

2024 GRADE 8 INTEGRATED SCIENCE MENTOR SCHEMES OF WORK - TERM 2

Week	Lesson	Strand	Sub-strand	Specific-Learning outcomes	Learning Experience	Key Inquiry Question(S)	Learning Resources	Assessment Methods	Reflection
1	1	Mixture, Elements and Compounds	Oxygen; Identifying the structure of the oxygen atom	By the end of the lesson, the learner should be able to: a) Identify the structure of the oxygen atom. b) Draw the structure of the oxygen atom. c) Discuss and suggest properties of the element in learner's book 8 page 42 d) Appreciate the structure of the oxygen atom.	In groups or in pairs, learners are guided to identify the structure of the oxygen atom. In groups or in pairs, learners are guided to draw the structure of the oxygen atom. In groups or in pairs, learners are guided to discuss and suggest properties of the element in learner's book 8 page 42	What is the atomic number of the oxygen atom?	Mentor; Integrated Science Learner's Book Grade 8 pg. 41 Pictures Charts Realia Computing devices	Oral questions Oral Report Observation	
	2	Mixture, Elements and Compounds	Role of oxygen in day-to-day life	By the end of the lesson, the learner should be able to: a) Use digital devices, textbooks or any other relevant resources, search for the role of oxygen in day-to-day life. b) Participate in a class presentation as they share their findings with their classmates. c) Appreciate the role of oxygen in day-to-day life.	In groups or in pairs, learners are guided to use digital devices, textbooks or any other relevant resources, search for the role of oxygen in day-to-day life. In groups, learners are guided to participate in a class presentation as they share their findings with their classmates.	What is the role of oxygen in day-to-day life?	Mentor; Integrated Science Learner's Book Grade 8 pg. 41-42 Pictures Charts Realia Computing devices	Oral questions Oral Report Observation	
	3	Mixture, Elements and Compounds	Preparation of oxygen in the laboratory	By the end of the lesson, the learner should be able to: a) Identify the requirements needed to prepare oxygen using hydrogen peroxide. b) State the safety precautions to be observed. c) Prepare oxygen using hydrogen peroxide. d) Appreciate the uses of oxygen.	In groups or in pairs, learners are guided to identify the requirements needed to prepare oxygen using hydrogen peroxide. In groups or in pairs, learners are guided to state the safety precautions to be observed. In groups or in pairs, learners are guided to prepare oxygen using hydrogen peroxide.	How do you prepare oxygen using hydrogen peroxide?	Mentor; Integrated Science Learner's Book Grade 8 pg. 42-43 Pictures Charts Realia Computing devices	Oral questions Oral Report Observation	
	4	Mixture, Elements and Compounds	How to prepare oxygen using Potassium Manganate (VII)	By the end of the lesson, the learner should be able to: a) Identify the requirements needed to prepare oxygen using Potassium Manganate (VII) b) Outline the procedure of preparing oxygen using Potassium Manganate (VII) c) Prepare oxygen using Potassium Manganate (VII) d) Appreciate the uses of oxygen.	In groups or in pairs, learners are guided to identify the requirements needed to prepare oxygen using Potassium Manganate (VII) In groups or in pairs, learners are guided to Outline the procedure of preparing oxygen using Potassium Manganate (VII) In groups or in pairs, learners are guided to prepare oxygen using Potassium Manganate (VII)	What is the colour and smell of the gas collected?	Mentor; Integrated Science Learner's Book Grade 8 pg. 43-44 Pictures Charts Realia Computing devices	Oral questions Oral Report Observation	
	5	Mixture, Elements and Compounds	Physical and Chemical properties of oxygen	By the end of the lesson, the learner should be able to: a) Define the term, 'Physical property' and 'chemical property' b) Describe the physical properties of oxygen.	In groups or in pairs, learners are guided to define the term, 'Physical property' and 'chemical property' In groups or in pairs, learners are guided to describe the physical properties of oxygen. In groups or in pairs, learners	What are the physical properties of oxygen? What are the chemical properties of oxygen?	Mentor; Integrated Science Learner's Book Grade 8 pg. 44-45 Pictures Charts	Oral questions Oral Report Observation	

