



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

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

PLUMBING

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 Nations 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;

Subjects		Time
General Education		
Languages		5 – 14 years = 10 hours
Home Language		14 – 18 years = 6 hours
First additional language		14 – 18 year = 2 hours
Mathematics		5 – 14 years = 5 hours
		14 – 18 years = 3 hours
Life Skills	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
Skills subjects		14 – 18 years = 8 hours

Subjects CAPS Grades R to 5 for learners with severe intellectual disability: Electives	Time
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"> - Personal and Social wellbeing - Physical education - Creative arts 	<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"> - Personal and Social wellbeing - Physical education - Creative arts - Natural Sciences <p>Skills subjects</p> <p>A minimum of 3 skills and maximum of 4 skills</p>

2 SECTION 2: INTRODUCTION TO PLUMBING.

2.1 What is Plumbing?

Plumbing is a study of installing and repairing water supply and drainage systems as well as fixtures. This subject will equip learners to assist in the installing and repairing of cold and hot water supply to buildings, installing and repairing fixtures, installing and repairing above and below ground drainage systems, work as a team with bricklayers, electricians etc. The learner will be able to assist a qualified artisan, semi skilled artisan or be able to follow a supervisor's instructions.

Plumbing skills and the content embedded in the skills are taught over two years in Grade 4 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 should preferably be 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 Plumbing learners study:

- Health, safety and first aid procedures as well as good housekeeping principles
- The sectors in the plumbing industry and career possibilities in each sector
- Client services and customer care in the industry
- Managing resources and job planning
- Basic plumbing principles
- Basic skills in each aspect of the plumbing sector
- An introduction to the world of work

2.3 Topics to be studied in Plumbing

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

1	Health, safety and good housekeeping practices.
2	Basic construction sketches

3	Tools.
4	Plumbing principles
5	Installation and maintenance of a water supply system
6	Installation and maintenance of a water supply system
7	Basic building work
8	Planning and preparation for performing plumbing works
9	Installation and maintenance of a drainage system
10	Solar hot water systems
11	World of work

2.4 Requirements for Plumbing 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 **Plumbing** 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 wear a two piece overall and safety shoes.

2.4.2.3 Books, magazines and teaching media

- Each learner should have a learner workbook for the current module being studied
- The teacher should have:
 - plumbing books
 - You tube videos on plumbing
 - Models of plumbing components

2.4.2.4 Infrastructure and equipment

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

2.4.2.4.1 Infrastructure

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

The workshop should contain the following furniture and equipment

• 1 x teachers table and chair	• 2x lockable cupboards
• 2 x workbenches x 4 bench vices	• 1 x wash basin
• 4 x Plug points for welding and other equipment	• 4 x sets combination spanners(6mm-32mm)
• 4 x shifting spanners(250mm)	• 4 x shifting spanner(150mm)
• 2 x stilson wrench(150mm)	• 2 x stilson wrench(250mm)
• 4 x pipe cutters	• 4 x hacksaws
• 4 x pipe benders	• 4 x bending spring
• 4 x level	• 4 x tap reseating tool
• 4 x gas blowtorch	• 4 x water pump pliers
• 1 x chalk line	• 4 x builders square
• 4 x sets screwdrivers	• 4 x combination pliers
• 4 x long nose pliers	• 4 x measuring tape
• 4 x sink sockets	• 1 x socket set complete(6mm-32mm)
• 4 x rubber mallet	• 4 x ball pein hammers
• 2 x toilet auger	• 4 x plungers
• 4 x smooth files	• 4 x round files
• 4 x builders hawk	• 4 x plastering trowels
• 4 x vice grip	• 1 x inside circlip pliers

• 1 x outside circlip pliers	• 1 x file brush
• 4 x claw hammers	• 4 x chisels
• 4 x spade	• 2 x wheelbarrow
• 1 x vernier	• 4 x tubing pliers
• 4 x Stanley knives	• 2 x industrial drill
• 2x angle grinder	• 4 x pipe vices
• 1 x drill press	• 1 x bench grinder
• 4 x Club hammer	• 4 x Brick bolster chisel
• 2 x Pickaxe	• 2 x flaring tool
• 4 x G clamps	• 2 x fire extinguishers

- Consumables are not included in the list

The learners should work in groups of 4.

2.4.2.5 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

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

- Be sub-contractors under supervision

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

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

3.1 Content overview of theoretical topics

The content is embedded in the skills and the learners should execute the skills in a stimulated working environment re created in the skills workshop. The table below indicates the topics and content in the Plumbing learning programme in Grade 4 and 5.

	Topics	Grade 4 The learner must be able to:	Grade 5 The learner must be able to:
1	Health, safety and good housekeeping practices	<ul style="list-style-type: none">• Identify and remove potential hazards in the work area.• Identify, use and care of protective clothing and equipment.• Demonstrate the ability to take appropriate steps in an emergency.• Set up protection and safety equipment for the working area.• Use, store and maintain tools and equipment safely.• Comply with Health, safety and Welfare in the workplace.• Understand unsafe conditions and acts.• Practice good housekeeping.	<ul style="list-style-type: none">• Identify and remove potential hazards in the work area.• State unsafe conditions and acts.• Practice good housekeeping.• Locate fire extinguishers and fire hoses.• Identify and use fire extinguishers.• Identify and follow procedures for emergencies promptly and correctly.• Report injuries involving individuals to the relevant persons promptly.• Follow procedures that apply to illness or injuries in the work area.• Access a first aid box• Administer basic first aid• Intervene in a first aid

	Topics	Grade 4 The learner must be able to:	Grade 5 The learner must be able to:
			scenario. <ul style="list-style-type: none"> • Treat bleeding wounds. • Treat an injured person for shock.
2	Basic construction sketches	<ul style="list-style-type: none"> • Explain the role of drawings when carrying out plumbing. • Draw simple sketches of plumbing layouts • Identify basic drawing and symbols used in plumbing activities. • Describe elements of basic plumbing drawings. • Apply information from drawing in plumbing activities. 	
3	Tools	<ul style="list-style-type: none"> • Identify, use and care basic for hand tools. • Identify, use and care for specialised tools. • Identify, use and care for measuring tools. 	<ul style="list-style-type: none"> • Identify, use and care for power tools. • Maintain power hand tools. • Identify, use and care for specialised tools. • Identify, use and care for measuring tools. • Maintain and repair tools.
4	Plumbing principles	<ul style="list-style-type: none"> • Describe the role of the plumber. • Describe water sources. • Describe basic water flow principles. • Describe basic water pressure principles. • Describe water quality principles. • Explain basic corrosion of plumbing materials. • Describe basic pollution prevention principles. 	<ul style="list-style-type: none"> • Understand and apply water flow principles. • Understand and apply basic water pressure principles. • Understand and apply water quality principles. • Understand and apply knowledge of corrosion of plumbing materials. • Apply pollution prevention principles. • Apply basic pipe design

	Topics	Grade 4 The learner must be able to:	Grade 5 The learner must be able to:
		<ul style="list-style-type: none"> Identify and describe plumbing tools and equipment. Identify and describe plumbing pipe work and related fittings and their uses. Identify and describe plumbing sanitary ware fixtures and fittings and their uses. Identify ancillary plumbing materials and consumables and describe their uses. 	<p>and sizing.</p> <ul style="list-style-type: none"> Select and understand the purpose of valves. Select and understand the purpose of meters. Select and understand the purpose of pumps. Select and understand the purpose of plumbing materials for pipes and fittings. Select and understand the purpose of hot water systems. Select and understand the purpose of terminal fittings.
5	Installation and maintenance of a water supply system	<ul style="list-style-type: none"> Understand and describe basic plumbing principles. Install and maintain a water supply under supervision. Install and maintain a below ground drainage system under supervision. Identify prescribed pipe laying resources. Identify all tools, equipment and personal protective equipment required for the task. Ensure that all tools, equipment and personal protective equipment are functional and ready for use at work area. Identify safety requirements for pipe laying activities. Understand and apply safety requirements for evacuation 	<ul style="list-style-type: none"> Describe cold water systems and list their components. Describe hot water systems and list their components. Describe the use and application of components. Join pipes and assemble using pipe fittings. Install and maintain above ground drainage components and sanitary fittings under supervision. Install and maintain cold water pipe systems. Test the pressure in pipe systems. Install and maintain hot water pipe systems. Install geysers Inspect and test hot water

	Topics	Grade 4 The learner must be able to:	Grade 5 The learner must be able to:
		<p>and working in trenches.</p> <ul style="list-style-type: none"> • Check work site for hazards and take corrective measures. • Set out work area to line and level to receive pipes. • Excavate trenches using manual or mechanical equipment. • Ensure that the excavated trench and work area is free of obstructions, water and loose materials. • Ensure that excavated trench or work area is shored up according to acceptable procedures. • Install pressure pipes. • Complete installation of pressure pipelines. 	<p>systems.</p> <ul style="list-style-type: none"> • Describe basic faults in hot and cold water systems. • Inspect, repair and maintain cold water pipes. • Inspect, repair and maintain hot water pipes. • Repair taps and mixers. • Find faults in cold water systems. • Find faults in hot water systems. • Find faults in geysers. • Find faults in fittings. • Apply fault finding techniques according to specifications. • Trace hidden pipe work. • Detect and repair water leaks. • Inspect, maintain and repair soil and waste water systems. • Inspect, maintain and repair drainage systems.
6	Erection, using and dismantling access equipment		<ul style="list-style-type: none"> • Level and clear area where scaffolding is erected. • Place adjustable jacks in position. • Level horizontal components. • Position scaffold boards properly on supports. • Tighten all couplings. • Dismantle and stack components in the correct order.

