

**GRADE 9 RATIONALIZED INTERGRATED SCIENCE SCHEMES OF WORK TERM 3**

W K	L S N	STRAND	SUB STRAND	SPECIFIC LEARNING OUTCOME	LEARNING EXPERIENCES	KEY INQUIRY QUESTION	LEARNING RESOURCES	ASSESSMENT METHODS	REFL
1	1	LIVING THINGS AND THEIR ENVIRONMENT	The interdependence of life	<b>By the end of the lesson the learner should be able to:-</b> -identify biotic factors of the environment -describe biotic factors of the environment -appreciate the interdependence between living and non living factors of the environment	<b>The learner is guided to:</b> -identify biotic factors of the environment -describe biotic factors of the environment	what are biotic factors?	Comprehensive Integrated Science Grade 9 Page 99-109	oral questions  written questions	
	2	LIVING THINGS AND THEIR ENVIRONMENT	The interdependence of life	-name biotic factors affecting the environment -watch video clips of biotic factors affecting the environment -appreciate the interdependence between living and non living factors of the environment	-name biotic factors affecting the environment -watch video clips of biotic factors affecting the environment	How do biotic factors affect the environment?	Comprehensive Integrated Science Grade 9 Page 99-109	oral questions  written questions	
	3	LIVING THINGS AND THEIR ENVIRONMENT	The interdependence of life	-identify abiotic factors of the environment -describe abiotic factors of the environment -appreciate the	-identify abiotic factors of the environment -describe abiotic factors of the environment	give 3 examples of abiotic factors of the environment?	Comprehensive Integrated Science Grade 9 Page 99-109	oral questions  written questions	

**WHAT 0721634274 SCHEME OF WORK<sub>1</sub>@20 EXAMS 50/- TOTAL IN A GRADE ALSO AVAILABLE LESSON PLANS NOTES ETC**

				interdependence between living and non living factors of the environment					
4	LIVING THINGS AND THEIR ENVIRONMENT	The interdependence of life	-name biotic factors in the nearby environment -describe the interrelationships between biotic factors of the environment in their locality -appreciate the interdependence between living and non living factors of the environment	-name biotic factors in the nearby environment -describe the interrelationships between biotic factors of the environment in their locality	Which biotic factors are found in the school environment?	Comprehensive Integrated Science Grade 9 Page 99-109	oral questions written questions		
5	LIVING THINGS AND THEIR ENVIRONMENT	The interdependence of life	-identify the meaning of the term interdependence -outline the importance of interdependence between living things and their environment -appreciate the interdependence between living and non living factors of the environment	-identify the meaning of the term interdependence -outline the importance of interdependence between living things and their environment	What is interdependence?	Comprehensive Integrated Science Grade 9 Page 99-109	-oral questions -written questions		
2	1	LIVING THINGS AND THEIR ENVIRONMENT	The interdependence of life	-identify the meaning of the term interdependence -outline the importance	-identify the meaning of the term interdependence	How do living things depend on the environment?	Comprehensive Integrated Science Grade 9 Page 99-109	-oral questions -written questions	

	ENT		of interdependence between living things and their environment -appreciate the interdependence between living and non living factors of the environment	-outline the importance of interdependence between living things and their environment				
2	LIVING THINGS AND THEIR ENVIRONMENT	The interdependence of life	-identify the difference between a food chain and a food web -construct a food web in the environment -appreciate the interdependence between living and non living factors of the environment	-identify the difference between a food chain and a food web -construct a food web in the environment	what is the difference between a food chain and a food web?	Comprehensive Integrated Science Grade 9 Page 110-112	-oral questions -written questions	
3	LIVING THINGS AND THEIR ENVIRONMENT	The interdependence of life	-outline the effects of human activities on the environment -use digital devices to search for more information on effects of human activities on the environment -appreciate the interdependence between living and non living factors of the environment	-outline the effects of human activities on the environment -use digital devices to search for more information on effects of human activities on the environment	Name human activities which endanger the environment?	Comprehensive Integrated Science Grade 9 Page 113	-oral questions -written questions	
4	LIVING THINGS	The interdependence	-name living organisms in the environment	-name living organisms in the	What name is given to animals which	Comprehensive Integrated Science	-oral questions -written	

