

# SCIENCE AND TECHNOLOGY SCHEME OF WORK GRADE 4 TERM ONE

Week	Lesson	Strand/Theme	Sub Strand	Specific learning outcomes	Key inquiry Questions	Learning experiences	Learning Resources		Assessment Methods	Ref
1	1	Living Things	Plants (Characteristic s Of Plants)	By the end of the sub strand the learner should be able to: a) Identify living and non-living things in the environment	What makes plants living things?	a) Learners take a walk in the school compound and the neighbourhood to observe, discuss and record evidence that plants: feed, grow, breathe, reproduce, remove waste, move, respond to changes in their environment and die.			Oral Questions, Assignments, project work	
	2		Plants (Characteristic s Of Plants)	b) Identify the characteristics of plants as living things.	What makes plants living things?	a) Learners take a walk in the school compound and the neighbourhood to observe, discuss and record evidence that plants: feed, grow, breathe, reproduce, remove waste, move, respond to changes in their environment and die.			Oral Questions, Assignments, project work	
	3		Plants (Characteristic s Of Plants)	c) Observe characteristics of plants in the environment.	What makes plants living things?	b) Learners use digital devices to observe, discuss and record evidence that plants: feed, grow, breathe, reproduce, remove waste materials, move, respond to changes in their environment and die.			Oral Questions, Assignments, project work	
	4		Plants (Characteristic s Of Plants)	d) Demonstrate responsibility while handling plants.	What makes plants living things?	c) In groups, learners are guided to observe safety precautions when handling plants (Examples: practise use of gloves, forceps, goggles, tongs, overcoats)			Oral Questions, Assignments, project work	
2	1		Plants (Characteristic s Of Plants)	e) Grow some plants found in the locality	What makes plants living things?	<b>Project:</b> With the help of parents, learners' plant seeds, observe as they grow and record the changes taking place as the plants grow to maturity.			Oral Questions, Assignments, project work	

	2		<b>Animals</b> (Characteristic s Of Animals)	By the end of the sub strand the learner should be able to: a) Identify the characteristics of animals as living things.		a) Learners take a walk in the school compound and the neighbourhood to observe, discuss and record evidence that animals: feed, grow, breathe, reproduce, remove waste, move, respond to changes in their environment and die.	Gloves, forceps, goggles, tongs, overcoats, videos, digital devices, internet, textbooks, assorted animals	Oral Questions, Assignme nts, project work	
	3		<b>Animals</b> (Characteristic s Of Animals)	By the end of the sub strand the learner should be able to: a) Identify the characteristics of animals as living things.		a) Learners take a walk in the school compound and the neighbourhood to observe, discuss and record evidence that animals: feed, grow, breathe, reproduce, remove waste, move, respond to changes in their environment and die.	Gloves, forceps, goggles, tongs, overcoats, videos, digital devices, internet, textbooks, assorted animals	Oral Questions, Assignme nts, project work	
	4		<b>Animals</b> (Characteristic s Of Animals)	b) Observe characteristics of animals in the r environment.		b) Learners use digital devices to observe, discuss and record evidence that animals: feed, grow, breathe, reproduce, remove waste materials, move, respond to changes in their environment and die. c) In groups, learners discuss the main difference between vertebrates and invertebrates.	Gloves, forceps, goggles, tongs, overcoats, videos, digital devices, internet, textbooks, assorted animals	Oral Questions, Assignme nts, project work	
3	1		<b>Animals</b> (Characteristic s Of Animals)	b) Observe characteristics of animals in the r environment.		b) Learners use digital devices to observe, discuss and record evidence that animals: feed, grow, breathe, reproduce, remove waste materials, move, respond to changes in their environment and die. c) In groups, learners discuss the main difference between vertebrates and invertebrates.	Gloves, forceps, goggles, tongs, overcoats, videos, digital devices, internet, textbooks, assorted animals	Oral Questions, Assignme nts, project work	
	2		<b>Animals</b> (Characteristic s Of Animals)	c) Distinguish between vertebrates and invertebrates.		d) In groups, learners are guided to observe safety precautions when handling animals (Examples: practise use of gloves, forceps, goggles, tongs, overcoats)	Gloves, forceps, goggles, tongs, overcoats, videos, digital devices, internet, textbooks, assorted animals	Oral Questions, Assignme nts, project work	
	3		<b>Animals</b> (Characteristic s Of Animals)	c) Distinguish between vertebrates and invertebrates.		d) In groups, learners are guided to observe safety precautions when handling animals (Examples: practise use of gloves, forceps, goggles, tongs, overcoats)	Gloves, forceps, goggles, tongs, overcoats, videos, digital devices, internet, textbooks, assorted animals	Oral Questions, Assignme nts, project work	