	Topics	Grade 4 The learner must be able to:	Grade 5 The learner must be able to:
			<ul style="list-style-type: none"> • Erect and dismantle a trestle scaffold. • Erect and dismantle an extension ladder. • Make use of a step ladder.
7	Basic building work	<ul style="list-style-type: none"> • Chase channels for piping in brickwork. • Drill holes in concrete and brickwork. • Use rawl bolts and other fasteners. • Set out and construct brickwork for sanitary ware fixtures. • Plaster channels, holes and brickwork. 	<ul style="list-style-type: none"> • Set out brick masonry work for manholes and chambers • Mix mortar and concrete and apply. • Construct brickwork for manholes and chambers. • Plaster brickwork. • Box plumbing pipes.
8	Planning and preparation for performing plumbing works	<ul style="list-style-type: none"> • Identify correct work area according to drawings. • Communicate and agree on a work task. • Set out and measure work area. • Determine levels. • Procure correct tools and equipment. • Calculate, order and prepare quantities according to site procedures. • Prepare work area for plumbing. 	<ul style="list-style-type: none"> • Estimate accurately quantities of materials needed. • Identify suppliers correctly. • List supplier selection criteria. • Prepare an order list based on specifications. • Purchase and deliver correct material to site. • Identify, select and maintain tools and equipment. • Check tools for defects before using.
9	Installation and maintenance of a drainage system	<ul style="list-style-type: none"> • Install and maintain a one pipe soil pipe system. • Install and maintain a single stack soil pipe system. • Install soil and waste water fixtures and fittings, and 	<ul style="list-style-type: none"> • Install, inspect a drainage system. • Set out trenches and excavate to line and level. • Bed, join and lay drainpipes.

	Topics	Grade 4 The learner must be able to:	Grade 5 The learner must be able to:
		sanitary fittings.	<ul style="list-style-type: none"> • Backfill and compact excavations. • Inspect drainpipes and clear blockages. • Build, inspect and maintain drainage systems structures. • Install in-site sanitation systems.
10	Solar hot water system		<ul style="list-style-type: none"> • Introduction of solar water systems • Installation of solar water systems; passive and active systems • Repair and maintenance of solar water systems
11	World of work	<ul style="list-style-type: none"> • Practice good work habits-personal presentation • Practice good work habits-social presentation • Conduct business ethically and professionally. • Identify customer needs accurately. • Deal with customers. • Address customer complaints. 	<ul style="list-style-type: none"> • Identify the criteria for placement in the learner work experience programme (LWEP) • Work with competence • Show good work tolerance • Practice appropriate social skills training • Orientate learners to the open labour market • Perform personal management/ activities for daily living. • Participate in the learner work experience programme (LWEP).

The content is embedded in the skills and the learners should execute the skills in a simulated working area recreated in a Plumbing workshop.

3.2 Teaching plans

The theory is embedded in the practical tasks in Plumbing. Omitting one or more of the practical tasks imply that learners are deprived of the full learning programme. The learners are two years in Grade 4 and three years in Grade 5. Each term comprises of ten weeks and a minimum of 9 practical sessions is compulsory. The sequence within the term is not compulsory and the teacher may cover the learning content and skills in any appropriate sequence

3.2.1 Grade 4: 1st and 2nd year: Term One.

Grade 4: Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
1	Health, safety and good housekeeping practices	Grade 4 1st year <ul style="list-style-type: none">Identify and remove potential hazards in the work area.Describe the role of the plumberPractice good housekeeping	Grade 4 1st year <p>The teacher:</p> <ul style="list-style-type: none">Discuss and demonstrate health, safety and good housekeeping practicesDiscuss and demonstrate how to identify and remove potential hazards in the work areaDiscuss the role of the plumber and employment in the plumbing sector <p>The learners complete the following activities:</p> <ul style="list-style-type: none">Discusses health, safety and good housekeeping practices.Answers questions on the role of the plumber and types of

Grade 4: Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
7	Plumbing principles	Grade 4 1st year <ul style="list-style-type: none"> Identify and describe plumbing tools and equipment 	Grade 4 1st year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates the use of the toilet auger, bending spring, the pipe bender, the tap reseating tools and the gas blowtorch The learners complete the following activities: <ul style="list-style-type: none"> Identify, use and care of the toilet auger Use a bending spring
	Basic building work	Grade 4 2nd year <ul style="list-style-type: none"> Set out and construct brickwork for sanitary ware fixtures 	Grade 4 2nd year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates brick masonry The learners complete the following activities: <ul style="list-style-type: none"> Carry out basic brick masonry
8	Plumbing principles	Grade 4 1st year <ul style="list-style-type: none"> Identify and describe plumbing pipe work and related fittings and their uses 	Grade 4 1st year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates the use of copper (capillary and compression fittings), galvanised iron fittings, stop cocks and pressure reduction valves The learners complete the following activities: <ul style="list-style-type: none"> Identify copper (capillary and compression fittings), galvanised iron

Practical Assessments 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:

Week	Grade 4 1 st year	Grade 4 2 nd year
2	Draw a water cycle diagram Draw a water purification diagram	Draw a simple sketch of a tap Draw a simple sketch of a basin with 2 taps
3	Carry out a filtration process Check salinity levels of water	Use a spanner to open a nut Use a water pump pliers to grip a pipe
4	Open and shut off a water meter Demonstrate water flow on different inclination of pipes	Use a measuring tape Use a reseating tool
5	Demonstrate the effects of corrosion on water by passing water through a corroded pipe Show the effects of corrosion to tap components	Use a hammer drill Drill a hole in the wall
6	Show how to prevent backflow in waste lines Explain the 'p' trap effect	Use a rawl bolt Use screws to secure a part
7	Use a toilet auger Use a bending spring	Set a profile Dry mix mortar
8	Use a capillary fitting Use a compression fitting	Make a mortar mix Lay a row of bricks
9	Identify plumbing sanitary ware fixtures and fittings State the uses of plumbing sanitary ware fixtures and fittings	Make a plaster mix Plaster a row of bricks

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 4 1st year	Grade 4 2nd year
2	Name 2 sources of water in nature	State the role of drawings when carrying out plumbing
3	State what is softness of water	Identify 4 basic hand tools used in plumbing
4	State why we need water pressure in water lines	State the purpose of the reseating tool
5	State which type of pipe is most affected by corrosion	State the function of the hand drill
6	Name one water borne disease caused by effluent waste	State the purpose of fasteners
7	State the purpose of the toilet auger	State the purpose of the profile
8	State the purpose of the stop cock	State the mortar mix proportions
9	Name 3 common sanitary ware fixtures in a bathroom	State the plaster mix proportions

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	Health, safety and good housekeeping	<p>Grade 4 1st year</p> <ul style="list-style-type: none"> Identify, use and care of protective clothing and equipment Practice good housekeeping <p>Grade 4 2nd year</p> <ul style="list-style-type: none"> Use, store and maintain tools and equipment safely Practice good housekeeping 	<p>Grade 4 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates use and care of protective clothing and equipment Discusses and demonstrates good housekeeping practices <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Identify, use and care of protective clothing and equipment Carry out good housekeeping practices <p>Grade 4 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to use, store and maintain tools and equipment safely Discusses and demonstrates good housekeeping practices <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Use, store and maintain tools and equipment safely
2	Tools	<p>Grade 4 1st year</p> <ul style="list-style-type: none"> Identify and use basic hand tools 	<p>Grade 4 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates use of basic hand tools; spanners,

Grade 4: Term 2			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	Plumbing and preparation for performing plumbing works	Grade 4 2nd year <ul style="list-style-type: none"> Set out work area 	<p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Observe and assist in installing a water supply system under supervision Observe and assist in installing cold water pipes and fittings under supervision. <p>Grade 4 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to set out a work area. <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Identify and set out a work area according to work site plans
7	Installation and maintenance of a water supply system	Grade 4 1st year <ul style="list-style-type: none"> Install a below ground drainage system under supervision 	<p>Grade 4 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to install a below ground drainage system under supervision Discusses and demonstrates how to install waste line and drainage pipes <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Observe and assist in installing a below ground drainage system Observe and assist in installing waste lines and drainage pipes

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"> Assist in preparing the work area for plumbing

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:

Week	Grade 4 1 st year	Grade 4 2 nd year
2	Use a screwdriver Use a hacksaw	Use an angle grinder Use a hand drill
3	Use a pipe cutter Use a bending spring	Make a plastering mix Plaster a channel
4	Use a tri-square Use a builders square	Make a plastering mix Plaster a hole
5	Identify different water pipes Identify 2 different types of taps	Identify a work area Communicate and agree on work tasks
6	Cut supply pipe to size Attach a fitting to pipe	Mark out work area Set out work area
7	Cut a waste line pipe Attach a fitting to pipe	Work out levels of work area Level out a bathtub
8	Connect a compression fitting Connect a capillary fitting	Procure tools for a job Order material for a job
9	Set angle of waste line pipe Connect up the waste line pipe	Clear out work areas Prepare area for plumbing

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 4 1 st year	Grade 4 2 nd year
2	State the purpose of a hacksaw	Identify the hand drill, angle grinder and bench grinder
3	State the purpose of the pipe cutter	State the plastering mix
4	State the purpose of the pipe cutter	State the drying time of plaster
5	State the advantage of using copper pipes	State the purpose of a job card
6	State the purpose of thread tape when installing water supply pipes	State the reason for marking out a work area
7	State the purpose of a gully and trap	State the reason for working out levels of worksites

