FORMAL ASSESSMENT

**GEOMORPHOLOGY 1** 

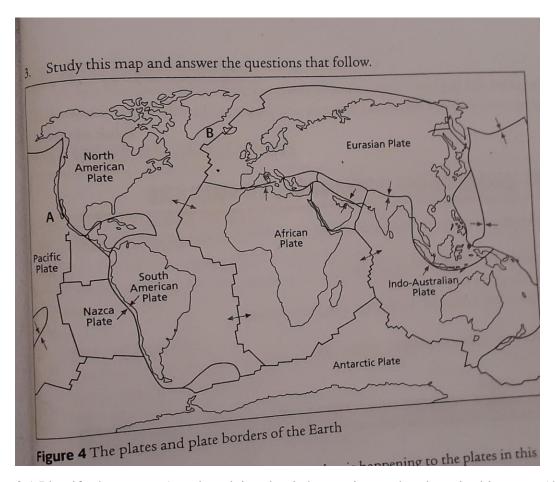
DUE DATE: 3 JULY 2020

**TOTAL MARKS: 50** 

## NB: KINDLY SUBMIT TYPED ANSWERS BY EMAILING THEM TO YOUR RESPECTIVE TEACHER.

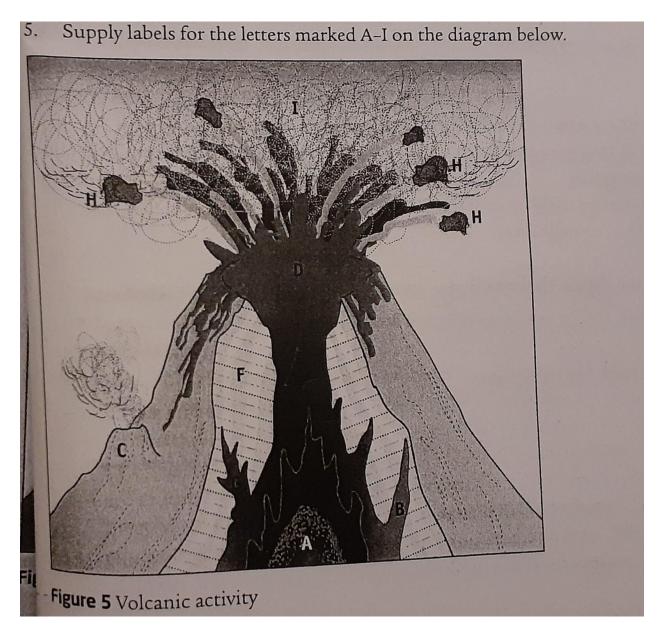
- 1. Imagine that you a mining engineer and are able to drill from the surface to the center of the Earth. Draw a fully labelled diagram that show each of the layers of the earth that you would drill through. (7)
- 2. Indicate whether each of the following statements is TRUE or FALSE.
  - 2.1 Sandstone is a permeable rock because it is porous.
  - 2.2 Basalt originates from magma that has cooled and solidified deep in the crust.
  - 2.3 Coal is a sedimentary rock that has changed form to become a metamorphic rock.
  - 2.4 Dolerite is an organically formed sedimentary rock.
  - 2.5 Resistant rocks do not allow water to pass through them
  - 2.6 Marble is a metamorphosed form of limestone.
  - 2.7 Granite is a resistant rock because it does not wear away easily. (7)

3. Study the map below and answer the questions that follow.



- 3.1 Identify the area at A and explain what is happening to the plates in this area. (4)
- 3.2 B is the Island of Surtsey, which was 'born' in 1963. Explain how and why this happened. (3)
- 3.3 Outline the evidence that scientists would use to prove that South America and southern Africa were once joined. (4)
- 4. Differentiate between:
- a) magma and lava
- b) laccoliths and batholiths
- c) tension and compression (3x2=6)

5. Study the diagram below and supply labels for letters marked A-I on the diagram (9)



6. Write a short paragraph describing how, although volcanoes cannot be prevented, they can be monitored and their damaging effects can be controlled. You should also mention how people can benefit from volcanoes. (5x2=10)