time-effective assessment.

### 4.3 Managing assessment

#### 4.3.1 Types of Assessment

Assessment benefits the learner and the teacher. It informs learners about their progress and helps teachers make informed decisions at different stages of the learning process. Depending on the intended purpose, different types of assessment can be used.

- **Baseline assessment:** At the beginning of a year or learning experience, baseline assessment establishes the knowledge, skills, values and attitudes that learners bring to the classroom. This knowledge assists teachers to plan learning programmes and learning activities

flexibly enough to accommodate a wide range of learning styles and learning needs. This assessment should be done at three levels, namely to determine:

#### *Progress with the curriculum*

- Are learner learning what they were taught?
- Are they at the right entry point to 'grasp' the content worked on in the classroom?
- Are they practicing and performing as expected?
- Are they applying the facts, concepts and/or skills being learned?

#### Interests

- Are learners engaged in the lessons and activities?
- Are they showing interest in a new topic or area of study?
- Are they sharing their interests with others?

#### Characteristics

- What are their preferred learning styles (e.g., whole class teaching or pair work)?
- What are their responses to the content?
- What are their responses to the difficulty level of instruction?
- What are their responses to the pacing of instruction?
- What are their responses to the environment?
- **Diagnostic assessment:** This assessment diagnoses the nature and causes of learning barriers experienced by specific learners. It is followed by guidance, appropriate support and intervention strategies. This type of assessment is useful to make referrals for learners requiring specialist assistance.
- **Formative assessment (Informal Assessment):** This assessment monitors and supports teaching and learning. It determines learners' strengths and areas to be addressed and provides feedback on progress. It determines if a learner is ready for summative assessment.
- **Summative assessment (Formal Assessment):** This type of assessment gives an overall picture of the learner's progress at a given time.

#### 4.3.2 Planning Assessment

An assessment plan should cover three main processes:

- **Collecting evidence:** The assessment plan indicates which learning programme topics, content and skills will be assessed, what assessment method or activity will be used and when this assessment will be conducted.

The assessment tasks may be broken down (designed down) into smaller, achievable steps and support may gradually be withdrawn as the learner master the content/skills. Thus, designing down means to look at the assessment goal and dividing this into smaller components which are spread over a longer period.

Two or more grades may be straddled, in other words the evidence may be collected over more than one grade within a subject. But straddling should be carefully recorded and monitored through Form 125 of the SIAS Protocol.

- **Recording:** The process of recording refers to the assessment instruments or tools with which the assessment will be captured or recorded. Therefore, appropriate assessment instruments must be developed or adapted.
- **Reporting:** All the evidence is put together in a report to deliver a decision for the subject. Reporting must reflect the straddling that has been applied and should provide guidance to parents through meaningful descriptive paragraphs on what has been achieved and what the next expected outcomes are.

#### 4.3.3 Methods of Assessment

Methods of assessment refer to who carries out the assessment and includes teacher assessment, self-assessment, peer assessment and group assessment.

<b>TEACHER ASSESSMENT</b>	The teacher assesses learners' performance against given criteria in different contexts, such as individual work, group work, etc.
<b>SELF-ASSESSMENT</b>	Learners assess their own performance against given criteria in different contexts, such as individual work, group work, etc.
<b>PEER ASSESSMENT</b>	Learners assess another learner or group of learners' performance against given criteria in different contexts, such as individual work,

	group work, etc.
<b>GROUP ASSESSMENT</b>	Learners assess the individual performance of other learners within a group or the overall performance of a group of students against given criteria.

#### 4.3.4 Assessment tools/instruments to execute assessment

An assessment tool is the instrument the teacher utilizes to execute the assessment. When choosing an assessment tool ensure that the tool:

- is appropriate for the selected assessment method;
- provides the most valid and reliable information on the learners' performances;
- measures the objectives of the lesson.

Examples of assessment tools are checklist, rubrics, questionnaires, worksheets and video recordings.

A **rubric** serves as an objective assessment tool that provides, at varying levels, clear descriptions of the characteristics of the tasks. The descriptions or criteria in the rubric enables learners to understand what the teacher expects from them and complete the task accordingly. Rubrics are either holistic or analytic.

Rubrics should explain the competence level descriptors for the skills, knowledge, values and attitudes (SKVAs) a learners must demonstrate to achieve each level of the rating scale. The relevant content must be used to create the rubric to assess the task or question. The descriptions must clearly indicate the minimum level of attainment for each category on the rating scale.

