

SECOND TERM

WEEKLY LESSON NOTES

WEEK 9

Week Ending:		DAY:	Subject: Science
Duration: 100mins		Strand: Forces & Energy	
Class: B9	Class Size:		Sub Strand: Conversion & Conservation Of Energy
Content Standard: B9.4.3.1 Show an understanding of conversion and conservation of energy and their application to life.		Indicator: B9.4.3.1.1 Describe how energy can be converted from one form to another and show how conservation of energy occurs.	Lesson: 1 of 2
Performance Indicator: Learners can differentiate between the conversion and conservation of energy and understand their applications in daily life.			Core Competencies: Critical Thinking and Problem Solving (CP), Communication and Collaboration (CC) Digital Literacy (DL), Creativity and Innovation
References: Science Curriculum Pg. 109			
Key words: Energy, Energy conversion, Energy conservation			
Phase/Duration	Learners Activities	Resources	
PHASE 1: STARTER	<p>Begin the lesson with a simple question: "What is energy?" Encourage learners to share their definitions and examples of energy. Write their responses on the board.</p> <p>Then, introduce the terms "energy conversion" and "energy conservation." Ask if anyone can provide examples or definitions for these terms.</p> <p>Share learning indicators and introduce the lesson.</p>		
PHASE 2: NEW LEARNING	<p>Define key terms: energy conversion, energy conservation.</p> <p>Explain that energy conversion involves changing one form of energy into another, while energy conservation involves the preservation of total energy within a system.</p> <p>Provide brief examples of each concept, such as a light bulb converting electrical energy into light energy (conversion) and a swinging pendulum conserving its mechanical energy (conservation).</p> <p>Divide the class into small groups.</p> <p>Provide each group with images or descriptions of different energy conversion processes (e.g., a car engine, a solar panel, a wind turbine).</p>	Visual aids or diagrams depicting energy conversion and conservation	

	<p>Instruct learners to identify and discuss the various forms of energy involved in each process.</p> <p>Each group presents their findings to the class, fostering a collective understanding of energy conversion.</p> <p>Introduce real-life scenarios or case studies where energy conservation is crucial (e.g., home insulation, hybrid vehicles).</p> <p>Assign different scenarios to each group and have them discuss how energy is conserved in those situations.</p> <p>Each group shares their insights with the class, highlighting the importance of energy conservation in daily life.</p> <p><u>Assessment</u></p> <ol style="list-style-type: none"> 1. What happens to the form of energy when a leaf falls from a tree? 2. How does using energy-efficient appliances at home contribute to energy conservation? 3. Explain why a solar panel is an example of energy conversion. 4. Describe one way understanding energy principles can help you make healthier choices. 	
<p>PHASE 3: REFLECTION</p>	<p>Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>	

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Duration: 100mins		Strand: Forces & Energy	
Class: B9	Class Size:	Sub Strand: Conversion & Conservation Of Energy	
Content Standard: B9.4.3.1 Show an understanding of conversion and conservation of energy and their application to life.		Indicator: B9.4.3.1.2 Describe how conversion and conservation of energy are applied in life.	Lesson: 1 of 2
Performance Indicator: Learners can distinguish between energy conversion and conservation using everyday examples		Core Competencies: Critical Thinking and Problem Solving (CP), Communication and Collaboration (CC) Digital Literacy (DL), Creativity and Innovation	
References: Science Curriculum Pg. 109			
Key words:			
Phase/Duration	Learners Activities	Resources	
PHASE 1: STARTER	<p>Begin the lesson with a brief discussion about the different forms of energy learners encounter in their daily lives.</p> <p>Ask them to share examples of energy conversion and conservation that they may have observed. Write these examples on the board.</p> <p>Share learning indicators and introduce the lesson.</p>		
PHASE 2: NEW LEARNING	<p>Define key terms: energy conversion, energy conservation.</p> <p>Briefly explain the distinctions between energy conversion (changing from one form to another) and energy conservation (preserving total energy within a system).</p> <p>Provide clear examples of each concept, using visuals or real-life scenarios.</p> <p>Divide the class into small groups. Provide each group with a list of everyday scenarios or objects (e.g., a cellphone charging, a car moving, a refrigerator running).</p> <p>Instruct learners to discuss and categorize each scenario as an example of energy conversion, conservation, or both.</p> <p>Each group shares their findings with the class, fostering discussion and clarifying any misconceptions.</p>	Pictures and charts	

	<p>Assign learners the task of identifying opportunities to conserve energy in their homes, schools, or communities.</p> <p>Instruct them to observe and document instances where energy can be conserved (e.g., turning off lights, using energy-efficient appliances).</p> <p>Each student produces a short report summarizing their findings, including suggestions for energy conservation.</p> <p><u>Assessment</u></p> <ol style="list-style-type: none"> 1. What happens to the energy when you throw a ball in the air and catch it? 2. How does turning off lights help conserve energy? 3. Explain why using a bike instead of a car is an example of both energy conservation and conversion. 4. Describe one opportunity to conserve energy in your daily routine. 	
<p>PHASE 3: REFLECTION</p>	<p>Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>	