



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
2018 Orientation

Learning programme

Contents

1	SECTION 1	4
	INTRODUCTION	4
2	SECTION 2: INTRODUCTION TO PLUMBING	4
2.1	What is Plumbing?	4
2.2	Specific Aims:.....	4
2.3	Topics to be studied in Plumbing.....	5
2.4	Requirements for Plumbing as a subject	5
2.4.1	Time Allocation.....	5
2.4.2	Resources	5
2.5	Career opportunities.....	7
3	SECTION 3: OVERVIEW OF TOPICS PER TERM AND ANNUAL TEACHING PLANS.....	9
3.1	Content overview of theoretical topics	9
3.2	Teaching plans.....	16
3.2.1	Grade 4: 1 st and 2 nd year: Term One.	16
3.2.2	Grade 4: 1 st and 2 nd year: Term 2	26
3.2.3	Grade 4: 1 st and 2 nd year: Term 3	35
3.2.4	Grade 4: 1 st and 2 nd year: Term 4	46
3.2.5	Grade 5: 1 st , 2 nd and 3 rd year: Term 1	56
3.2.6	Grade 5: 1 st , 2 nd and 3 rd year: Term 2.	71
3.2.7	Grade 5: 1 st , 2 nd and 3 rd year :Term 3	85

3.2.8	Grade 5: 1 st , 2 nd and 3 rd year: Term 4	100
4	SECTION 4	113
	ASSESSMENT	113

PUBLIC COMMENT

1 SECTION 1

INTRODUCTION

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

PUBLIC COMMENT

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:
			<p>scenario.</p> <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 	<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

	Topics	Grade 4 The learner must be able to:	Grade 5 The learner must be able to:
		<p>requirements for evacuation 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. 	<ul style="list-style-type: none"> • Inspect and test hot water systems. • 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

	Topics	Grade 4 The learner must be able to:	Grade 5 The learner must be able to:
			<p>components in the correct order.</p> <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. 	<ul style="list-style-type: none"> • Install, inspect a drainage system. • Set out trenches and excavate to line and level.

	Topics	Grade 4 The learner must be able to:	Grade 5 The learner must be able to:
		<ul style="list-style-type: none"> • Install soil and waste water fixtures and fittings, and sanitary fittings. 	<ul style="list-style-type: none"> • Bed, join and lay drainpipes. • 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.

PUBLIC COMMENT

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 plumber Practice good housekeeping 	Grade 4 1st year The teacher: <ul style="list-style-type: none"> Discuss and demonstrate health, safety and good housekeeping practices Discuss and demonstrate how to identify and remove potential hazards in the work area Discuss the role of the plumber and employment in the plumbing sector The learners complete the following activities: <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.
		<p>Grade 4 2nd year</p> <ul style="list-style-type: none"> Use, store and maintain tools and equipment safely Practice good housekeeping 	<p>employment available</p> <ul style="list-style-type: none"> Identify and removes potential hazards in the work area. Practice safety and good housekeeping <p>Grade 4 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discuss and demonstrate how to use, store and maintain tools and equipment safely Discuss and demonstrate good housekeeping practices <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Discuss the use, storage and maintaining of tools and equipment Use, store and maintain tools and equipment safely Carry out good housekeeping practices in the workshop
2	Plumbing principles	<p>Grade 4 1st year</p> <ul style="list-style-type: none"> Describe water sources 	<p>Grade 4 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses the water cycle Discusses water purification process <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Discuss the water cycle and water purification Draw a water cycle diagram and a water purification diagram
	Basic construction	<p>Grade 4 2nd year</p>	<p>Grade 4 2nd year</p>

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

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 1 st year	Grade 4 2 nd 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, screwdrivers, hacksaws, shifting spanners and stilson wrench

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"> Identify correct work areas according to drawings Communicate and agree on a work task 	<p>plumbing system components and materials</p> <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Identify and use different plumbing pipes, plumbing components and materials. <p>Grade 4 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to identify correct work areas according to drawings Discusses and demonstrates how to communicate and agree on a work task <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Identify correct work areas according to drawings Communicate and agree on a work task from a job card or supervisors instruction
6	Installation and maintenance of a water supply system	Grade 4 1st year <ul style="list-style-type: none"> Install a water supply system under supervision 	Grade 4 1st year <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to install a water supply system under supervision Discusses and demonstrates how to install cold water pipes and fittings