				<p>c) Investigate the chemical properties of oxygen.</p> <p>d) Appreciate the importance of oxygen.</p>	are guided to investigate the chemical properties of oxygen.		Realia Computing devices		
2	1	Mixture, Elements and Compounds	The role of oxygen in combustion and spread of fire	<p>By the end of the lesson, the learner should be able to:</p> <p>a) Identify the role of oxygen in combustion.</p> <p>b) Explain the role of oxygen in combustion and spread of fire.</p> <p>c) Investigate the three requirements for combustion to occur.</p> <p>d) Appreciate the role of oxygen in combustion.</p>	<p>In groups or in pairs, learners are guided to identify the role of oxygen in combustion.</p> <p>In groups or in pairs, learners are guided to explain the role of oxygen in combustion and spread of fire.</p> <p>In groups or in pairs, learners are guided to investigate the three requirements for combustion to occur.</p>	What is the role of oxygen in combustion and spread of fire?	<p>Mentor; Integrated Science Learner' s Book Grade 8 pg. 46-47</p> <p>Pictures Charts Realia Computing devices</p>	Oral questions Oral Report Observation	
	2	Mixture, Elements and Compounds	Classes of fire and their control measures	<p>By the end of the lesson, the learner should be able to:</p> <p>a) State the difference between burning paper and burning kerosene.</p> <p>b) Investigate types of fire.</p> <p>c) Advocate the importance of controlling fire.</p>	<p>In groups or in pairs, learners are guided to state the difference between burning paper and burning kerosene.</p> <p>In groups or in pairs, learners are guided to investigate types of fire.</p>	What is the difference between difference between burning paper and burning kerosene?	<p>Mentor; Integrated Science Learner' s Book Grade 8 pg. 47</p> <p>Pictures Charts Realia Computing devices</p>	Oral questions Oral Report Observation	
	3	Mixture, Elements and Compounds	Identifying the classes of fire	<p>By the end of the lesson, the learner should be able to:</p> <p>a) Identify different classes of fire and their control measures.</p> <p>b) Recognize which substance cause each class of fire.</p> <p>c) Appreciate the classes of fire.</p>	<p>In groups or in pairs, learners are guided to identify different classes of fire and their control measures.</p> <p>In groups or in pairs, learners are guided to recognize which substance cause each class of fire.</p>	Which substance cause each class of fire?	<p>Mentor; Integrated Science Learner' s Book Grade 8 pg. 47-48</p> <p>Pictures Charts Computing devices</p>	Oral questions Oral Report Observation	
	4	Mixture, Elements and Compounds	Control measures for different classes of fire	<p>By the end of the lesson, the learner should be able to:</p> <p>a) Identify types of fire extinguishers.</p> <p>b) State the classes of fire that each extinguisher is suitable for.</p> <p>c) Investigate the chemicals found in each of the fire extinguisher.</p> <p>d) Appreciate the uses of fire extinguisher.</p>	<p>In groups or in pairs, learners are guided to identify types of fire extinguishers.</p> <p>In groups or in pairs, learners are guided to state the classes of fire that each extinguisher is suitable for.</p> <p>In groups or in pairs, learners are guided to investigate the chemicals found in each of the fire extinguisher.</p>	What is a fire extinguisher?	<p>Mentor; Integrated Science Learner' s Book Grade 8 pg. 48-49</p> <p>Pictures Charts Realia Computing devices</p>	Oral questions Oral Report Observation	
	5	Mixture, Elements and Compounds	The fire triangle	<p>By the end of the lesson, the learner should be able to:</p> <p>a) Identify the three requirements for a fire to start.</p> <p>b) Explain the three ways of breaking the fire triangle.</p> <p>c) Investigate ways one can apply the knowledge of breaking the fire</p>	<p>In groups or in pairs, learners are guided to identify the three requirements for a fire to start.</p> <p>In groups or in pairs, learners are guided to explain the three ways of breaking the fire triangle.</p> <p>In groups or in pairs, learners are guided to investigate ways one can apply the knowledge</p>		<p>Mentor; Integrated Science Learner' s Book Grade 8 pg. 49-50</p> <p>Pictures Charts Realia Computing devices</p>	Oral questions Oral Report Observation	

				triangle to stop fire. d) Appreciate the fire triangle.	of breaking the fire triangle to stop fire.				
