FIRST TERM
WEEKLY LESSON NOTES
WEEK 9

Week Ending: 10-03-2023	**DAY:**	**Subject:** Science	
Duration: 100mins		**Strand:** Forces & Energy	
Class: B8	**Class Size:**	**Sub Strand:** Heat And Temperature	
Content Standard: B8.4.1.3 Demonstrate an understanding of the relationship between heat and temperature		**Indicator:** B8.4.1.3.1 Discuss the differences and the relationship between heat and temperature in the environment	**Lesson:** 1 of 2
Performance Indicator: Learners can describe the differences and the relationship between heat and temperature		**Core Competencies:** DL 5.3: CI 6.8: DL 5.1: CI 6.6:	
References: Science Curriculum Pg. 71			

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners on the previous lesson. Share learning indicators and introduce the lesson.	
PHASE 2: **NEW LEARNING**	Brainstorm learners for meaning of temperature and heat *Temperature is a measure of the degree of hotness or coldness of a substance* *Heat is a form of energy that is transferred from one body to another due to a difference in temperature.* Create a table to show the distinguishing features of temperature and heat. 1. Definition: Temperature is a measure of the degree of hotness or coldness of a substance, while heat is a form of energy that is transferred from one body to another due to a difference in temperature. 2. Units: Temperature is typically measured in units of degrees Celsius (°C) or Fahrenheit (°F), while heat is measured in units of joules (J) or calories (cal). 3. Transfer: Temperature can be transferred from one object to another when the two objects are in contact. Heat, on the other hand, always flows from a hotter object to a cooler object. 4. Sensation: Temperature can be sensed by touch or with a thermometer, while heat is not directly sensed, but rather it is inferred from changes in temperature or other physical effects. 5. Dependence: Temperature depends only on the average kinetic energy of the particles in a substance, while heat depends on both the temperature and the amount of substance. 6. Effect: Temperature affects the physical properties of a substance, such as its volume, density, and state of matter. Heat, on the other hand, can change the temperature and physical state of a substance, as well as do work. Guide learners to discuss the relationship between temperature and heat	Pictures and Charts

	Temperature is a measure of the average kinetic energy of the particles in a substance, while heat is a form of energy that is transferred from one body to another due to a difference in temperature. *When two objects of different temperatures are brought into contact, heat will flow from the hotter object to the cooler object until they reach thermal equilibrium and have the same temperature.*	
PHASE 3: **REFLECTION**	Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson. Take feedback from learners and summarize the lesson.	

Week Ending: 10-03-2023	**DAY:**	**Subject:** Science	
Duration: 100mins		**Strand:** Forces & Energy	
Class: B8	**Class Size:**	**Sub Strand:** Electricity And Electronics	
Content Standard: B8.4.2.1 Demonstrate knowledge of electricity transmission	**Indicator:** B8.4.2.1.1 Explain how electricity transmission occurs.		**Lesson:** 2 of 2
Performance Indicator: Learners can explain how electricity transmission is generated		**Core Competencies:** DL 5.3: CI 6.8: DL 5.1: CI 6.6:	
References: Science Curriculum Pg. 72			

Phase/Duration	Learners Activities	Resources
PHASE 1: **STARTER**	Revise with learners on the previous lesson. Share learning indicators and introduce the lesson.	
PHASE 2: **NEW LEARNING**	Brainstorm learners to identify different stages of electricity transmission 1. Generation: This is the process of producing electrical energy in power plants, either through burning fossil fuels, using nuclear reactions, or harnessing renewable energy sources like solar, wind, or hydroelectric power. 2. Step-up transformation: The electrical energy produced by power plants is typically at a low voltage level. To minimize energy losses during transmission, the voltage is stepped up using transformers, which increase the voltage to several hundred kilovolts or even megavolts. 3. Transmission: The high-voltage electricity is then transported over long distances via overhead power lines or underground cables. The transmission lines are designed to minimize energy losses due to resistance and other factors. 4. Step-down transformation: Once the electricity reaches its destination, it is stepped down using transformers to a lower voltage suitable for distribution to homes, businesses, and other consumers. 5. Distribution: The final stage of electricity transmission involves distributing the electricity to end-users via a network of power lines and transformers. The distribution system delivers electricity to local substations, which then distribute the electricity to homes and businesses in the surrounding area. Draw a flow chart to show the stages of electricity transmission from the point of generation to the point of consumption	Pictures and Charts
PHASE 3: **REFLECTION**	Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson. Take feedback from learners and summarize the lesson.	