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
	Plumbing and	Grade 4 2nd year	Grade 4 2nd year

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 gulley 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

PUBLIC COMMENT

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
	supply system	personal protective equipment are functional and ready for use at work area.	<ul style="list-style-type: none"> Discusses and demonstrates how to get all tools, equipment and personal protective equipment functional and ready for use at work area. <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Check all tools, equipment and personal protective equipment functionality. Check if all of the above is ready for use Maintain all tools, equipment and personal protective equipment
	Installation and maintenance of a drainage system	Grade 4 2nd year <ul style="list-style-type: none"> Install and maintain a one pipe soil pipe system 	Grade 4 2nd year <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
4	Installation of maintenance of a water supply system	Grade 4 1st year <ul style="list-style-type: none"> Identify safety requirements for pipe laying activities 	Grade 4 1st year <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates safety requirements for pipe laying

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 one pipe soil pipe system 	<p>activities.</p> <ul style="list-style-type: none"> 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 <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	Grade 4 1st year <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 Discusses and demonstrates how to mark a trench using pegs and a line

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 	<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> <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: 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 	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 Carry out safety procedures when excavating trenches
	Installation and	Grade 4 2nd year	Grade 4 2nd year

Grade 4: Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
	maintenance of a drainage system	<ul style="list-style-type: none"> Install soil and waste water fixtures and fitting. 	<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
8	Installation and maintenance of a water supply system	<p>Grade 4 1st year</p> <ul style="list-style-type: none"> Excavate trenches using manual and mechanical equipment 	<p>Grade 4 1st year</p> <p>The teacher:</p> <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 <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
	Installation and	Grade 4 2nd year	Grade 4 2nd year

Grade 4: Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources
	maintenance of a drainage system	<ul style="list-style-type: none"> Install soil and waste water fixtures and fittings. 	<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 Discusses and demonstrates fitting a rodding point and access point <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 Observe and assist in fitting a rodding point
9	Installation and maintenance of a water supply system	<p>Grade 4 1st year</p> <ul style="list-style-type: none"> Excavate trenches using manual or mechanical equipment 	<p>Grade 4 1st year</p> <p>The teacher:</p> <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 <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

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 	<ul style="list-style-type: none"> Carry out safety procedures when excavating trenches Loosen hard ground 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

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

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 bathtub 	<ul style="list-style-type: none"> Observe safety precautions when assisting to shore up an excavated trench or work area. Grade 4 2nd year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to install the bathtub. The learners complete the following activities: <ul style="list-style-type: none"> Assist in installing the bathtub
4	Installation and maintenance of a water supply system	Grade 4 1st year <ul style="list-style-type: none"> Ensure that the excavated trench or work area is shored up according to acceptable procedures 	Grade 4 1st year The teacher: <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. The learners complete the following activities: <ul style="list-style-type: none"> Assist in ensuring that the excavated trench or work area is shored up according to acceptable procedures Observe safety precautions when assisting to shore up an excavated trench or work area.
	Installation and maintenance of a drainage system	Grade 4 2nd year <ul style="list-style-type: none"> Install sanitary fittings: the bathtub 	Grade 4 2nd year The teacher:

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 	<p>pressure pipes</p> <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 	<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 Discusses and demonstrates safety precautions when making 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"> Practice good work habits- personal and social presentation Conduct business ethically and professionally 	<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 Discusses and demonstrates safety precautions when making 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 	<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 a trench	State 1 advantage of installing a shower in a 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.
		Grade 5 3rd year <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 Grade 5 3rd year The teacher: <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 The learners complete the following activities: <ul style="list-style-type: none"> Assist in administering basic first aid Practice good housekeeping Clean up and sets workshop
2	Tools	Grade 5 1st year <ul style="list-style-type: none"> Identify, use and care of power tools 	Grade 5 1st year The teacher: <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 The learners complete the following activities: <ul style="list-style-type: none"> Identifies, uses and maintains power tools; the angle grinder, the hand drill and the bench 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>Grade 5 2nd year</p> <ul style="list-style-type: none"> Find faults in cold water systems 	<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>Plumbing and preparation for performing plumbing works</p>	<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>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 <ul style="list-style-type: none"> The learners complete the following activities: Assist in estimating quantities of materials needed