		AND THEIR ENVIRONMENT	of life	-watch video clips of food chains and food webs -appreciate the interdependence between living and non living factors of the environment	environment -watch video clips of food chains and food webs	feed on others?	Grade 9 Page 113	questions	
	5	LIVING THINGS AND THEIR ENVIRONMENT	The interdependence of life	-outline the role of living and non-living factors in the environment -use digital devices to search for more information on living and non-living factors in the environment -appreciate the interdependence between living and non living factors of the environment	-outline the role of living and non-living factors in the environment -use digital devices to search for more information on living and non-living factors in the environment	what is the role of living and non living factors in the environment?	Comprehensive Integrated Science Grade 9 Page 113	-oral questions -written questions	
3	1	LIVING THINGS AND THEIR ENVIRONMENT	The interdependence of life	-state the meaning of decomposers -outline the role of decomposers in the environment -appreciate the interdependence between living and non living factors of the environment	-state the meaning of decomposers -outline the role of decomposers in the environment	What are decomposers?	Comprehensive Integrated Science Grade 9 Page 114-116	-oral questions -written questions	
	2	LIVING	The	-state the meaning of	-state the	What is the role of	Comprehensive	-oral questions	

	THINGS AND THEIR ENVIRONMENT	interdependence of life	decomposers -outline the role of decomposers in the environment -appreciate the interdependence between living and non living factors of the environment	meaning of decomposers -outline the role of decomposers in the environment	decomposers?	Integrated Science Grade 9 Page 114-116	-written questions	
3	FORCE AND ENERGY	Curved mirrors	-describe types of curved mirrors -draw ray diagrams to locate images formed by concave and convex -appreciate the applications of curved mirrors in day to day life	-describe types of curved mirrors -draw ray diagrams to locate images formed by concave and convex	name the types of curved mirrors?	Comprehensive Integrated Science Grade 9 Page 117-118	-oral questions -written exercise	
4	FORCE AND ENERGY	Curved mirrors	-mention the key terms used in curved mirrors -explain the terms used in curved mirrors -appreciate the applications of curved mirrors in day to day life	-mention the key terms used in curved mirrors -explain the terms used in curved mirrors such as aperture,pole, centre of curvature,principal of focus	What is aperture?	Comprehensive Integrated Science Grade 9 Page 117-118	-oral questions -written exercise	
5	FORCE AND ENERGY	Curved mirrors	-mention the key terms used in curved	-mention the key terms used	What is principal of focus?	Comprehensive Integrated Science	-oral questions -written	

				mirrors -explain the terms used in curved mirrors -appreciate the applications of curved mirrors in day to day life	in curved mirrors -explain the terms used in curved mirrors such as aperture,pole, centre of curvature,principle of focus		Grade 9 Page 117-118	exercise	
4	1	FORCE AND ENERGY	Curved mirrors	-Identify characteristics of images formed by concave and convex mirrors -use digital devices to search for more information on characteristics of images formed on concave and convex mirrors -appreciate the applications of curved mirrors in daily life	-Identify characteristics of images formed by concave and convex mirrors -use digital devices to search for more information on characteristics of images formed on concave and convex mirrors	Name the characteristics of images formed by concave and convex mirrors?	Comprehensive Integrated Science Grade 9 Page 122-136	-oral questions -written exercise	
	2	FORCE AND ENERGY	Curved mirrors	-Identify characteristics of images formed by concave and convex mirrors -use digital devices to search for more	-Identify characteristics of images formed by concave and convex mirrors -use digital	Name the characteristics of images formed by concave and convex mirrors?	Comprehensive Integrated Science Grade 9 Page 122-136	-oral questions -written exercise	

				information on characteristics of images formed on concave and convex mirrors -appreciate the applications of curved mirrors in daily life	devices to search for more information on characteristics of images formed on concave and convex mirrors				
3	FORCE AND ENERGY	Curved mirrors	-identify the uses of concave and convex mirrors in daily life -watch video clips of uses of concave and convex mirrors in daily life -appreciate the applications of curved mirrors in daily life	-identify the uses of concave and convex mirrors in daily life -watch video clips of uses of concave and convex mirrors in daily life	Give 2 uses of concave mirrors?	Comprehensive Integrated Science Grade 9 Page 122-136	-oral questions -written questions		
4	FORCE AND ENERGY	Curved mirrors	-identify the uses of concave and convex mirrors in daily life -carry out a demonstration on uses of concave and convex mirrors in daily life -appreciate the applications of curved mirrors in daily life	-identify the uses of concave and convex mirrors in daily life -carry out a demonstration on uses of concave and convex mirrors in daily life	Give 3 uses of convex mirror?	Comprehensive Integrated Science Grade 9 Page 122-136	-oral questions -written questions		