8	State one reason for using polycop pipe	State the reason for calculating the amount of material required
9	Name the different types of pipe used in drainage	State the reason for preparing the work area for plumbing

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	Health, safety and good housekeeping practices	<p>Grade 4 1st year</p> <ul style="list-style-type: none"> • Demonstrate the ability to take appropriate steps in an emergency • Practice good housekeeping <p>Grade 4 2nd year</p> <ul style="list-style-type: none"> • Understand unsafe conditions and acts • Practice good housekeeping 	<p>Grade 4 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> • Discusses and demonstrates how to take appropriate steps in an emergency • Discusses and demonstrates good housekeeping practices <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> • Name and take appropriate steps in an emergency • Practice good housekeeping <p>Grade 4 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> • Discusses and demonstrates unsafe conditions and acts • Discusses and demonstrates good housekeeping practices <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> • State unsafe and safe conditions and acts • Practice safe conditions and acts • Practice good housekeeping
2	Installation and	Grade 4 1st year	Grade 4 1st year

Grade 4: Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
	maintenance of a water supply system	<ul style="list-style-type: none"> Identify prescribed pipe laying Identify all tools, equipment and personal protective equipment 	<p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates pressure and flow principles Discusses and demonstrates how to lay pipe in ground Discusses and demonstrates use of basic tools, equipment and personal protective equipment <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Lay pipes on correct substrate in ground Identify, use and care of all tools, equipment and personal protective equipment
	Basic construction sketches	<p>Grade 4 2nd year</p> <ul style="list-style-type: none"> Identify basic drawing and symbols used in plumbing activities. Describe elements of basic plumbing drawings Apply information from drawing in plumbing activities 	<p>Grade 4 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and identifies basic drawing and symbols use in plumbing activities Discusses how to apply information from drawing in plumbing activities <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Identify basic drawing and symbols used in plumbing activities Apply information from drawing in plumbing activities. Copy basic symbols from worksheet
3	Installation and	Grade 4 1st year	Grade 4 1st year

Grade 4: Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
	supply system	laying activities	<ul style="list-style-type: none"> Discusses and demonstrates safety requirements for pipe laying activities. Discusses and demonstrates shoring of trenches <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Identify safety requirements for pipe laying activities Shore up trenches
	Installation and maintenance of a drainage system	<p>Grade 4 2nd year</p> <ul style="list-style-type: none"> Install and maintain a one pipe soil pipe system 	<p>Grade 4 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to install and maintain a one pipe soil pipe system Demonstrates how to fit soil, waste and vent pipes according to specification <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in installing and maintaining a one pipe soil pipe system. Assist in fitting soil, waste and vent pipes according to specifications
5	Installation and maintenance of a water supply system	<p>Grade 4 1st year</p> <ul style="list-style-type: none"> Understand and apply safety requirements for evacuation and working in trenches 	<p>Grade 4 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates safety requirements for evacuation and working in trenches

Grade 4: Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
	Installation and maintenance of a drainage system	Grade 4 2nd year <ul style="list-style-type: none"> Install and maintain a single stack soil pipe system 	<ul style="list-style-type: none"> Discusses and demonstrates how to mark a trench using pegs and a line <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Practice safety requirements when working in trenches Understand and practice evacuation when working in trenches Observe and assist in marking out a trench <p>Grade 4 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to install and maintain a single stack soil pipe system <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in installing and maintaining a single stack pipe system Identify the components
6	Installation and maintenance of a water supply system	Grade 4 1st year <ul style="list-style-type: none"> Check work site for hazards and take corrective measures 	<p>Grade 4 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to check worksites for hazards and take corrective measure Discusses unsafe acts and conditions in a worksite <p>The learners complete the following activities:</p>

Grade 4: Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
	Installation and maintenance of a drainage system	Grade 4 2nd year <ul style="list-style-type: none"> Install and maintain a single stack soil pipe system 	<ul style="list-style-type: none"> Check worksites for hazards and take corrective measures State the unsafe acts and conditions at a worksite Grade 4 2nd year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to install and maintain a single stack soil pipe system Discusses the different components of the single stack soil pipe system The learners complete the following activities: <ul style="list-style-type: none"> Assist to install and maintain the single stack soil pipe system Name the different components of the single stack soil pipe system
7	Installation and maintenance of a water supply system	Grade 4 1st year <ul style="list-style-type: none"> Excavate trenches using manual and mechanical equipment 	Grade 4 1st year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to excavate trenches using manual and mechanical equipment Discusses and demonstrates safety practices when excavating trenches The learners complete the following activities: <ul style="list-style-type: none"> Assist in the excavation of trenches using manual and mechanical equipment

Grade 4: Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
	Installation and maintenance of a drainage system	Grade 4 2nd year <ul style="list-style-type: none"> Install soil and waste water fixtures and fitting. 	<ul style="list-style-type: none"> Carry out safety procedures when excavating trenches Grade 4 2nd year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to install soil and waste water fixtures and fittings Discusses safety factors when installing soil and waste water fixtures The learners complete the following activities: <ul style="list-style-type: none"> Assist in the installation of soil and waste water fixtures and fittings Observe safety procedures when installing soil and waste water fixtures and fittings
8	Installation and maintenance of a water supply system	Grade 4 1st year <ul style="list-style-type: none"> Excavate trenches using manual and mechanical equipment 	Grade 4 1st year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to excavate trenches using manual and mechanical equipment Discusses and demonstrates safety practices when excavating trenches The learners complete the following activities: <ul style="list-style-type: none"> Assist in the excavation of trenches using manual and mechanical equipment

Grade 4: Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
	Installation and maintenance of a drainage system	Grade 4 2nd year <ul style="list-style-type: none"> Install soil and waste water fixtures and fittings. 	<ul style="list-style-type: none"> Carry out safety procedures when excavating trenches Grade 4 2nd year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to install soil and waste water fixtures and fittings Discusses safety factors when installing soil and waste water fixtures Discusses and demonstrates fitting a rodding point and access point The learners complete the following activities: <ul style="list-style-type: none"> Assist in the installation of soil and waste water fixtures and fittings Observe safety procedures when installing soil and waste water fixtures and fittings Observe and assist in fitting a rodding point
9	Installation and maintenance of a water supply system	Grade 4 1st year <ul style="list-style-type: none"> Excavate trenches using manual or mechanical equipment 	Grade 4 1st year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to excavate trenches using manual and mechanical equipment Discusses and demonstrates safety practices when excavating trenches

Grade 4: Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
	Installation and maintenance of a drainage system	Grade 4 <ul style="list-style-type: none"> Install soil and waste water fixtures and fittings 	<p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in the excavation of trenches using manual and mechanical equipment Carry out safety procedures when excavating trenches Loosen hard ground <p>Grade 4 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to install soil and waste water fixtures and fittings Discusses safety factors when installing soil and waste water fixtures <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in the installation of soil and waste water fixtures and fittings Observe safety procedures when installing soil and waste water fixtures and fittings

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:

Week	Grade 4 1 st year	Grade 4 2 nd year
2	Lay pipes on ground Use personal protective equipment	Copy symbols from worksheet Identifies basic drawing and symbols
3	Maintain hand tools Maintain equipment	Install a waste line Install a vent pipe
4	Excavate up a trench Shore up a trench	Install a 1 pipe soil pipe system Install a vent pipe
5	Mark out and peg a trench Work safely in a trench	Install a 1 pipe soil pipe system Install a vent pipe
6	Practice good housekeeping Correct hazardous situations	Check the gradient level of a 1 pipe soil pipe system Backfill a 1 pipe soil pipe system
7	Excavate a trench using manual labour Excavate a trench using mechanical equipment	Install a soil and waste water fixture Complete installation of a soil and waste water fixture
8	Practice safety procedures when excavating a trench Drain a trench	Connect a rodding point Connect an access point
9	Excavate a trench with a gradient Loosen hard ground	Insert a cleaning eye Backfill the trench

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:

Week	Grade 4 1 st year	Grade 4 2 nd year
2	State the reason for using personal protective equipment	State the purpose of a plumbing drawing
3	State the reason for maintaining hand tools	State the purpose of a waste line
4	State 1 reason for shoring up a trench	State the reason for a vent pipe

5	State 1 safety requirement when working in a trench	State the reason for a vent pipe	
6	State 3 unsafe acts	State the reason for a gradient	
7	State 1 reason for excavating a trench	State the purpose of a soil and waste water fixture	
8	State 1 safety procedure when excavating trenches	State the purpose of a rodding point	
9	State how you would loosen hard ground	State the purpose of the cleaning eye	

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 resources.
1	Health, safety and good housekeeping practices	<p>Grade 4 1st year</p> <ul style="list-style-type: none"> Practice good housekeeping <p>Grade 4 2nd year</p> <ul style="list-style-type: none"> Practice and understand the concept of good housekeeping 	<p>Grade 4 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates good housekeeping practices Keeps the workshop neat and tidy. <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Observe good housekeeping practices Carry out workshop cleanup and setup <p>Grade 4 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates good housekeeping practices <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Observe good housekeeping practices Carry out workshop cleanup and setup
2	Installation and maintenance of a water supply system	<p>Grade 4 1st year</p> <ul style="list-style-type: none"> Ensure that the excavated trench and work area is free of obstructions, water and loose 	<p>Grade 4 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to keep an excavated trench and work area free of obstructions, water and loose materials.

