

1. Determine whether the rock described is igneous (I), sedimentary (S) or metamorphic (M)? (4)
- Slate is formed from sedimentary rock that has been subjected to heavy pressure. _____
 - Granite results from the cooling of a magma bubble slowly moving to the earth's surface. _____
 - Obsidian is a type of volcanic glass formed during an eruption. _____
 - Rocks found along the shores of James Bay contain fossils as a result of the accumulation _____ and compaction of layers of sand
2. Consider a clear high quality diamond. Diamonds are very hard and made of pure carbon. (4)
Circle the properties that apply.
- Is the diamond a rock or a mineral? Rock / Mineral
 - Describe its colour. Idiochromatic / Allochromatic
 - Describe its transparency. Transparent / Translucent / Opaque
 - Its Mohs scale value. High value / Low value

We have considered three energy resources from the lithosphere, namely; **fossil fuels, uranium, geothermal**.

(8)

- Which are non-renewable? _____
- Which creates a large amount of greenhouse gases? _____
- Name or give the chemical formula for two greenhouse gases. _____
- Provide one disadvantage to each energy resource listed below:

Energy Resource	Disadvantage
Fossil Fuel	
Nuclear	
Geothermal	

Multiple choice

(4)

- What are the three components of fossil fuels?
 A) oil, natural gas and coal C) natural gas, oil and water
 B) natural gas, water, plastics D) coal, oil and water
- Which of the following are properties of **rocks**? They:
 A) Are composed of more than two types of minerals. C) Have the same properties throughout.
 B) Have a unique chemical composition. D) Have an ordered atomic structure.
- The proper term for the extracted material from the ground whose concentration of a mineral is high enough for mining is:
 A) Rock B) Deposit C) Ore D) Natural deposit
- Which mineral is extracted from the lithosphere to produce nuclear energy?
 A) Iron B) Pyrite C) Coal D) Uranium