	4		<b>Animals</b> (Characteristic s Of Animals)	d) Demonstrate responsibility while handling animals.	1. What makes animals living things? 2. Which ways do animals differ from each other?	<b>Project:</b> With the help of parents, learners make a portfolio of vertebrate and invertebrates animals	Gloves, forceps, goggles, tongs, overcoats, videos, digital devices, internet, textbooks, assorted animals	Oral Questions,  Assignme nts, project work	
4	1		<b>Animals</b> (Characteristic s Of Animals)	d) Demonstrate responsibility while handling animals.	1. What makes animals living things? 2. Which ways do animals differ from each other?	<b>Project:</b> With the help of parents, learners make a portfolio of vertebrate and invertebrates animals	Gloves, forceps, goggles, tongs, overcoats, videos, digital devices, internet, textbooks, assorted animals	Oral Questions,  Assignme nts, project work	
	2		<b>Human Body System</b> (Digestive System)	By the end of the sub strand the learner should be able to: a) Identify parts of the digestive system.	1. How are the different parts of the digestive system suited to their functions? 2. How do teeth differ?	a) In groups, learners are guided to use digital devices and visual aids to observe and identify parts of the digestive system (mouth, teeth, oesophagus, stomach, small intestines, liver, pancreas, large intestines, rectum, anus)	Sugar cane, carrots, fruits, tubers	Oral Questions, Assignme nts, project work	
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	4		<b>Human Body System</b> (Digestive System)	By the end of the sub strand the learner should be able to: a) Identify parts of the digestive system.	1. How are the different parts of the digestive system suited to their functions? 2. How do teeth differ?	a) In groups, learners are guided to use digital devices and visual aids to observe and identify parts of the digestive system (mouth, teeth, oesophagus, stomach, small intestines, liver, pancreas, large intestines, rectum, anus)	Sugar cane, carrots, fruits, tubers	Oral Questions, Assignme nts, project work	
5	1		<b>Human Body System</b> (Digestive System)	b) Describe functions of the different parts of the digestive system	1. How are the different parts of the digestive system suited to their functions? 2. How do teeth differ?	b) In groups, learners are guided to use digital devices and visual aids to discuss the functions of parts of the digestive system (the mouth, oesophagus, stomach, small intestines, large intestines, rectum, anus)	Sugar cane, carrots, fruits, tubers	Oral Questions, Assignme nts, project work	