Grade 4: Term 4			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
		<p>materials</p> <p>Grade 4 2nd year</p> <ul style="list-style-type: none"> Install sanitary fittings: the bathtub 	<ul style="list-style-type: none"> Discusses and demonstrates safety procedures when excavating trenches <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Ensure that the excavated trench and work area is free of obstructions, water and loose materials Observe safety precautions when excavating trenches <p>Grade 4 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to install the bathtub. <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in installing the bathtub
3	Installation and maintenance of a water supply system	<p>Grade 4 1st year</p> <ul style="list-style-type: none"> Ensure that the excavated trench or work area is shored up according to acceptable procedures 	<p>Grade 4 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to shore up an excavated trench or work area according to acceptable procedures Discusses and demonstrates safety precautions when shoring up an excavated trench or work area. <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in ensuring that the excavated trench or work area is shored up according to acceptable procedures

[illegible]

Grade 4: Term 4			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	Installation and maintenance of a drainage system	Grade 4 2nd year <ul style="list-style-type: none"> Install sanitary fittings: the toilet 	<ul style="list-style-type: none"> Discusses and demonstrates safety procedures when installing pressure pipes <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Shut off water supply Install pressure pipes Observe safety precautions when installing pressure pipes <p>Grade 4 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to install the toilet <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in installing the toilet
8	Basic building work	Grade 4 1st year <ul style="list-style-type: none"> Chase channels for piping in brickwork 	Grade 4 1st year <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to cut channels in brickwork for installing pipe work. Discusses and demonstrates how to use an angle grinder to chase channels in brickwork. Discusses and demonstrates how to use a chisel and hammer to chase channels in brickwork Discusses and demonstrates safety precautions when making

Grade 4: Term 4			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	World of work	Grade 4 2nd year <ul style="list-style-type: none"> Practice good work habits- personal and social presentation Conduct business ethically and professionally 	<p>channels in brickwork</p> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Cut channels in brickwork using an angle grinder, a hammer and chisel Observe safety precautions when cutting channels in brickwork <p>Grade 4 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to practice good social habits; personal and social presentation Discusses how to conduct business ethically and professionally <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Practice good social habits; personal and social presentation Conduct business ethically and professionally
9	Basic building work	Grade 4 1st year <ul style="list-style-type: none"> Chase channels for piping in brickwork 	<p>Grade 4 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to cut channels in brickwork for installing pipe work. Discusses and demonstrates how to use an angle grinder to chase channels in brickwork. Discusses and demonstrates how to use a chisel and hammer to chase channels in brickwork

Grade 4: Term 4			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	World of work	Grade 4 2nd year <ul style="list-style-type: none"> • Accurately identify customer needs • Deal with customers • Address customer complaints 	<ul style="list-style-type: none"> • Discusses and demonstrates safety precautions when making channels in brickwork <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> • Cut channels in brickwork using an angle grinder, a hammer and chisel • Observe safety precautions when cutting channels in brickwork <p>Grade 4 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> • Discusses and demonstrates how to accurately identify customer needs • Discusses and demonstrates how to deal with customers and address customers complaints <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> • Identify customers needs • Deal with customers • Address customers complaints

Practical Assessments 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:

Week	Grade 4 1 st year	Grade 4 2 nd year
2	Clear work area from obstruction Drain water from trench	Prepare area for bathtub installation Install the bathtub
3	Shore up a trench Observe safety precautions when shoring up a trench	Check drainage of bathtub Connect supply pipes to bathtub
4	Shore up a trench Observe safety precautions when shoring up a trench	Prepare area for shower Install the shower
5	Shuts off the water supply Prepare ground for laying of supply pipe	Check drainage of shower Install supply pipes to shower
6	Install supply pipes Connect supply pipes with compression fittings	Prepare area for toilet Install the toilet
7	Connects up supply pipes above ground with capillary fittings Secure supply pipes above ground	Connect up water supply to toilet Connect up outlet to toilet
8	Mark out channel in brickwork Chase channel with angle grinder	Practice good social habits Conduct business ethically
9	Use a chisel and hammer to clear channel Use protective gear when chasing a channel	Identify customer needs Address customer complaints

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:

Week	Grade 4 1 st year	Grade 4 2 nd year
2	State 1 safety precaution when working in a trench	State 1 reason for levelling out a bathtub
3	State 1 safety precaution when shoring up a trench	State 1 reason for correct drainage of bathtub
4	State 1 safety precaution when shoring up	State 1 advantage of installing a shower in a

	a trench	bathtub
5	State 1 safety precaution when preparing ground for laying of supply pipes	State 1 reason for a p trap in a shower
6	State an advantage of compression fittings	State 2 methods of securing a toilet
7	State an advantage of capillary fittings	State 2 methods of connecting the outlet of a toilet
8	State 1 reason for chasing out a channel in brickwork	State 1 reason to practice good social habits
9	State 1 way of sharpening a chisel	State the main needs of a customer

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

Learners are three years in Grade 5

Grade 5: Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
1	Health , safety and good housekeeping practices	<p>Grade 5 1st year</p> <ul style="list-style-type: none"> Identify and remove potential hazards in the work place Practice good housekeeping <p>Grade 5 2nd year</p> <ul style="list-style-type: none"> Locate fire extinguishers and fire hoses Practice good housekeeping 	<p>Grade 5 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to identify and remove potential hazards in the work place Discusses and demonstrates good housekeeping practices <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Identify and removes potential hazards in the work place. Practice good housekeeping Clean up and set workshop <p>Grade 5 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to locate fire extinguishers and fire hoses Discusses and demonstrates the different fire extinguishers to put out different fires Discusses and demonstrates good housekeeping practices <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>Grade 5 3rd year</p> <ul style="list-style-type: none"> • Administer basic first aid • Practice good housekeeping 	<ul style="list-style-type: none"> • Locate fire extinguishers and fire hoses • Assist in putting out fires using different fire extinguishers • Practice good housekeeping • Clean up and sets workshop <p>Grade 5 3rd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> • Discusses and demonstrates basic first aid • Discusses AIDS and HIV around bleeding injuries • Discusses and demonstrates good housekeeping practices <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> • Assist in administering basic first aid • Practice good housekeeping • Clean up and sets workshop
2	Tools	<p>Grade 5 1st year</p> <ul style="list-style-type: none"> • Identify, use and care of power tools 	<p>Grade 5 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> • Discusses and demonstrates how to identify, use and care for power tools; the angle grinder, the hand drill and the bench grinder <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> • Identifies, uses and maintains power tools; the angle grinder,

Grade 5: Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	<p>Installation and maintenance of a water supply system</p> <p>Plumbing and preparation for performing plumbing works</p>	<p>Grade 5 2nd year</p> <ul style="list-style-type: none"> Find faults in cold water systems <p>Grade 5 3rd year</p> <ul style="list-style-type: none"> Estimate accurately quantities of material needed Identify suppliers correctly List suppliers selection criteria 	<p>the hand drill and the bench grinder</p> <p>Grade 5 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to find faults in cold water systems Discusses and demonstrates how to repair water supply systems Discusses and demonstrates how to repair valves, taps and cocks <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in finding faults in cold water systems Assist in repairing water supply systems Assist in repairing valves, taps and cocks <p>Grade 5 3rd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to accurately estimate quantities of material needed Discusses how to identify suppliers correctly Discusses selection criteria for suppliers

Grade 5: Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	Plumbing and preparation for performing plumbing works	Grade 5 3rd year <ul style="list-style-type: none"> Prepare an order list based on specification 	<p>geysers</p> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in finding faults in hot water systems Assist in inspecting, repairing and maintaining hot water systems Assist in repairing and maintaining geysers <p>Grade 5 3rd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to prepare an order list based on specification <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in preparing an order list based on specification
4	Tools	Grade 5 1st year Identify, use and care for specialised tools	Grade 5 1st year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to use the following specialized tools: the pipe cutter, the pipe bender and the bending spring Discusses and demonstrates how to use the blowtorch Discusses and demonstrates safety precautions when using specialised tools

Grade 5: Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	<p>Installation and maintenance of a water supply system</p> <p>Plumbing and preparation for performing plumbing works</p>	<p>Grade 5 2nd year</p> <ul style="list-style-type: none"> Find faults in geysers <p>Grade 5 3rd year</p> <ul style="list-style-type: none"> Identify, select and maintain tools and equipment Check tools for defects before using 	<p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Use the pipe cutter, the pipe bender and the bending spring Use the blowtorch Observe safety when using specialised tools <p>Grade 5 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to find faults in geysers Discusses and demonstrates how to fix a leaking geyser Discusses and demonstrates how to replace an faulty element <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in finding faults in geysers Assist in fixing a leaking geyser Assist in replacing a faulty element <p>Grade 5 3rd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to identify, select and maintain plumbing tools and equipment Discusses and demonstrates how to check plumbing tools for defects before using

Grade 5: Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	Installation and maintenance of a drainage system	Grade 5 3rd year <ul style="list-style-type: none"> Install, inspect a drainage system 	<ul style="list-style-type: none"> Assist in finding and repairing faults in capillary and compression fittings Grade 5 3rd year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to install and inspect a drainage system Discusses and demonstrates the layout of a below ground drainage system Discusses and demonstrates angles, bedding and backfilling of drainpipes The learners complete the following activities: <ul style="list-style-type: none"> Assists in installing and inspecting drainage system Assists in the layout of a below ground drainage system Assists in angling pipes, bedding and backfilling of drainpipes
6	Tools	Grade 5 1st year <ul style="list-style-type: none"> Maintain and repair tools 	Grade 5 1st year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to maintain and repair plumbing tools The learners complete the following activities: <ul style="list-style-type: none"> Assist to maintain and repair plumbing tools