**Analytical descriptive rubrics** focus on elements of the product or performances. Descriptive sentences are formulated for each of the seven rating codes, with the best performance reflected with a score of 7 and the poorest with a score of 1. This is the most reliable and trustworthy assessment tool.

**Task lists** and **checklists** are examples of a holistic rubric and show the learners what needs to be done. They consist of short statements describing the expected performance in a particular task. The statements on the checklist can be ticked off when the learner has adequately achieved the criterion. Checklists and task lists are useful in peer or group assessment activities.

Learners must do a minimum of 5 activities/projects/worksheets/tests per term 1 to 4. The teacher compiles the activities/worksheets/tests and these should consist of activities that require the learner to:

- Identify the correct answer/picture/object – the question as well as the answer may consist of images/objects, e.g. Boardmaker or clip art images;
- Match column A to B and both columns may consist of pictures/objects;
- Fill in the missing words. The missing words may be available to the learners (on a separate sheet or printed on the worksheet) and they can copy the words, or write the words on the dotted lines provided by the teacher;
- Perform a skill other than writing, e.g. to colour, to cut and paste in specified groups, to find pictures in a magazine and cut and paste in book; or
- Provide answers.

**The following should at least be included in the Teacher's Assessment or Planning and Assessment File:**

- Programme of Assessment for the grade
- The tools (rubric, checklist, etc.) used for each assessment task
- A mark sheet/record sheet for each assessment task

**The learners Evidence must at least include:**



- Classwork book
- Worksheet file

Evidence of learner performance must be available for quality assurance. This may be in the form of a Portfolio of Evidence (POE) which will include the learners' classwork books and the Support Needs Analysis (SNA).

#### 4.4 School Assessment Programme

The **Programme of Assessment** takes place continuously and should commence in the second week of each term. The programme of assessment should include a minimum of five (5) assessment goals per subject. The programme of assessment should be recorded in the Teacher's assessment file or planning file (which may serve a dual purpose).

**The following should at least be included in the Teacher's Assessment or Planning and Assessment File:**

- A contents page
- The assessment goals for each subject
- The tools used for each assessment task
- A mark sheet/record sheet and report for each assessment task
- Recording instrument(s) for each assessment task
- A mark sheet and report for each assessment task

**The learners Portfolio of Evidence must at least include:**

- A contents page
- The assessment tasks according to the assessment programme as indicated below
- The assessment tools or instruments for the task
- A record of the rating code (and comments) achieved for each task.

Eighty to hundred percent (80% - 100%) of formal assessment should consist of **practical tasks/activities/skills**. Each learner should do a variety of practical tasks and activities during each term as indicated in the learning programmes.

#### 4.5 Assessment programme across the five years

##### Grade 4 – Practical assessment tasks

Task	Term 1		
1	Week 2 or 3	Measure 2 lengths of different metal in millimetres.  Measure a person's height in metres	Punch large holes in a sheet metal.  Cut and bend a piece of sheet metal.
2	Week 4 or 5	Mark off and cuts a round bar.  Use the cross filing method to file the round bar square.	Remove and repairs a safety gate.  Replace the repaired gate.
3	Week 6 or 7	Start a vehicle using all the safety rules learnt.  Start a brush cutter/ lawn mower using all the safety rules learnt.	Mix the correct amount of two stroke oil and petrol.  Replace trimmer lines on a brush cutter.
4	Week 8 or 9	Wash and polish car.  Vacuum a car.	Change the spark plugs on a vehicle.  Replace the oil and oil filter on a vehicle.
Task	Term 2		
1	Week 2 or 3	Disconnect a negative terminal on the battery.  Point out at least 5 electrical components.	Remove the covers of the different bulbs.  Change the different bulbs on a vehicle
2	Week 4 or 5	Identify the different colour codes on electrical equipment.  Use the different tools in electrical work.	Replace a light fitting.  Fix a broken extension cord.
3	Week 6 or 7	Identify and a use soldering iron.  Change a 3 pin plug.	Use a connection block.  Fix a faulty bulb fitting.