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 	<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 Grade 5 3rd year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to prepare an order list based on specification The learners complete the following activities: <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 The learners complete the following activities: <ul style="list-style-type: none"> Use the pipe cutter, the pipe bender and the bending spring Use the blowtorch

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 	<ul style="list-style-type: none"> 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 a 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 <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Identify, select and maintain plumbing tools Check plumbing tools for defects
5	Tools	Grade 5 1 st year	Grade 5 1 st year

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"> Identify, use and care of measuring tools 	<p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates use and care of measuring tools; measuring tape, steel ruler and builder square Discusses the different units of measurements; millimetres, centimetres and metres. <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Identify, use and maintain measuring tools; measuring tape, steel rule and the builders square Use millimetres, centimetres and metres as units of measurements
	Installation and maintenance of a water supply system	<p>Grade 5 2nd year</p> <ul style="list-style-type: none"> Find faults in fittings 	<p>Grade 5 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to find and repairs faults in different water supply fittings Discusses and demonstrate how to find and repair faults in compression and capillary fittings <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in finding and repairing faults in capillary and compression fittings
	Installation and	Grade 5 3rd year	Grade 5 3rd year

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"> Set out trenches and excavate to line and level 	<p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in applying fault finding techniques in a water supply system according to specification <p>Grade 5 3rd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to set out trenches and 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
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 	<p>Grade 5 1st year</p> <p>The teacher:</p> <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 <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Demonstrate different pressure flow and water quantity with different diameters of pipes. Demonstrate how gravity and floor inclinations affect water flow Demonstrate how closing off the water meter tap affects

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>pressure and water flow</p> <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 Understand and apply knowledge of corrosion of plumbing materials 	<p>Grade 5 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates water quality principles; hardness, softness, salinity, bacterial; levels and suspended solids Discusses and demonstrates corrosion of plumbing materials and the prevention thereof

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"> Detect and repair water leaks 	<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 <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 system	Grade 5 3rd year <ul style="list-style-type: none"> Bed, join and lay drainpipes 	<p>Grade 5 3rd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to bed, join and lay drainpipes. <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.
	Installation and maintenance of a drainage system	Grade 5 3 rd year <ul style="list-style-type: none"> • Bed, join and lay drainpipes 	Grade 5 3 rd 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 1 st year	Grade 5 2 nd year	Grade 5 3 rd 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.
	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>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 <p>Grade 5 2nd year</p>

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 Level horizontal components	The teacher: <ul style="list-style-type: none"> • Discusses and demonstrates how to level horizontal components • Discusses drainage of the bathtub and shower floor The learners complete the following activities: <ul style="list-style-type: none"> • Assist in the levelling of horizontal components • Assist in positioning the bathtub and shower floor for proper drainage
	Installation and maintenance of a drainage system	Grade 5 3rd year Install in-site sanitation systems; the bath	Grade 5 3rd year The teacher: <ul style="list-style-type: none"> • Discusses and demonstrates how to install the bath • Discusses and demonstrates drainage of bathtub The learners complete the following activities: <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	Grade 5 1st year <ul style="list-style-type: none"> • Describe hot water systems and list their components 	Grade 5 1st year The teacher: <ul style="list-style-type: none"> • Discusses and list hot water systems and their components • Discusses and demonstrates some use of hot water components • Discusses and demonstrates how to connect a pressure and

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</p> <ul style="list-style-type: none"> Position scaffold boards properly on supports <p>Grade 5 3rd year</p> <ul style="list-style-type: none"> Install in-site sanitation systems: the basin 	<p>overflow valve</p> <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 <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> <ul style="list-style-type: none"> Assist in installing the hand wash basin
9	Installation and	Grade 5 1st year	Grade 5 1st year

Grade 5: Term 2			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
	maintenance of a drainage system	<ul style="list-style-type: none"> Install in-site sanitation systems: the basin 	<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 <p>The learners complete the following activities:</p> <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 1 st year	Grade 5 2 nd year	Grade 5 3 rd 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 gulley	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 1 st year	Grade 5 2 nd year	Grade 5 3 rd 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 water meter	State the purpose of an inspection waste line cover	State the cause of blockage
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 <p>The learners complete the following activities:</p>