Grade 5: Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	Installation and maintenance of a water supply system	Grade 5 2nd year <ul style="list-style-type: none"> Apply fault finding techniques according to specifications 	Grade 5 2nd year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to apply fault finding techniques in a water supply system according to specification The learners complete the following activities: <ul style="list-style-type: none"> Assist in applying fault finding techniques in a water supply system according to specification
	Installation and maintenance of a drainage system	Grade 5 3rd year <ul style="list-style-type: none"> Set out trenches and excavate to line and level 	Grade 5 3rd year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to set out trenches and excavate to line and level The learners complete the following activities: <ul style="list-style-type: none"> Assist in setting out trenches, excavating to line and levelling
7	Plumbing principles	Grade 5 1st year <ul style="list-style-type: none"> Understand and apply water flow principles Understand and apply basic water pressure principles 	Grade 5 1st year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates water flow principles Discusses and demonstrates basic water pressure principles Discusses and demonstrates pipe design and sizing The learners complete the following activities: <ul style="list-style-type: none"> Demonstrate different pressure flow and water quantity with

Grade 5: Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	<p>Installation and maintenance of a water supply system</p> <p>Installation and maintenance of a drainage system</p>	<p>Grade 5 2nd year</p> <ul style="list-style-type: none"> Trace hidden pipe works and rectify faults <p>Grade 5 3rd year</p> <ul style="list-style-type: none"> Set out trenches and excavate to line and level 	<p>different diameters of pipes.</p> <ul style="list-style-type: none"> Demonstrate how gravity and floor inclinations affect water flow Demonstrate how closing off the water meter tap affects pressure and water flow <p>Grade 5 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to trace hidden pipe work and rectify faults <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in tracing hidden pipe work and rectifying faults <p>Grade 5 3rd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to set out trenches, excavate to line and level <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in setting out trenches, excavating to line and levelling
8	Plumbing principles	<p>Grade 5 1st year</p> <ul style="list-style-type: none"> Understand and apply water quality principles 	<p>Grade 5 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates water quality principles;

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"> Understand and apply knowledge of corrosion of plumbing materials 	<p>hardness, softness, salinity, bacterial; levels and suspended solids</p> <ul style="list-style-type: none"> Discusses and demonstrates corrosion of plumbing materials and the prevention thereof <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Explain and demonstrate hardness and softness of water. Demonstrate how to carry out simple filtration process of water with suspended solids Demonstrate how to check salinity levels of water
	Installation and maintenance of a water supply system	<p>Grade 5 2nd year</p> <ul style="list-style-type: none"> Detect and repair water leaks 	<p>Grade 5 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to shut off water supply when carrying out repairs Discusses and demonstrates how to detect and repair water leaks <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Shut off water supply Detect and repair water leaks
	Installation and maintenance of a drainage	<p>Grade 5 3rd year</p> <ul style="list-style-type: none"> Bed, join and lay drainpipes 	<p>Grade 5 3rd year</p> <p>The teacher:</p>

Grade 5: Term 1			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	Installation and maintenance of a drainage system	Grade 5 3rd year <ul style="list-style-type: none"> Bed, join and lay drainpipes 	<ul style="list-style-type: none"> State and understand the criteria for the learner work experience programme. Participate in the learner work experience programme Grade 5 3rd year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to bed, join and lay drainpipes. The learners complete the following activities: <ul style="list-style-type: none"> Assist in bedding, joining and laying drainpipes

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:

Week	Grade 5 1st year	Grade 5 2nd year	Grade 5 3rd year
2	Use an angle grinder Use a hand drill	Reseat a tap Replace a tap washer	Estimate quantity of material needed Identify suppliers
3	Maintain an angle grinder Maintain a hand drill	Find fault in geyser Repair fault in geyser	Prepare an order list Price an order list
4	Use a pipe cutter Use a pipe bender	Remove an element Replace an element	Select plumbing tools Maintain plumbing tools
5	Use a measuring tape Use a builder square	Repair a leaking compression fitting Repair a leaking capillary fitting	Install a drainage system Inspect a drainage system
6	Maintain plumbing tools Repair plumbing tools	Remove a faulty stopcock Replace a faulty stopcock	Mark out trench Excavate trench
7	Close a water meter Show pressure of different pipe diameters	Find a hidden leaking pipe Repair the hidden leaking pipe	Excavate trench Level out trench
8	Demonstrate hardness of water Demonstrate softness of water	Shut off water supply Repair leaking pipe	Bed drainpipes Lay drainpipes
9	Show how pollution affects the water cycle Show how to prevent pollution in the water cycle	State criteria for the work experience programme Participate in the work experience programme	Lay drainpipes Join drainpipes

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 1st year	Grade 5 2nd year	Grade 5 3rd year
2	State the use of an angle grinder	State reason for repairing water supply systems	State reason for estimating quantity of material needed
3	State why we maintain power tools	State the purpose of a geyser	State reason for pricing an order list
4	Identify the pipe cutter and pipe bender	State the purpose of an element	Identify basic plumbing tools
5	State why we use measuring tools	State reasons for leaking capillary fittings	State reason for bedding drainage pipe
6	State why we maintain plumbing tools	State reasons for maintaining a water supply system	State reason for excavating trenches
7	State why we use different diameter pipes in plumbing	State reason for keeping pipes hidden	State reason for gradient in trench
8	State what causes hardness and softness of water	State reason for repairing leaks	State reason for inclination in drainage pipes
9	State 1 effect of effluent in the water supply system	State the objective of the work experience programme	State the purpose of drainage pipes

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	Health, safety and good housekeeping practices	<p>Grade 5 1st year</p> <ul style="list-style-type: none"> • State safe and unsafe conditions and acts • Practice good housekeeping <p>Grade 5 2nd year</p> <ul style="list-style-type: none"> • Identify and follow procedures for emergencies promptly and correctly • Practice good housekeeping 	<p>Grade 5 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> • Discusses and demonstrates safe and unsafe conditions and acts • Discusses and demonstrates good housekeeping practices <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> • State safe and unsafe conditions and acts. • State how to prevent unsafe conditions and acts • Practice good housekeeping • Clean up and set workshop <p>Grade 5 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> • Discusses and demonstrates the procedures for emergencies • Discusses and demonstrates good housekeeping practices <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> • Identify and follow procedures for emergencies promptly and correctly

Grade 5: Term 2			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
		Grade 5 3rd year <ul style="list-style-type: none"> Intervene in a first aid scenario Practice good housekeeping 	<ul style="list-style-type: none"> Practice good housekeeping Clean up and set workshop Grade 5 3rd year The teacher: <ul style="list-style-type: none"> Discusses AIDs and HIV in a bleeding first aid scenario Discusses and demonstrates intervention in a first aid scenario Discusses and demonstrates good housekeeping The learners complete the following activities: <ul style="list-style-type: none"> State the precaution to be taken in a bleeding first aid situation Assist in basic first aid scenario Practice good housekeeping Clean up and set up workshop
2	Plumbing principles	Grade 5 1st year <ul style="list-style-type: none"> Select and understand the purpose of valves 	Grade 5 1st year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates the purpose of valves. Demonstrate how to connect up valves The learners complete the following activities: <ul style="list-style-type: none"> State the purpose of valves Connect up valves

Grade 5: Term 2			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	<p>Installation and maintenance of a water supply system</p> <p>Installation and maintenance of a drainage system</p>	<p>Grade 5 2nd year</p> <ul style="list-style-type: none"> • Detect and repair water leaks <p>Grade 5 3rd year</p> <ul style="list-style-type: none"> • Backfill and compact excavation 	<p>Grade 5 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> • Discusses and demonstrates how to shut off the water supply • Discusses and demonstrates how to detect and repair water leaks <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> • Shut off the water supply • Assist to detect and repair water leaks <p>Grade 5 3rd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> • Discusses and demonstrates how to backfill and compact an evacuation <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> • Assist in backfilling and compacting an evacuation
3	Plumbing principles	<p>Grade 5 1st year</p> <ul style="list-style-type: none"> • Select and understand the purpose of meters 	<p>Grade 5 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> • Discusses and demonstrates the purpose of water meters <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> • Identify the water meter • Assist in connecting a water meter

Grade 5: Term 2			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	Installation and maintenance of a water supply system	Grade 5 2nd year <ul style="list-style-type: none"> Inspect, maintain and repair soil and waste water systems 	Grade 5 2nd year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to inspect, maintain and repair soil and waste water systems Discusses and demonstrates how to remove an inspection waste line cover and clean out waste line The learners complete the following activities: <ul style="list-style-type: none"> Assist in inspecting, maintaining and repairing soil and waste water system Remove an inspection waste line cover and cleans out waste line
	Installation and maintenance of a drainage system	Grade 5 3rd year <ul style="list-style-type: none"> Inspect drainpipes and clear blockages 	Grade 5 3rd year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to inspect drainpipes and clear blockages The learners complete the following activities: <ul style="list-style-type: none"> Assist in inspecting drainpipes and clearing blockages
4	Plumbing principles	Grade 5 1st year <ul style="list-style-type: none"> Select and understand the purpose of pumps 	Grade 5 1st year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates the purpose of pumps