	2		<b>Human Body System</b> (Digestive System)	b) Describe functions of the different parts of the digestive system		b) In groups, learners are guided to use digital devices and visual aids to discuss the functions of parts of the digestive system (the mouth, oesophagus, stomach, small intestines, large intestines, rectum, anus)	Sugar cane, carrots, fruits, tubers	Oral Questions, Assignments, project work	
	3		<b>Human Body System</b> (Digestive System)	b) Describe functions of the different parts of the digestive system		b) In groups, learners are guided to use digital devices and visual aids to discuss the functions of parts of the digestive system (the mouth, oesophagus, stomach, small intestines, large intestines, rectum, anus)	Sugar cane, carrots, fruits, tubers	Oral Questions, Assignments, project work	
	4		<b>Human Body System</b> (Digestive System)	c) Develop curiosity about taking care of the teeth		c) In groups learners are guided to demonstrate the use of different types of teeth (Incisors, Canines, Pre-molars and Molars) using locally available food items (e.g. sugar cane, carrots, fruits, tubers), and digital devices.	Sugar cane, carrots, fruits, tubers	Oral Questions, Assignments, project work	
6	1		<b>Human Body System</b> (Digestive System)	c) Develop curiosity about taking care of the teeth		c) In groups learners are guided to demonstrate the use of different types of teeth (Incisors, Canines, Pre-molars and Molars) using locally available food items (e.g. sugar cane, carrots, fruits, tubers), and digital devices.	Sugar cane, carrots, fruits, tubers	Oral Questions, Assignments, project work	
	2		<b>Human Body System</b> (Digestive System)	c) Develop curiosity about taking care of the teeth		c) In groups learners are guided to demonstrate the use of different types of teeth (Incisors, Canines, Pre-molars and Molars) using locally available food items (e.g. sugar cane, carrots, fruits, tubers), and digital devices.	Sugar cane, carrots, fruits, tubers	Oral Questions, Assignments, project work	
	3		<b>Human Body System</b> (Digestive System)	d) Model the four different types of teeth.			Sugar cane, carrots, fruits, tubers	Oral Questions, Assignments, project work	

	4		<b>Human Body System</b> (Digestive System)	d) Model the four different types of teeth.		d) In groups learners are guided to draw/model the four types of teeth using locally available materials.	Sugar cane, carrots, fruits, tubers	Oral Questions, Assignments, project work	
7	1		<b>Human Body System</b> (Digestive System)	d) Model the four different types of teeth.		d) In groups learners are guided to draw/model the four types of teeth using locally available materials.	Sugar cane, carrots, fruits, tubers	Oral Questions, Assignments, project work	
	2	<b>Environment</b>	Air Pollution	By the end of the sub strand the learner should be able to: a) State the meaning of the terms "pollution" and "air pollution". b) Identify air pollutants in his/her environment.		a) In groups, learners are guided to discuss the meaning of the terms "pollution" and "air pollution". b) Learners to be guided as they use visual aids and digital devices to explore the meaning of "pollution" and "air pollution".	Dust masks, goggles, overcoats, piece of white cloth, digital devices, internet, textbooks	Oral Questions, Assignments, project work	
	3		Air Pollution	By the end of the sub strand the learner should be able to: a) State the meaning of the terms "pollution" and "air pollution". b) Identify air pollutants in his/her environment.		a) In groups, learners are guided to discuss the meaning of the terms "pollution" and "air pollution". b) Learners to be guided as they use visual aids and digital devices to explore the meaning of "pollution" and "air pollution".	Dust masks, goggles, overcoats, piece of white cloth, digital devices, internet, textbooks	Oral Questions, Assignments, project work	
	4		Air Pollution	c) Distinguish between clean and polluted air in his/her environment. d) Identify effects of air pollution on living things.		c) In groups, learners walk around the school and neighbourhood to observe, identify and record air pollutants (bad smell, dust, smoke). d) Learners to be guided as they use visual aids and digital devices to identify and record air pollutants.	Dust masks, goggles, overcoats, piece of white cloth, digital devices, internet, textbooks	Oral Questions, Assignments, project work	