4	Week 8 or 9	Identify supply water pipes. Identify waste water pipes	Identify, care and use the tools used to repair gutters.  Identify, care and use tools for fixing downpipes.
Task	Term 3		
1	Week 2 or 3	Use different types of safety equipment.  Set up and use a ladder	Cut and use fibre glass membrane for waterproofing roofs.  Use water proofing paint on fibre glass membrane
2	Week 4 or 5	Scrape a wall and sandpaper different surfaces.  Fill cracks on walls and sand down.	Care and use for a glass cutter.  Care and use for a putty knife and scraper.
3	Week 6 or 7	Use a measuring tape to measure timber.  Use marking off equipment to mark off wood.	Switch an electric tool on and off.  Use tools without injury to the learner by observing all safety rules.
4	Week 8 or 9	Care and use of a sash clamp.  Care and use the woodwork bench vice.	Drill and chisel out wood in door for fitment of a door lock.  Fit a door lock and handles
Task	Term 4		
1	Week 2 or 3	Use a spirit level.  Use the different types of trowels.	Identify bricks and blocks.  Identify different types of sand, stone and cement.
2	Week 4 or 5	Erect scaffolding.  Dismantle scaffolding	Make a dry mortar mix.  Make a wet mortar mix.
3	Week 6 or 7	Use a tile cutter.  Use a pincher to nibble tiles.	Mix tile adhesive.  Apply tile adhesive
4	Week 8 or 9	Use a carpet fitter's bolster and a carpet stretcher.	Fit the different types of under felt.

		Use a measuring tape and a Stanley knife.	Fit the different types of carpets
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#### Grade 4 term 1 – 4: Theoretical assessment tasks

Evidence of one theoretical task of formal assessment between weeks 2 – 09 as in the annual teaching plan must be available for quality assurance.

#### Grade 5 – Practical assessment tasks

Task	Week	Grade 5 1 <sup>st</sup> year	Grade 5 2 <sup>nd</sup> year	Grade 5 3 <sup>rd</sup> year
Term 1				
1	2	Use a hand drill. Use a hand held angle grinder	Switch an industrial angle grinder on and off. Use and industrial angle grinder.	Connect up an inverter welding machine. Light up a gas torch with a welding flame
2	4	Cut a straight piece of metal using a cut off saw. Cut an angled piece of metal using a cut off saw.	Cut a small piece of sheet metal. Bend the piece of sheet metal	Use a hand drill. Use a riveting gun.
3	6	Remove and refit a lawn mower blade. Sharpen a lawn mower blade.	Remove a bicycle brake pad. Replace a bicycle brake pad.	Check radiator fluid and engine oil levels. Drain and fill engine oil.
4	8	Clean a bicycle chain. Lubricate linkages on a bicycle.	Identify parts for replacement. State when a minor service should be done.	Jack up a vehicle. Remove and refit a car tyre
Term 2				
1	2	Test a battery. Replace a battery.	Repair household appliances without using a multi-meter. Repair household appliances using a multi-meter.	Test for a defective fuse in a stove. Remove and replace a fuse in a stove.
2	4	Operate a multi-meter. Use a multi- meter to test for faults.	Test a light fitting. Replace a light fitting.	Wire a bed lamp switch. Test a bed lamp with a multi-meter.

3	6	Measure and cut PVC pipes. Connect PVC pipes.	Shut off the water supply to a tap. Replace a tap.	Unblock a toilet with a plunger. Unblock a toilet with an auger.
4	8	Measure and cut a copper pipe. Connect two copper pipes with a compression fitting.	Clean out the hopper. Carry out rodding of a drain pipe.	Measure and cut guttering. Install guttering.
Term 3				
1	2	Remove old paint. Fill cracks and smooth out surface.	Mix water based paint. Apply water based paint with roller.	Remove glass from window frame. Clean old putty from frame.
2	4	Strain old paint. Mix oil paint.	Set ladder to work. Clean up area for water proofing.	Soften putty. Put putty onto frame rebate.
3	6	Cut door to size. Fit hinges.	Use a jigsaw. Use a table saw.	Mark off board. Cut board to size.
4	8	Mark off door handles to door. Drill holes and chisel out to fit door locks and handles.	Replace cupboard door. Replace cupboard.	Repair a loose cupboard door screws. Replace cupboard door hinges.
Term 4				
1	2	Set up a profile board. Build a stretcher bond.	Re-point mortar between bricks. Replace a spalled brick.	Use paving tools correctly. Use a level.
2	4	Apply plaster. Levels out plaster,	Prepare damaged area for repairs. Repair cracks/damaged areas.	Lay paving slab with mortar. Fills joints.