Grade 5: Term 2			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	Installation and maintenance of a water supply system	Grade 5 2nd year <ul style="list-style-type: none"> Inspect, maintain and repair drainage systems 	<p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assists in selecting and understanding the purpose of pumps <p>Grade 5 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to inspect, maintain and repair drainage systems Discusses and demonstrates how to clean out a blocked p trap and drainage gulley <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in inspecting, maintaining and repairing drainage systems Clean out p trap blockage Clean out drainage gulley
	Installation and maintenance of a drainage system	Grade 5 3rd year <ul style="list-style-type: none"> Build, inspect and maintain drainage system structures 	<p>Grade 5 3rd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to build, inspect and maintain drainage system structures Builds a manhole for a drainage system <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.
	Installation and maintenance of a drainage system	Grade 5 3rd year <ul style="list-style-type: none"> Install in-site sanitation systems; the bathtub 	<p>jacks</p> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in placing adjustable jacks in position <p>Grade 5 3rd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to select site and build support structure for bathtub Discusses and demonstrates how to install the bath <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in selecting site and building structure for bathtub Assist in installing the bathtub
7	Installation and maintenance of a water supply system	Grade 5 1st year <ul style="list-style-type: none"> Describe cold water systems and list their components 	<p>Grade 5 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses cold water systems and their components Demonstrates how to connect and use cold water system components <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Name the cold water system components Assist in connecting and using cold water system components

Grade 5: Term 2			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	<p>Erection, using and dismantling access equipment</p> <p>Installation and maintenance of a drainage system</p>	<p>Grade 5 2nd year Level horizontal components</p> <p>Grade 5 3rd year Install in-site sanitation systems; the bath</p>	<p>Grade 5 2nd year The teacher:</p> <ul style="list-style-type: none"> • Discusses and demonstrates how to level horizontal components • Discusses drainage of the bathtub and shower floor <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> • Assist in the levelling of horizontal components • Assist in positioning the bathtub and shower floor for proper drainage <p>Grade 5 3rd year The teacher:</p> <ul style="list-style-type: none"> • Discusses and demonstrates how to install the bath • Discusses and demonstrates drainage of bathtub <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> • Assist in installing the bathtub • Assist in positioning bathtub for proper drainage
8	Installation and maintenance of a water supply system	<p>Grade 5 1st year</p> <ul style="list-style-type: none"> • Describe hot water systems and list their components 	<p>Grade 5 1st year The teacher:</p> <ul style="list-style-type: none"> • Discusses and list hot water systems and their components • Discusses and demonstrates some use of hot water

Grade 5: Term 2			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	Erection, using and dismantling access equipment	Grade 5 2nd year <ul style="list-style-type: none"> Position scaffold boards properly on supports 	<p>components</p> <ul style="list-style-type: none"> Discusses and demonstrates how to connect a pressure and overflow valve <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in fitting some hot water components Name the hot water system components Assist in connecting pressure valve Assist in connecting an overflow valve <p>Grade 5 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to position scaffold boards properly on supports <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in positioning scaffold boards properly on supports
	Installation and maintenance of a drainage system	Grade 5 3rd year <ul style="list-style-type: none"> Install in-site sanitation systems: the basin 	<p>Grade 5 3rd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to install the hand wash basin <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"> Assist in installing the hand wash basin
9	<p>Installation and maintenance of a water supply system</p> <p>World of work</p>	<p>Grade 5 1st year</p> <ul style="list-style-type: none"> Describe the use and application of hot water system components <p>Grade 5 2nd year</p> <ul style="list-style-type: none"> Able to work with competence Able to have good work tolerance Practice appropriate social skills training 	<p>Grade 5 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates the use and application of hot water system components Discusses and demonstrates how to remove and replace an element in a geyser <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in removing and replacing an element in a geyser <p>Grade 5 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses how to work with competence Discusses how to have good work tolerances Discusses and demonstrates appropriate social skills training <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Work with competence Work with tolerance Practice appropriate social skills training Role play working with competence, tolerance and appropriate social skills

Grade 5: Term 2			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	Installation and maintenance of a drainage system	Grade 5 3rd year <ul style="list-style-type: none"> Install in-site sanitation systems: the basin 	Grade 5 3rd year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to install the hand wash basin Discusses and demonstrates how to connect up supply lines and waste line for basin The learners complete the following activities: <ul style="list-style-type: none"> Assist in installing the hand wash basin Assist in connecting supply line and waste line for basin

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:

Week	Grade 5 1st year	Grade 5 2nd year	Grade 5 3rd year
2	Select a valve Connect a valve	Shut off water supply Repair water leaks	Backfill excavation Compact excavation
3	Select a water meter Connect a water meter	Remove inspection cover on waste line Clean out waste line	Inspect blockages Clear blockages
4	Select a pump Connect a pump	Clean out p trap blockage Clean out drainage gully	Excavate area for manhole Build a manhole structure
5	Select plumbing materials Connect a fitting to a pipe	Clear out area for scaffolding Level out area for scaffolding	Select basic drainpipes Lay out basic drainpipes
6	Select a terminal fitting Connect a terminal fitting	Select adjustable jack Place adjustable jack in position	Select site for bathtub Build support structure for bathtub
7	Connect a tap Connect a stop cock	Level out horizontal components Position bathtub in place	Install bathtub Position bathtub for drainage
8	Connect a pressure valve Connect an overflow valve	Select scaffold boards Position scaffold boards	Select position for basin Install basin
9	Remove an element from a geyser Replace an element in a geyser	Work with competence Work with tolerance	Connect water supply Connect waste line

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 1st year	Grade 5 2nd year	Grade 5 3rd year
2	State the purpose of a valve	State how to detect a water leak	State the purpose of compacting a filled excavation
3	State the purpose of a	State the purpose of an	State the cause of blockage

	water meter	inspection waste line cover	
4	State the purpose of a pump	State the purpose of a p trap	State the purpose of a manhole
5	State the purpose of a fitting	State purpose of levelling area for scaffolding	State the purpose of drain pipes
6	State the purpose of a terminal fitting	State the purpose of adjustable jacks	State the purpose of building a support structure for a bathtub
7	State the purpose of thread tape	State the reason for levelling out horizontal components	State the reason for correct drainage position of a bathtub
8	State the purpose of an overflow valve	State the purpose of scaffold boards	State the purpose of the basin
9	State the purpose of an element in a geyser	State the purpose of appropriate skills training	State the standard height of a basin

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

Grade 5: Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
1	Health, safety and good housekeeping practices	<p>Grade 5 1st year</p> <ul style="list-style-type: none"> Practice good housekeeping <p>Grade 5 2nd year</p> <ul style="list-style-type: none"> Report injuries involving individuals to the relevant persons promptly Practice good housekeeping 	<p>Grade 5 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to practice good housekeeping Discusses and demonstrates how to clean up and set up the workshop <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Practice good housekeeping Clean up and sets up the workshop <p>Grade 5 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses how to report injuries involving individuals to relevant persons promptly Discusses and demonstrates how to practice good housekeeping Discusses and demonstrates how to clean up and set up the workshop

Grade 5: Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
		<p>Grade 5 3rd year</p> <ul style="list-style-type: none"> • Treat bleeding wounds • Practice good housekeeping 	<p>The learners complete the following activities:</p> <ul style="list-style-type: none"> • Report injuries involving individuals to the relevant persons promptly • Practice good housekeeping • Clean up and sets up the workshop <p>Grade 5 3rd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> • Discusses and demonstrates how to treat bleeding wounds • Discusses the effects of AIDS and HIV on exposure to bleeding wounds • Discusses and demonstrates how to practice good housekeeping • Discusses and demonstrates how to clean up and set up the workshop <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> • Assist in the treatment of bleeding wounds • Take safety precautions in terms of AIDS and HIV when treating bleeding wounds • Practice good housekeeping • Clean up and sets up the workshop
2	Installation and	Grade 5 1 st year	Grade 5 1 st year

Grade 5: Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	maintenance of a water supply system	<ul style="list-style-type: none"> Join pipes and assemble using pipe fittings 	<p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to join pipes and assemble using pipe fittings Discusses and demonstrates how to join capillary fittings using a blow torch and soldering wire <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in joining pipes and assemble using pipe fittings Join pipes using capillary fittings Join pipes using a blow torch and soldering wire
	Erection, using and dismantling access equipment	<p>Grade 5 2nd year</p> <ul style="list-style-type: none"> Tighten all couplings 	<p>Grade 5 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to tighten all couplings <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Tighten all couplings
	Solar hot water system	<p>Grade 5 3rd year</p> <ul style="list-style-type: none"> Introduction of solar hot water systems 	<p>Grade 5 3rd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates what are solar hot water systems and how they work Discusses the advantages and disadvantages of solar hot water systems

Grade 5: Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	Solar hot water system	Grade 5 3rd year <ul style="list-style-type: none"> Installation of a solar hot water system 	<p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in dismantling of access equipment <p>Grade 5 3rd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates the different components of the solar hot water system Discusses and demonstrates how to install a solar hot water system Discusses and demonstrates the passive solar water system Discusses and demonstrates how to connect up the solar collector <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Name the different components of the solar hot water system; the passive solar water system Assist in the installation of the solar hot water system Assist in connecting the solar collector
4	Installation and maintenance of a water supply system	Grade 5 1st year <ul style="list-style-type: none"> Install and maintain cold water pipe systems. 	<p>Grade 5 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to install and maintain cold water pipe systems