8	1		Air Pollution	c) Distinguish between clean and polluted air in his/her environment. d) Identify effects of air pollution on living things.		c) In groups, learners walk around the school and neighbourhood to observe, identify and record air pollutants (bad smell, dust, smoke). d) Learners to be guided as they use visual aids and digital devices to identify and record air pollutants.	Dust masks, goggles, overcoats, piece of white cloth, digital devices, internet, textbooks	Oral Questions, Assignments, project work	
	2		Air Pollution	e) Appreciate the importance of clean air in his/her environment.		e) In groups, learners walk around the school and neighbourhood to observe and identify clean and polluted air (toilets, dusty area, smoky areas and decomposing matter). f) Learners to be guided as they use visual aids and digital devices to differentiate between clean and polluted air.	Dust masks, goggles, overcoats, piece of white cloth, digital devices, internet, textbooks	Oral Questions, Assignments, project work	
	3		Air Pollution	e) Appreciate the importance of clean air in his/her environment.		e) In groups, learners walk around the school and neighbourhood to observe and identify clean and polluted air (toilets, dusty area, smoky areas and decomposing matter). f) Learners to be guided as they use visual aids and digital devices to differentiate between clean and polluted air.	Dust masks, goggles, overcoats, piece of white cloth, digital devices, internet, textbooks	Oral Questions, Assignments, project work	
	4		Air Pollution	e) Appreciate the importance of clean air in his/her environment.		g) In groups, learners walk around the school and neighbourhood to observe, identify and record the effects of air pollution on living things (breathing problems, irritation of eyes, visibility and growth of plants) h) In groups, learners to use visual aids and digital devices to identify the effects of air pollution on living things.	Dust masks, goggles, overcoats, piece of white cloth, digital devices, internet, textbooks	Oral Questions, Assignments, project work	
9	1		Air Pollution	f) Identify ways of reducing air pollution.		i) Learners are guided to identify and discuss ways of reducing air pollution (proper disposal of waste; Ventilation; Use of Ventilation Improved Pit latrines; sprinkling ash in pit latrines; Sprinkling water on dusty grounds). j) In groups, learners are guided to observe safety precautions when working in air polluted environment (Example: practise use of dust masks, goggles, overcoats).	Dust masks, goggles, overcoats, piece of white cloth, digital devices, internet, textbooks	Oral Questions, Assignments, project work	

	2		Air Pollution	f) Identify ways of reducing air pollution.		<ul style="list-style-type: none"> <li>i) Learners are guided to identify and discuss ways of reducing air pollution (proper disposal of waste; Ventilation; Use of Ventilation Improved Pit latrines; sprinkling ash in pit latrines; Sprinkling water on dusty grounds).</li> <li>j) In groups, learners are guided to observe safety precautions when working in air polluted environment (Example: practise use of dust masks, goggles, overcoats).</li> </ul>	Dust masks, goggles, overcoats, piece of white cloth, digital devices, internet, textbooks	Oral Questions, Assignments, project work	
	3		Air Pollution	f) Identify ways of reducing air pollution.		<b>Project 1:</b> In groups, learners are guided to make a simple air pollution detector using a clean white piece of cloth.	Dust masks, goggles, overcoats, piece of white cloth, digital devices, internet, textbooks	Oral Questions, Assignments, project work	
	4		Air Pollution	<ul style="list-style-type: none"> <li>g) Make a functional air pollution detector.</li> <li>h) Make a functional dust mask using locally available materials.</li> </ul>		<b>Project 1:</b> In groups, learners are guided to make a simple air pollution detector using a clean white piece of cloth.	Dust masks, goggles, overcoats, piece of white cloth, digital devices, internet, textbooks	Oral Questions, Assignments, project work	
10	1		Air Pollution	<ul style="list-style-type: none"> <li>g) Make a functional air pollution detector.</li> <li>h) Make a functional dust mask using locally available materials.</li> </ul>		<b>Project 2:</b> Learners are guided to make a functional dust mask using locally available materials.	Dust masks, goggles, overcoats, piece of white cloth, digital devices, internet, textbooks	Oral Questions, Assignments, project work	
	2		<b>Water Pollution</b>	<p>By the end of the sub strand the learner should be able to:</p> <ul style="list-style-type: none"> <li>a) State the meaning of the term "water pollution".</li> <li>b) Identify water pollutants in his/her environment.</li> </ul>		<ul style="list-style-type: none"> <li>a) In groups, learners are guided to discuss the meaning of the term "water pollution".</li> <li>b) Learners to be guided as they use visual aids and digital devices to explore the meaning of the term "water pollution".</li> </ul>	Gumboots, gloves, digital devices digital devices, internet, textbooks	Oral Questions, Assignments, project work	