3	1	Mixture, Elements and Compounds	Brainstorm on classes of fire and their control measures	By the end of the lesson, the learner should be able to: a) Name the materials that can catch fire in school. b) Identify sources of heat that can ignite a fire at school. c) Recognise classes of fire that are likely to occur in their school. d) Appreciate the control measures of fire.	In groups or in pairs, learners are guided to name the materials that can catch fire in school. In groups or in pairs, learners are guided to identify sources of heat that can ignite a fire at school. In groups or in pairs, learners are guided to recognise classes of fire that are likely to occur in their school.	How best can we prepare in case of a fire at school?	Mentor; Integrated Science Learner's Book Grade 8 pg. 50 Pictures Charts Realia Computing devices	Oral questions Oral Report Observation	
	2	Mixture, Elements and Compounds	Practicing fire control measure.	By the end of the lesson, the learner should be able to: a) Practice breaking the fire triangle. b) Observe safety precautions as they carry out the activity. c) Write a report about how each of the method of breaking the fire triangle works to stop the fire. d) Enjoy practicing fire control measures.	In groups or in pairs, learners are guided to practice breaking the fire triangle. In groups or in pairs, learners are guided to observe safety precautions as they carry out the activity. In groups or in pairs, learners are guided to write a report about how each of the method of breaking the fire triangle works to stop the fire.	What have you learnt about fire?	Mentor; Integrated Science Learner's Book Grade 8 pg. 50-51 Pictures Charts Realia Computing devices	Oral questions Oral Report Observation	
	3	Mixture, Elements and Compounds	Right to safety and access to information on flammable substances	By the end of the lesson, the learner should be able to: a) Identify information on flammable substances. b) Explain the meaning of hazard symbols on the container. c) Recognize the importance of providing information about flammable substances. d) Appreciate the importance of safety and access to information on flammable substances.	In groups or in pairs, learners are guided to identify information on flammable substances. In groups or in pairs, learners are guided to explain the meaning of hazard symbols on the container. In groups or in pairs, learners are guided to recognize the importance of providing information about flammable substances.	Why do you think it is important to provide information about flammable substances?	Mentor; Integrated Science Learner's Book Grade 8 pg. 51-52 Pictures Charts Realia Computing devices	Oral questions Oral Report Observation	
	4	Living things and their environment	The cell; Structure of the cell	By the end of the lesson, the learner should be able to: a) Explain the meaning of a cell. b) Identify the structure of a cell. c) Draw the structure of a cell. d) Have a desire to learn more about a cell.	Individually, learners are guided to explain the meaning of a cell. Individually, learners are guided to identify the structure of a cell. Individually, learners are guided to draw the structure of a cell.	What is a cell?	Mentor; Integrated Science Learner's Book Grade 8 pg. 53 Pictures Computing devices	Oral questions Oral Report Observation	
	5	Living things and their environment	Preparing a slide of a plant cell	By the end of the lesson, the learner should be able to: a) Identify the requirements needed to prepare a slide of a plant cell. b) Outline the process of preparing a slide of a	In groups or in pairs, learners are guided to identify the requirements needed to prepare a slide of a plant cell. In groups or in pairs, learners are guided to outline the process of preparing a slide of a plant cell.	How do you prepare a slide of a plant cell?	Mentor; Integrated Science Learner's Book Grade 8 pg. 54-55 Pictures Charts	Oral questions Oral Report Observation	

				<p>plant cell.</p> <p>c) Prepare and mount a sample of a part of a plant on a slide.</p> <p>d) Enjoy preparing a slide of a plant cell.</p>	In groups or in pairs, learners are guided to prepare and mount a sample of a part of a plant on a slide.		Realia Computing devices		