Grade 5: Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	<p>Erection, using and dismantling access equipment</p> <p>Solar hot water system</p>	<p>Grade 5 2nd year</p> <ul style="list-style-type: none"> Erect and dismantle a trestle scaffold <p>Grade 5 3rd year</p> <ul style="list-style-type: none"> Installation of a solar system 	<ul style="list-style-type: none"> Discusses and demonstrates how to mark off level lines on walls using a plumb line or level Discusses and demonstrates how fit pipe holding clamps on wall <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in installing and maintaining a cold water pipe system Mark off lines on wall Fit pipe holders on wall <p>Grade 5 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to erect and dismantle a trestle scaffold <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in erecting and dismantling a trestle scaffold <p>Grade 5 3rd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates the different components of the solar hot water system Discusses and demonstrates how to install a solar hot water system

Grade 5: Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	Solar hot water system	Grade 5 3rd year <ul style="list-style-type: none"> Installation of a solar system 	<p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in erecting and dismantling a trestle scaffold <p>Grade 5 3rd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates the different components of the solar hot water system Discusses and demonstrates how to install a solar hot water system Discusses and demonstrates the active solar hot water system Discusses and demonstrates how to connect up the collector and controller <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Name the different components of the solar hot water system; the active system Assist in the installation of the solar hot water system Assist in connecting up the collector and controller
6	Installation and maintenance of a water supply system	Grade 5 1st year <ul style="list-style-type: none"> Pressure test pipe system 	<p>Grade 5 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to pressure test a pipe system

Grade 5: Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	<p>Erection, using and dismantling access equipment</p> <p>Solar hot water system</p>	<p>Grade 5 2nd year</p> <ul style="list-style-type: none"> Erect and dismantle an extension ladder <p>Grade 5 3rd year</p> <ul style="list-style-type: none"> Installation of a solar system 	<p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in pressure testing a pipe system <p>Grade 5 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to erect and dismantle an extension ladder <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Erect and dismantle an extension ladder <p>Grade 5 3rd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates the different components of the solar hot water system Discusses and demonstrates how to install a solar hot water system Discusses and demonstrates how to connect up the storage tank and the solar pump <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Name the different components of the solar hot water system

Grade 5: Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
			<ul style="list-style-type: none"> Assist in the installation of the solar hot water system Assist in connecting up the storage tank and the solar pump
7	<p>Installation and maintenance of a water supply system</p> <p>Erection, using and dismantling access equipment</p> <p>Solar hot water system</p>	<p>Grade 5 1st year</p> <ul style="list-style-type: none"> Install and maintain hot water systems <p>Grade 5 2nd year</p> <ul style="list-style-type: none"> Make use of a step ladder <p>Grade 5 3rd year</p> <ul style="list-style-type: none"> Repair and maintenance of solar systems 	<p>Grade 5 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to install and maintain a hot water system <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in installing and maintaining a hot water system <p>Grade 5 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to make use of a step ladder <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Use a step ladder effectively <p>Grade 5 3rd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to repair and maintain solar systems Discusses and demonstrates how to remove the collector

Grade 5: Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
		<ul style="list-style-type: none"> Repair and maintenance of solar hot water systems 	<p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to repair and maintain solar hot water systems Discusses and demonstrates how to replace the collector <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in repairing and maintaining a solar hot water system Assist in replacing the collector
9	<p>Installation and maintenance of a water supply system</p> <p>World of work</p>	<p>Grade 5 1st year</p> <ul style="list-style-type: none"> Install a geyser <p>Grade 5 2nd year</p> <ul style="list-style-type: none"> Orientate learners to the open labour market Perform personal management activities for daily living 	<p>Grade 5 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to install a pressure geyser Discusses and demonstrates how to connect up the pressure and overflow valve <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in installing a geyser Assist in connecting up the pressure and overflow valve <p>Grade 5 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses the open labour market Discusses personal management activities for daily living

Grade 5: Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	Solar hot water system	<ul style="list-style-type: none"> Participate in the learner work experience programme (LWEP) <p>Grade 5 3rd year</p> <ul style="list-style-type: none"> Repair and maintenance of solar hot water systems 	<ul style="list-style-type: none"> Discusses the learner work experience programme <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Talk about the open labour market Practice personal management activities for daily living Participate in the learner work experience programme <p>Grade 5 3rd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to repair and maintain solar hot water systems Discusses and demonstrates how to remove and replace the storage tank <p>The learners complete the following activities</p> <ul style="list-style-type: none"> Assist in repairing and maintaining a solar hot water system Assist in removing and replacing the storage tanks

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:

Week	Grade 5 1st year	Grade 5 2nd year	Grade 5 3rd year
2	Light up a blowtorch Join capillary fittings using a blowtorch	Fit thread tape on couplings Tighten all couplings	Identify the storage tank Identify the collector
3	Join pipes using compression fittings Check pipes for leaks	Dismantle access equipment Stack access equipment	Identify the components of the passive solar system Connect up the solar collector
4	Mark off lines on the wall Drill holes in wall	Erect a trestle scaffold Dismantle a trestle scaffold	Connect up the hot water storage tank Connect up the hot water piping system
5	Drill holes in wall Fit water pipe bracket in wall	Erect a trestle scaffold Dismantle a trestle scaffold	Connect up the active solar collector Connect up the controller
6	Connect up pressure test equipment Pressure test pipe system	Erect an extension ladder Dismantle an extension ladder	Connect up the active solar storage tank Connect up the solar pump
7	Install hot water pipes Connect up hot water pipes	Set up a step ladder Climb up a step ladder	Strip the collector pipes Remove the collector
8	Install geyser Connect electrical wires	Set up a profile for brickwork Set up brick masonry	Replace the collector Refit the collector pipes
9	Connect pressure valve Connect overflow valve	Practice personal management activities for daily living Participate in the work experience programme	Remove the storage tank Replace the storage tank

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:

Week	Grade 5 1st year	Grade 5 2nd year	Grade 5 3rd year
2	State the purpose of soldering wire	State the purpose of thread tape	State the purpose of the collector
3	State the purpose of compression fittings	State the purpose of access equipment	State the advantage of the passive solar system
4	State the purpose of the masonry bit	State the purpose of a trestle scaffold	State the purpose of the storage tank
5	State the purpose of the water pipe bracket	State the purpose of a trestle scaffold	State the purpose of the controller
6	State the purpose of the pressure test equipment	State the purpose of an extension ladder	State the purpose of the solar pump
7	State the purpose of the hot water system	State the purpose of a step ladder	State what causes the collector from working
8	State the purpose of the geyser	State the purpose of a manhole	State precautions that must be taken when working on the solar water system
9	State the purpose of the overflow valve	State the learners place in the open labour market	State what causes the storage tank from working

3.2.8 Grade 5: 1st, 2nd and 3rd year: Term 4

Grade 5: Term 4			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
1	Health, safety and good housekeeping practices	<p>Grade 5 1st year</p> <ul style="list-style-type: none"> Identify and use fire extinguishers and hoses Practice good housekeeping <p>Grade 5 2nd year</p> <ul style="list-style-type: none"> Follow procedures that apply to illness or injuries in the work area Practice good housekeeping 	<p>Grade 5 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to identify and use fire extinguishers and hoses Discusses and demonstrates how to practice good housekeeping <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Identify and uses fire extinguishers Practice good housekeeping Clean up and set workshop <p>Grade 5 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses how to follow procedures that apply to illness or injuries in the work area Discusses and demonstrates how to practice good housekeeping <p>The learners complete the following activities:</p>

Grade 5: Term 4			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
		<p>Grade 5 3rd year</p> <ul style="list-style-type: none"> • Treat an injured person for shock • Practice good housekeeping 	<ul style="list-style-type: none"> • Assist in following procedures that apply to illness or injuries in the work area • Practice good housekeeping • Clean up and set workshop <p>Grade 5 3rd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> • Discusses and demonstrates how to treat an injured person for shock • Discusses and demonstrates how to practice good housekeeping <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> • Assist in treating a injured person for shock • Practice good housekeeping • Clean up and set workshop
2	Installation and maintenance of a water supply system	<p>Grade 5 1st year</p> <ul style="list-style-type: none"> • Inspect and test hot water systems 	<p>Grade 5 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> • Discusses and demonstrates how to inspect and test hot water systems <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> • Assist to inspect and test hot water systems

Grade 5: Term 4			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	Basic building work	Grade 5 2nd year <ul style="list-style-type: none"> Construct brickwork for manholes and chambers 	<p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist to inspect, repair and maintain hot water pipes Observe safety precautions when working with hot water pipes <p>Grade 5 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrate how to set out brick masonry work for manholes and chambers Discusses and demonstrate how to mix mortar and apply <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in setting out brick masonry work for manholes and chambers Mix mortar and apply
	Installation and maintenance of a water supply system	Grade 5 3rd year <ul style="list-style-type: none"> Repair taps and mixers 	<p>Grade 5 3rd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates why and how to repair taps and mixers Discusses and demonstrates how to packing in a tap <p>The learners complete the following activities:</p>

Grade 5: Term 4			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
			<ul style="list-style-type: none"> Identify the different washers and o rings in taps and mixers Repair taps and mixers Assist in repairing/replacing packing in a tap
6	Installation and maintenance of a water supply system	Grade 5 1st year <ul style="list-style-type: none"> Install and maintain above ground drainage components under supervision: the toilet 	Grade 5 1st year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to install and maintain above ground drainage components under supervision; the toilet The learners complete the following activities: <ul style="list-style-type: none"> Assist in the installation and maintenance of above ground drainage components; the toilet
	Basic building work	Grade 5 2nd year <ul style="list-style-type: none"> Construct brickwork for manholes and chambers 	Grade 5 2nd year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to construct brickwork for manholes and chambers The learners complete the following activities: <ul style="list-style-type: none"> Assist in setting out brick masonry work for manholes and chambers
	Installation and maintenance of a water supply system	Grade 5 3rd year <ul style="list-style-type: none"> Find faults in cold water systems 	Grade 5 3rd year The teacher:

Grade 5: Term 4			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	Installation and maintenance of a water supply system	Grade 5 3rd year <ul style="list-style-type: none"> Find faults in hot water systems 	<p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Mix plaster and plasters brickwork <p>Grade 5 3rd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to find and fix faults in a hot water system Discusses how to observe safety precautions when working with hot water Removes the geyser element <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in finding and fixing faults in a hot water system Observe safety precautions when working with hot water Assist in removing the geyser element
9	Installation and maintenance of a water supply system	Grade 5 1st year <ul style="list-style-type: none"> Install and maintain above ground drainage components and sanitary fittings under supervision: the shower 	<p>Grade 5 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to install and maintain above ground drainage components and sanitary fittings under supervision; the shower <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in installing and maintaining above ground drainage components and sanitary fittings under supervision; the

Grade 5: Term 4			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	Basic building work	Grade 5 2nd year <ul style="list-style-type: none"> Box plumbing pipes 	shower Grade 5 2nd year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to box plumbing pipes The learners complete the following activities: <ul style="list-style-type: none"> Assist in boxing plumbing pipe
	Installation and maintenance of a water supply system	Grade 5 3rd year <ul style="list-style-type: none"> Find faults in hot water systems 	Grade 5 3rd year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to find and fix faults in a hot water system Discusses how to observe safety precautions when working with hot water Replace the geyser element The learners complete the following activities: <ul style="list-style-type: none"> Assist in finding and fixing faults in a hot water system Observe safety precautions when working with hot water Assist in replacing the geyser element

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:

Week	Grade 5 1st year	Grade 5 2nd year	Grade 5 3rd year
2	Inspect the hot water system Test the hot water system	Dry mix concrete Wet mix concrete	Repair 1 basic fault in a cold water system Repair 1 basic fault in a hot water system
3	Repair 1 fault in the hot water system Repair 1 fault in the cold water system	Square brickwork profile Set out brickwork profile	Remove a tap washer Replace a tap washer
4	Inspect cold water pipes Repair cold water pipes	Dry mix mortar Wet mix mortar	Remove o rings in a tap Replace o rings in a tap
5	Inspect hot water pipes Repair hot water pipes	Construct brickwork for manhole Complete brickwork for manholes	Remove packing in a tap Replace packing in a tap
6	Install the toilet Level the toilet	Construct brickwork for manhole Complete brickwork for manholes	Strip a tap Reseat a tap
7	Install supply water pipes Install outlet pipes	Dry mix plaster Wet mix plaster	Remove a tap Replace a tap
8	Install the shower Level the shower floor	Apply plaster Plaster brickwork	Drain the geyser water Remove geyser element
9	Install the water supply Install the outlet pipes	Identify pipes to be blocked Boxes plumbing pipes	Replace the geyser element Connect up element wiring

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:

Week	Grade 5 1 st year	Grade 5 2 nd year	Grade 5 3 rd year
2	State safety precautions when working on hot water systems	State the proportions of concrete mix	State the most basic fault in a cold water system
3	State 1 basic fault in a cold water system	State the purpose of a brickwork profile	State the purpose of a tap washer
4	State how to inspect cold water pipes	State the proportions of mortar mix	State the purpose of an o ring
5	State how to inspect hot water pipes	State the purpose of manholes	State the purpose of the packing gland in a tap
6	State the purpose of the toilet	State the purpose of manholes	State the reason for reseating a tap
7	State how to adjust water levels in the cistern	State the proportions of plaster mix	State the reason for replacing a tap
8	State the purpose of levelling the shower floor	State the purpose of plastering brickwork	State the reason for replacing a geyser element
9	State the purpose of the outlet pipes	State the reasons for boxing brickwork	State the reason for bleeding the hot water system

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 80% of rating codes to reflect on different practical skills	Minimum of 4 practical assessment tasks or activities in order for 80% of rating codes to reflect on different practical skills	Minimum of 4 practical assessment tasks or activities in order for 80% of rating codes to reflect on different practical skills	Minimum of 4 practical assessment tasks or activities in order for 80% of rating codes to reflect on different practical skills

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.

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

Assessment across the 5 years

Grade 4 – Practical assessment tasks

Task	Week	Grade 4 1 st year	Grade 4 2 nd year
Term 1			
1	Week 2 or 3	Draw a water cycle diagram. Draw a water purification diagram	Draw a simple sketch of a tap. Draw a simple sketch of a basin with 2 taps
2	Week 4 or 5	Open and shut off a water meter. Demonstrate water flow on different inclination of pipes	Open and shut off a water meter. Demonstrate water flow on different inclination of pipes
3	Week 6 or 7	Show how to prevent backflow in waste lines. Explain the 'p' trap effect	Use a rawl bolt. Use screws to secure a part
4	Week 8 or 9	Use a rawl bolt. Use screws to secure a part	Make a mortar mix. Lay a row of bricks
Term 2			
1	Week 2 or 3	Use a screwdriver. Use a hacksaw	Use an angle grinder. Use a hand drill
2	Week 4 or 5	Use a tri-square. Use a builders square	Make a plastering mix. Plaster a hole
3	Week 6 or 7	Cut supply pipe to size. Attach a fitting to pipe	Mark out work area. Set out work area
4	Week 8 or 9	Connect a compression fitting. Connect a capillary fitting	Procure tools for a job. Order material for a job
Term 3			
1	Week 2 or 3	Lay pipes on ground. Use personal protective equipment	Copy symbols from worksheet. Identifies basic drawing and symbols
2	Week 4 or 5	Excavate up a trench. Shore up a trench	Install a 1 pipe soil pipe system. Install a vent pipe
3	Week 6 or 7	Practice good housekeeping. Correct hazardous situations	Check the gradient level of a 1 pipe soil pipe system. Backfill a 1 pipe soil pipe system

4	Week 8 or 9	Practice safety procedures when excavating a trench. Drain a trench	Connect a rodding point. Connect an access point
Term 4			
1	Week 2 or 3	Clear work area from obstruction. Drain water from trench	Prepare area for bathtub installation. Install the bathtub
2	Week 4 or 5	Shore up a trench. Observe safety precautions when shoring up a trench	Prepare area for shower. Install the shower
3	Week 6 or 7	Install supply pipes. Connect supply pipes with compression fittings	Prepare area for toilet. Install the toilet
4	Week 8 or 9	Mark out channel in brickwork. Chase channel with angle grinder	Practice good social habits. Conduct business ethically

Grade 4 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.

Grade 5 – Practical assessment tasks

Task	Week	Grade 5 1st year	Grade 5 2nd year	Grade 5 3rd year
Term 1				
1	Week 2 or 3	Use an angle grinder. Use a hand drill	Reseat a tap. Replace a tap washer	Estimate quantity of material needed. Identify suppliers
2	Week 4 or 5	Use a pipe cutter. Use a pipe bender	Remove an element. Replace an element	Select plumbing tools. Maintain plumbing tools

3	Week 6 or 7	Maintain plumbing tools. Repair plumbing tools	Remove a faulty stopcock Replace a faulty stopcock	Mark out trench. Excavate trench
4	Week 8 or 9	Demonstrate hardness of water. Demonstrate softness of water	Shut off water supply. Repair leaking pipe	Bed drainpipes. Lay drainpipes
Term 2				
1	Week 2 or 3	Select a valve. Connect a valve	Shut off water supply. Repair water leaks	Backfill excavation. Compact excavation
2	Week 4 or 5	Select a pump. Connect a pump	Clean out p trap blockage. Clean out drainage gully	Excavate area for manhole. Build a manhole structure
3	Week 6 or 7	Select a terminal fitting. Connect a terminal fitting	Select adjustable jack. Place adjustable jack in position	Select site for bathtub. Build support structure for bathtub
4	Week 8 or 9	Connect a pressure valve. Connect an overflow valve	Select scaffold boards. Position scaffold boards	Select position for basin. Install basin
Term 3				
1	Week 2 or 3	Light up a blowtorch. Join capillary fittings using a blowtorch	Fit thread tape on couplings. Tighten all couplings	Identify the storage tank. Identify the collector
2	Week 4 or 5	Mark off lines on the wall. Drill holes in wall	Erect a trestle scaffold. Dismantle a trestle scaffold	Connect up the hot water storage tank. Connect up the hot water piping system
3	Week 6 or 7	Connect up pressure test equipment. Pressure test pipe system	Erect an extension ladder. Dismantle an extension ladder	Connect up the active solar storage tank. Connect up the solar pump
4	Week 8 or 9	Install geyser. Connect electrical wires	Practice personal management activities for daily living. Participate in the work experience programme	Remove the storage tank. Replace the storage tank
Term 4				

1	Week 2 or 3	Inspect the hot water system. Test the hot water system	Dry mix concrete. Wet mix concrete	Repair 1 basic fault in a cold water system. Repair 1 basic fault in a hot water system
2	Week 4 or 5	Inspect cold water pipes. Repair cold water pipes	Dry mix mortar. Wet mix mortar	Remove o rings in a tap. Replace o rings in a tap
3	Week 6 or 7	Install the toilet. Level the toilet	Construct brickwork for manhole. Complete brickwork for manholes	Strip a tap. Reseat a tap
4	Week 8 or 9	Install the shower. Level the shower floor	Apply plaster. Plaster brickwork	Drain the geyser water. Remove geyser element

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).*