	3		Water Pollution	By the end of the sub strand the learner should be able to: a) State the meaning of the term "water pollution". b) Identify water pollutants in his/her environment.		a) In groups, learners are guided to discuss the meaning of the term "water pollution". b) Learners to be guided as they use visual aids and digital devices to explore the meaning of the term "water pollution".	Gumboots, gloves, digital devices digital devices, internet, textbooks	Oral Questions, Assignments, project work	
	4		Water Pollution	c) Distinguish between clean and polluted water in his/her environment.		c) In groups, learners walk around the school and neighbourhood to observe, identify and record water pollutants (soil and waste). d) Learners to be guided as they use visual aids and digital devices to observe, identify and record water pollutants.	Gumboots, gloves, digital devices digital devices, internet, textbooks	Oral Questions, Assignments, project work	
	1		Water Pollution	c) Distinguish between clean and polluted water in his/her environment.		c) In groups, learners walk around the school and neighbourhood to observe, identify and record water pollutants (soil and waste). d) Learners to be guided as they use visual aids and digital devices to observe, identify and record water pollutants.	Gumboots, gloves, digital devices digital devices, internet, textbooks	Oral Questions, Assignments, project work	
11	2		Water Pollution	d) Identify effects of water pollution on living things. e) Appreciate the importance of clean water in his/her environment.		e) In groups, learners walk around the school and neighbourhood to observe and identify clean and polluted water (water in a pit, open pools, ponds, rivers, sewers and watering troughs). f) Learners to be guided as they use visual aids and digital devices to differentiate between clean and polluted water.	Gumboots, gloves, digital devices digital devices, internet, textbooks	Oral Questions, Assignments, project work	
	3		Water Pollution	d) Identify effects of water pollution on living things. e) Appreciate the importance of clean water in his/her environment.		e) In groups, learners walk around the school and neighbourhood to observe and identify clean and polluted water (water in a pit, open pools, ponds, rivers, sewers and watering troughs). f) Learners to be guided as they use visual aids and digital devices to differentiate between clean and polluted water.	Gumboots, gloves, digital devices digital devices, internet, textbooks	Oral Questions, Assignments, project work	



	4		Water Pollution	f) Identify ways of reducing water pollution.		<p>g) In groups, learners walk around the school and neighbourhood to observe, identify and record the effects of water pollution on living things (waterborne diseases, death of plants and animals that live in water).</p> <p>h) In groups, learners to use visual aids and digital devices to identify the effects of water pollution</p>	Gumboots, gloves, digital devices digital devices, internet, textbooks	Oral Questions, Assignments, project work	
12	1		Water Pollution	f) Identify ways of reducing water pollution.		<p>g) In groups, learners walk around the school and neighbourhood to observe, identify and record the effects of water pollution on living things (waterborne diseases, death of plants and animals that live in water).</p> <p>h) In groups, learners to use visual aids and digital devices to identify the effects of water pollution</p>	Gumboots, gloves, digital devices digital devices, internet, textbooks	Oral Questions, Assignments, project work	
	2		Water Pollution			<p>i) Learners are guided to identify and discuss ways of reducing water pollution (proper disposal of waste; proper disposal of dirty water).</p> <p>j) In groups, learners are guided to observe safety precautions when working in water polluted environment (Example: practise use of gumboots and gloves).</p>	Gumboots, gloves, digital devices digital devices, internet, textbooks	Oral Questions, Assignments, project work	
	3		Water Pollution			<p>i) Learners are guided to identify and discuss ways of reducing water pollution (proper disposal of waste; proper disposal of dirty water).</p> <p>j) In groups, learners are guided to observe safety precautions when working in water polluted environment (Example: practise use of gumboots and gloves).</p>	Gumboots, gloves, digital devices digital devices, internet, textbooks	Oral Questions, Assignments, project work	
	4		Water Pollution			<p><b>Project:</b> In groups, learners are guided to make a functional water filter using locally available materials.</p>	Gumboots, gloves, digital devices digital devices, internet, textbooks	Oral Questions, Assignments, project work	