4	1	Living things and their environment	Observing a plant cell under a light microscope	<p>By the end of the lesson, the learner should be able to:</p> <p>a) Identify the requirements needed to observe a plant cell under a light microscope.</p> <p>b) Outline the procedure of observing a plant cell under a light microscope.</p> <p>c) Observe a plant cell under a light microscope.</p> <p>d) Appreciate the importance of a light microscope.</p>	<p>In groups or in pairs, learners are guided to identify the requirements needed to observe a plant cell under a light microscope.</p> <p>In groups or in pairs, learners are guided to outline the procedure of observing a plant cell under a light microscope.</p> <p>In groups or in pairs, learners are guided to observe a plant cell under a light microscope.</p>	How do you observe a plant cell under a light microscope?	<p>Mentor; Integrated Science Learner' s Book Grade 8 pg. 55-56</p> <p>Pictures Charts Realia Computing devices</p>	Oral questions Oral Report Observation	
	2	Living things and their environment	Functions of the parts of a plant cell	<p>By the end of the lesson, the learner should be able to:</p> <p>a) Draw a plant cell.</p> <p>b) Name the structures of a plant cell.</p> <p>c) State the functions of the parts of a plant cell.</p> <p>d) Appreciate the functions of a plant cell.</p>	<p>In groups or in pairs, learners are guided to draw a plant cell.</p> <p>In groups or in pairs, learners are guided to name the structures of a plant cell.</p> <p>In groups or in pairs, learners are guided to state the functions of the parts of a plant cell.</p>	What are the functions of a plant cell?	<p>Mentor; Integrated Science Learner' s Book Grade 8 pg. 56-57</p> <p>Pictures Charts Realia Computing devices</p>	Oral questions Oral Report Observation	
	3	Living things and their environment	Observing an animal cell in a permanent slide	<p>By the end of the lesson, the learner should be able to:</p> <p>a) Identify the requirements needed to observe an animal cell under a light microscope.</p> <p>b) Outline the procedure of observing an animal cell under a light microscope.</p> <p>c) Observe an animal cell under a light microscope.</p> <p>d) Appreciate the importance of a light microscope.</p>	<p>In groups or in pairs, learners are guided to identify the requirements needed to observe an animal cell under a light microscope.</p> <p>In groups or in pairs, learners are guided to outline the procedure of observing an animal cell under a light microscope.</p> <p>In groups or in pairs, learners are guided to observe an animal cell under a light microscope.</p>	How do you observe an animal cell under a light microscope?	<p>Mentor; Integrated Science Learner' s Book Grade 8 pg. 57-58</p> <p>Pictures Charts Realia Computing devices</p>	Oral questions Oral Report Observation	
	4	Living things and their environment	Functions of the parts of an animal	<p>By the end of the lesson, the learner should be able to:</p> <p>a) Draw an animal cell.</p> <p>b) Name the structures of an animal cell.</p> <p>c) State the functions of the parts of an animal cell.</p> <p>d) Appreciate the functions of an animal cell.</p>	<p>In groups or in pairs, learners are guided to draw an animal cell.</p> <p>In groups or in pairs, learners are guided to name the structures of an animal cell.</p> <p>In groups or in pairs, learners are guided to state the functions of the parts of an animal cell.</p>	What are the functions of an animal cell?	<p>Mentor; Integrated Science Learner' s Book Grade 8 pg. 58</p> <p>Pictures Charts Realia Computing devices</p>	Oral questions Oral Report Observation	
	5	Living things and their environment	Differences between plant cell and animal cell	<p>By the end of the lesson, the learner should be able to:</p> <p>a) State the differences between a plant cell and an animal cell.</p> <p>b) Recognise the differences between</p>	<p>In groups or in pairs, learners are guided to state the differences between a plant cell and an animal cell.</p> <p>In groups or in pairs, learners are guided to recognise the differences between plant and</p>	Which structure are in a plant cell and not in an animal cell?	<p>Mentor; Integrated Science Learner' s Book Grade 8 pg. 59-60</p> <p>Pictures</p>	Oral questions Oral Report Observation	

				plant and animal cell. c) Draw the table in learner' s book 8 page 59 d) Appreciate the differences between plant cell and animal cell.	animal cell. In groups or in pairs, learners are guided to draw the table in learner' s book 8 page 59		Charts Realia Computing devices		
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