	5	FORCE AND ENERGY	Curved mirrors	-outline the applications of concave and convex mirrors in day to day life -use digital devices to search for more information on applications of concave and convex mirrors -appreciate the applications of curved mirrors in daily life	-outline the applications of concave and convex mirrors in day to day life -use digital devices to search for more information on applications of concave and convex mirrors	where do we use concave and convex mirrors?	Comprehensive Integrated Science Grade 9 Page 122-136	-oral questions  -written questions	
5	1	FORCE AND ENERGY	Curved mirrors	-outline the applications of concave and convex mirrors in day to day life -use digital devices to search for more information on applications of concave and convex mirrors -appreciate the applications of curved mirrors in daily life	-outline the applications of concave and convex mirrors in day to day life -use digital devices to search for more information on applications of concave and convex mirrors	What is the importance of mirrors?	Comprehensive Integrated Science Grade 9 Page 122-136	-oral questions	
	2	FORCE AND ENERGY	Curved mirrors	-outline the	-outline the	Where can we use	Comprehensive		

		ENERGY		<p>applications of concave and convex mirrors in day to day life</p> <p>-use digital devices to search for more information on applications of concave and convex mirrors</p> <p>-appreciate the applications of curved mirrors in daily life</p>	<p>applications of concave and convex mirrors in day to day life</p> <p>-use digital devices to search for more information on applications of concave and convex mirrors</p>	curved mirrors?	Integrated Science Grade 9 Page 122-136		
3	FORCE AND ENERGY	Waves	<p>-brainstorm on the meaning of wave as used in Science</p> <p>-describe generation of waves in nature</p> <p>-appreciate the applications of waves in day to day life</p>	<p>-brainstorm on the meaning of wave as used in Science</p> <p>-describe generation of waves in nature</p>	What is wave?	Comprehensive Integrated Science Grade 9 Page 137-141	<p>-oral questions</p> <p>-written questions</p>		
4	FORCE AND ENERGY	Waves	<p>-state the meaning of wave as used in Science</p> <p>-carry out activities to demonstrate generation of waves in nature</p> <p>-appreciate the applications of waves in day to day life</p>	<p>-state the meaning of wave as used in Science</p> <p>-carry out activities to demonstrate generation of waves in nature</p>	Which activities can you carry out to demonstrate generation of waves?	Comprehensive Integrated Science Grade 9 Page 137-141	<p>-oral questions</p> <p>-written questions</p>		

	5	FORCE AND ENERGY	Waves	<ul style="list-style-type: none"> <li>-Classify waves into as longitudinal and transverse</li> <li>-describe longitudinal and transverse waves</li> <li>-appreciate the applications of waves in day to day life</li> </ul>	<ul style="list-style-type: none"> <li>-Classify waves into as longitudinal and transverse</li> <li>-describe longitudinal and transverse waves</li> </ul>	What is the difference between longitudinal and transverse Waves?	Comprehensive Integrated Science Grade 9 Page 142-143	<ul style="list-style-type: none"> <li>-oral questions</li> <li>-written questions</li> </ul>	
6	1	FORCE AND ENERGY	Waves	<ul style="list-style-type: none"> <li>-identify parts of a wave</li> <li>-use digital devices to observe pictures of parts of a wave</li> <li>-appreciate the applications of waves in day to day life</li> </ul>	<ul style="list-style-type: none"> <li>-identify parts of a wave</li> <li>-use digital devices to observe pictures of parts of a wave</li> </ul>	Name parts of a wave?	Comprehensive Integrated Science Grade 9 Page 144-146	<ul style="list-style-type: none"> <li>-oral questions</li> <li>-written questions</li> </ul>	
	2	FORCE AND ENERGY	Waves	<ul style="list-style-type: none"> <li>-name parts of waves</li> <li>-draw and label the parts of waves</li> <li>-appreciate the applications of waves in day to day life</li> </ul>	<ul style="list-style-type: none"> <li>-name parts of waves</li> <li>-draw and label the parts of waves (amplitude, wave length, frequency, wave speed</li> </ul>	Name parts of a wave?	Comprehensive Integrated Science Grade 9 Page 144-146		
	3	FORCE AND ENERGY	Waves	<ul style="list-style-type: none"> <li>-identify characteristics of waves in nature</li> <li>-watch a video clip on characteristics of waves</li> <li>-appreciate the</li> </ul>	<ul style="list-style-type: none"> <li>-identify characteristics of waves in nature</li> <li>-watch a video clip on</li> </ul>	List 2 characteristics of waves?	Comprehensive Integrated Science Grade 9 Page 147-151	<ul style="list-style-type: none"> <li>-oral questions</li> <li>-written questions</li> </ul>	

