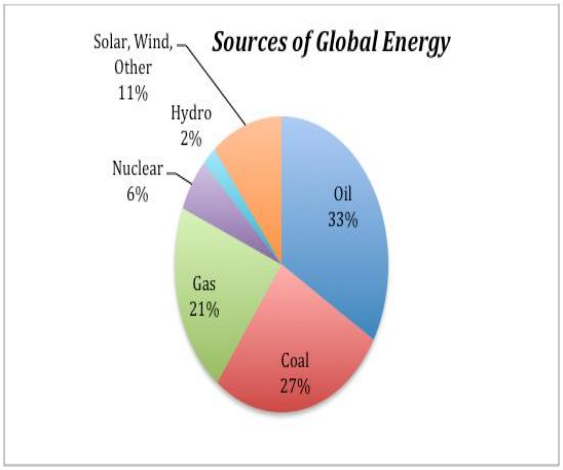
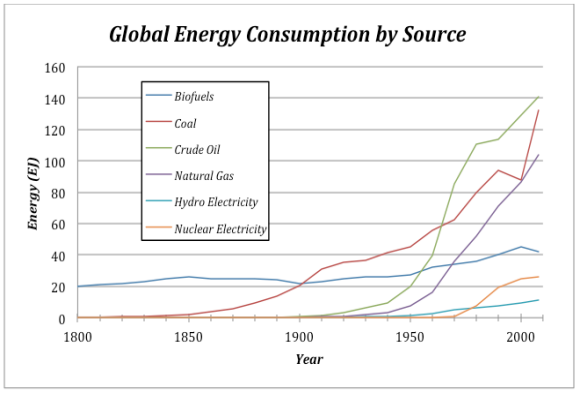
Strand:	Environment	**Sub-Strand:**	Environmental Issues

BASIC 9

WEEKLY LESSON PLAN – WEEK 2

Content Standard:	B9.1.1.2. Evaluate the sources and ways of conserving energy				
Indicator (s)	B9.1.1.2.1. Assess global sources and the means of conserving energy	**Performance Indicator:** Learners can distinguish between renewable and sustainable energy.			
Week Ending	20-09-2024				
Class	B.S.9	**Class Size:**		**Duration:**	
Subject	Social Studies				
Reference	Social Studies Curriculum, Teachers Resource Pack, Learners Resource Pack, Textbook.				
Teaching / Learning Resources	Poster, Word Chart, Video and Pictures	**Core Competencies:**	• Critical Thinking • Problem Solving • Communication and Collaboration.		

DAY/DATE	**PHASE 1 : STARTER**	**PHASE 2: MAIN**	**PHASE 3: REFLECTION**
WEDNESDAY	Discuss with the learners on the meanings of keywords and terminologies. **Keywords;** • Global • Sustainable energy • Environment • Conservation • Energy • Efficiency.	1. Assist Learners to explain "Global Energy monitor". 2. Learners brainstorm to identify examples of global energy associations across the world. 3. Using Poster and pictures, briefly explain 3 sources of global energy with the Learners. 4. Learners brainstorm to identify global energy sources and conservation in Ghana. **Global Energy Sources** The energy we use to support the whole range of human activities comes from a variety of sources, but as you all know, fossil fuels (coal, oil, and natural gas) currently provide the majority of our energy on a global basis, supplying about 81% of the energy we use:  	Learners in small groups to compare global energy sources and conservation among developed countries and developing countries using charts. **Exercise;** 1. What is Global Energy Source? 2. State 4 examples of global energy sources.

			
FRIDAY	Learners brainstorm to identify 5 uses of energy.	1. Discuss with the Learners on the difference between sustainable energy and renewable energy. 2. Show Learners video educating them on examples of renewable and sustainable energy sources. 3. Assist Learners to describe the processes and devices for measuring and metering energy consumption. 4. Learners brainstorm to explain the term "energy conservation". Renewable energy Literally 'to make new again', a renewable resource is one that is naturally replenished with time, like the growth of new organisms or natural recycling of materials. Renewable energy is any energy production which uses one of these resources. Renewable resources do not have a fixed quantity - more can always be generated. However, if the rate of use exceeds the rate of renewal - that is, the source is used more than it's being recreated - its continued use will become unsustainable. Generally, renewable energy is taken to mean any of the following: • Solar power • Wind power • Hydropower • Tidal power • Geothermal power Resources are considered non-renewable if they take a very long time to be created (e.g. fossil fuels) or if their creation happened long ago and is not likely to happen again (e.g. uranium). Primary energy flows are almost always renewable. On the other hand, biofuels are renewable and definitely count as fuels. Sustainable energy Literally, that which can be maintained for a definable period of time, sustainable energy is energy production that can last for the foreseeable future. Sustainable energy practices must rely on resources which can continue to supply our needs. These sources must be used cautiously so that they will not be used up, run out, or otherwise	Assist Learners to explain 5 importance of energy conservation. **Exercise;** 1. Explain the following; i. Renewable energy ii. Sustainable energy 2. Explain 5 importance of energy conservation.

		become unusable. Even renewable resources can become unsustainable. If a resource is used up faster than it can regenerate, it will eventually be entirely depleted despite its renewability. Conversely, a non-renewable resource can be sustainable if it's used in moderation. Again, if used without caution, these too may become be depleted in a short time. For most people sustainable energy use means that the environment is not significantly damaged due to accumulated effects of an energy practice. This part of the definition of sustainable energy is quite politically charged with widely varying opinions. Often advocates for fossil fuels will claim that coal, oil and natural gas are sustainable because the reserves for these are so large, discounting the problems with climate change **Sustainable vs Renewable** Comparison Chart **Sustainable** | **Renewable** Sustainable energy comes from sources that can never be depleted and can be maintained indefinitely for future generations. | Energy is considered renewable when it is derived from natural sources that are replenished naturally. Polymers are an integral part of all aspects of sustainable energy solutions. | There are various types of energy sources that are renewable such as wind, solar, biomass, and geothermal. Wind and solar energy are sustainable energy sources, but they are also renewable. | Most of the renewable energy sources are forms of sustainable energy, but not all. DB Difference Between.net	

Name of Teacher: **School:** **District:**