3	6	Remove paint from a wall. Apply Keykote to wall.	Measure and cut edgings. Fit edgings.	Vacuum the floor. Deep cleans the floor.
4	8	Measure and mark tile. Cut tile with a tile cutter.	Fit wall tile. Grout wall tile.	Fit clips to laminate board. Lay laminate board.

### **Grade 5 terms 1 – 4: Theoretical assessment tasks**

**Evidence of one theoretical task of formal assessment between weeks 2 – 09 as in the annual teaching plan must be available for quality assurance.**

#### **4.6 Recording and Reporting**

Recording is a process in which the teacher documents the level of a learner's performance in a specific assessment task. It indicates learner progress towards the achievement of the knowledge and skill. Records of learner performance should provide evidence of the learner's progression. Records of learner performance should also be used to verify the progress made by teachers and learners in the teaching and learning process.

Reporting is a process of communicating learner performance to learners, parents, schools, and other stakeholders. Learner performance can be reported in a number of ways. These include report cards, parents' meetings, school visitation days, parent-teacher conferences, phone calls, letters, class or school newsletters, etc.

Good record keeping is essential in all assessment, particularly in continuous assessment. A record book or file must be kept up to date by each teacher. It should contain:

- learners' names;
- dates of assessment;
- name and description of the assessment activity;
- the results of assessment activities, according to Subject;
- comments for support purposes.

Teachers in all grades issue formal report cards quarterly indicating the competence level of the learner and as stated above also provide explanatory notes on what the learner has achieved per subject and what could be done by the parents at home to provide further stimulation.

The report cards may either be in narrative form that states the theory embedded in the skills and skill performed, or in a rating code as follows:

Rating code	Description of competence
7	Outstanding achievement
6	Meritorious achievement
5	Substantial achievement
4	Adequate achievement
3	Moderate achievement
2	Elementary achievement
1	Not achieved

The reports should always be a combination of both the narrative form and rating codes. All records must be accessible, easy to interpret, securely kept, confidential and helpful in the teaching and reporting process. The school assessment policy determines the details of how record books must be completed. Schools are required to provide quarterly feedback to parents, using a formal reporting tool, such as a report card. The schedule and the report card should indicate the overall level of performance of a learner.

**NOTE:**

Criterion referencing is best used to describe learner's performance in a skill. Teachers must make use of suitable analytical descriptive rubrics when assessing a learner's competence for a specific skill using practical demonstrations.

#### 4.7 Moderation of Assessment

Moderation refers to the process that ensures that the assessment tasks are fair, valid and reliable. Moderation must be implemented at school as required. Comprehensive and appropriate moderation practices must be in place for the quality assurance of all subject assessments. The formal School-Based Assessment and the practical assessment tasks should be moderated internally and if necessary by the relevant subject specialists at the district.

##### 4.7.1 Moderation serves five purposes:

- It must ascertain whether subject content and skills have been sufficiently covered.
- The moderator must ensure that the correct balance of cognitive demands are reflected in the assessments.
- The assessments and marking are of an acceptable standard and consistency.
- The moderator must make judgements about the comparability of learner performance across schools; whilst recognising that teachers teach in different ways.
- The subject specialist/moderator must identify areas in which a teacher may need development and support and must ensure that this support is provided.

##### 4.7.2 Internal moderation

Assessment must be moderated according to the internal moderation policy of the School, Provincial and National Departments. Moderation is a continuous process. The moderator's involvement starts with the planning of assessment methods and instruments and follows with continuous collaboration with and support to the assessor. Internal moderation creates common understanding of topics and skills and maintains these across the learning programmes.



Moderation is therefore an on-going process and not a once-off end-of-year event.

#### 4.8 General

This document should be read in conjunction with:

- White Paper 6 on Special Needs Education: Building an Inclusive Education and Training System (2001);
- *National policy pertaining to the programme and promotion requirements of the National Curriculum Statement Grades R – 12; and (NPPPPR) (2011);*
- *National Protocol for Assessment Grades R – 12. (NPA) (2011);*
- *Guidelines for Responding to Diversity in the Classroom through the Curriculum and Assessment Policy Statements (2011);*
- *Guidelines to Ensure Quality Education and Support in Special Schools and Special School Resource Centres (2013);*
- *Policy on Screening, Identification, Assessment and Support (2014);*
- *Guidelines for Full-service/Inclusive Schools (2010);*
- *Standard Operating Procedures for Assessment of Learners who Experience Barriers to Assessment (2016).*