				applications of waves in day to day life	characteristics of waves				
4	FORCE AND ENERGY	Waves	<ul style="list-style-type: none"> <li>-identify characteristics of waves in nature</li> <li>-carry out activities to demonstrate characteristic of waves</li> <li>-appreciate the applications of waves in day to day life</li> </ul>	<ul style="list-style-type: none"> <li>-identify characteristics of waves in nature</li> <li>-carry out activities to demonstrate characteristic of waves</li> <li>velocity=wave length * frequency</li> </ul>	How do we get velocity?	Comprehensive Integrated Science Grade 9 Page 147-151	<ul style="list-style-type: none"> <li>-oral questions</li> <li>-written questions</li> </ul>		
5	FORCE AND ENERGY	Waves	<ul style="list-style-type: none"> <li>-brainstorm on the meaning of remote sensing in relation to waves</li> <li>-describe remote sensing in relation to waves</li> <li>-appreciate the applications of waves in day to day life</li> </ul>	<ul style="list-style-type: none"> <li>-brainstorm on the meaning of remote sensing in relation to waves</li> <li>-describe remote sensing in relation to waves</li> </ul>	what is remote sensing in relation to waves?	Comprehensive Integrated Science Grade 9 Page 152-153	<ul style="list-style-type: none"> <li>-oral questions</li> <li>-written questions</li> </ul>		
7	1	FORCE AND ENERGY	Waves	<ul style="list-style-type: none"> <li>-state the meaning of remote sensing in relation to waves</li> <li>-use digital devices to search for more</li> </ul>	<ul style="list-style-type: none"> <li>-state the meaning of remote sensing in relation to waves</li> </ul>	How do waves occur?	Comprehensive Integrated Science Grade 9 Page 152-153	<ul style="list-style-type: none"> <li>-oral questions</li> <li>-written questions</li> </ul>	

				information on remote sensing in relation to waves -appreciate the applications of waves in day to day life	-use digital devices to search for more information on remote sensing in relation to waves				
2	FORCE AND ENERGY	Waves	-outline characteristics of waves -carry out activities to demonstrate characteristics of waves -appreciate the applications of waves in day to day life	-outline characteristics of waves -carry out activities to demonstrate characteristics of waves such as straight line, motion, reflection, bending of waves, movement around objects	give 2 characteristics of waves?	Comprehensive Integrated Science Grade 9 Page 152-153	-oral questions -written questions		
3	FORCE AND ENERGY	Waves	-outline characteristics of waves -use digital devices to search for characteristics of waves -appreciate the applications of waves in day to day life	-outline characteristics of waves -use digital devices to search for characteristics of waves	give 2 characteristics of waves?	Comprehensive Integrated Science Grade 9 Page 152-153	-oral questions -written questions		
4	FORCE AND ENERGY	Waves	-identify applications	-identify	how are waves	Comprehensive	-oral questions		

		ENERGY		of waves in day to day life -describe application of waves in real life situation -appreciate the applications of waves in day to day life	applications of waves in day to day life -describe application of waves in real life situation	applied in our day to day life?	Integrated Science Grade 9 Page 154	-written questions	
	5	FORCE AND ENERGY	Waves	-identify applications of waves in day to day life -describe application of waves in real life situation -appreciate the applications of waves in day to day life	-identify applications of waves in day to day life -describe application of waves in real life situation	how are waves applied in our day to day life?	Comprehensive Integrated Science Grade 9 Page 154	-oral questions -written questions	
8 - 9	<b>REVISION &amp; END OF TERM 3 ASSESSMENTS</b>								