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 	<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 maintenance of a water supply system	<p>Grade 5 1st year</p> <ul style="list-style-type: none"> • Join pipes and assemble using pipe fittings 	<p>Grade 5 1st year</p> <p>The teacher:</p> <ul style="list-style-type: none"> • Discusses and demonstrates how to join pipes and

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"> Tighten all couplings <p>Grade 5 3rd year</p> <ul style="list-style-type: none"> Introduction of solar hot water systems 	<p>assemble using pipe fittings</p> <ul style="list-style-type: none"> 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 <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 <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 Discusses the 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.
	Solar hot water system	Grade 5 3rd year <ul style="list-style-type: none"> Installation of a solar hot water system 	Grade 5 3rd year The teacher: <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 The learners complete the following activities: <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. 	Grade 5 1st year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to install and maintain cold water pipe systems 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

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 	<p>wall</p> <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 Discusses and demonstrates how to connect up the hot water storage tank and other parts

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 	Grade 5 3rd year The teacher: <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 The learners complete the following activities: <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 	Grade 5 1st year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to pressure test a pipe system The learners complete the following activities: <ul style="list-style-type: none"> Assist in pressure testing 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>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 Assist in the installation of the solar hot water system Assist in connecting up the storage tank and the solar pump
7	Installation and	Grade 5 1st year	Grade 5 1st year

Grade 5: Term 3			
Week	Topic	Content The learner must be able to:	Teaching tips, techniques, activities and resources.
8	Installation and maintenance of a water supply system	Grade 5 1st year <ul style="list-style-type: none"> Install a geyser 	Grade 5 1st year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to install a pressure geyser Discusses and demonstrates how to connect up the electrical wires on the element The learners complete the following activities: <ul style="list-style-type: none"> Assist in installing a geyser Assist in connecting up the electrical wires in the element
	Basic building work	Grade 5 2nd year <ul style="list-style-type: none"> Set out brick masonry for manholes and chambers 	Grade 5 2nd year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to set out brick masonry for manholes and chambers The learners complete the following activities: <ul style="list-style-type: none"> Assist in setting out brick masonry for man holes and chambers
	Solar hot water system	Grade 5 3rd year <ul style="list-style-type: none"> Repair and maintenance of solar hot water systems 	Grade 5 3rd year The teacher: <ul style="list-style-type: none"> Discusses and demonstrates how to repair and maintain solar hot water systems

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"> 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 Participate in the learner work experience programme (LWEP) 	<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 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

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"> Repair and maintenance of solar hot water systems 	<ul style="list-style-type: none"> 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 1 st year	Grade 5 2 nd year	Grade 5 3 rd 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> <ul style="list-style-type: none"> Identify the different washers and o rings in taps and mixers

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"> Repair taps and mixers Assist in repairing/replacing packing in a tap
6	<p>Installation and maintenance of a water supply system</p> <p>Basic building work</p> <p>Installation and maintenance of a water supply system</p>	<p>Grade 5 1st year</p> <ul style="list-style-type: none"> Install and maintain above ground drainage components under supervision: the toilet <p>Grade 5 2nd year</p> <ul style="list-style-type: none"> Construct brickwork for manholes and chambers <p>Grade 5 3rd year</p> <ul style="list-style-type: none"> Find faults in cold water 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 above ground drainage components under supervision; the toilet <p>The learners complete the following activities:</p> <ul style="list-style-type: none"> Assist in the installation and maintenance of above ground drainage components; the toilet <p>Grade 5 2nd year</p> <p>The teacher:</p> <ul style="list-style-type: none"> Discusses and demonstrates how to construct brickwork for manholes and chambers <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 <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 cold

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 	<ul style="list-style-type: none"> Mix plaster and plasters brickwork 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 Removes 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 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 	Grade 5 1st year The teacher: <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 The learners complete the following activities: <ul style="list-style-type: none"> Assist in installing and maintaining above ground drainage components and sanitary fittings under supervision; the shower

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

Subject specific content to be added to generic section 4 after public comment changes/corrections have been made.

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 1 st year	Grade 5 2 nd year	Grade 5 3 rd 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.

PUBLIC COMMENT