

LESSON NOTE FOR WEEK TWO (FAMVAR INTERNATIONAL SECONDARY SCHOOL)

SUBJECT: GEOGRAPHY

CLASS: SS2

TOPIC: EARTHQUAKES

EARTHQUAKE

An earthquake is a sudden movement or vibration in the earth's crust which may be violent enough to cause great damage. A small earthquake or a relatively minor seismic shaking or vibrating movement of the earth's crust is called a **tremor**.

CAUSES

Earthquakes are caused by :

- A. The development of faults/cracks in the crust as a result of the collision between the tectonic plates.
- B. The movement of molten rock below or within the crust or the sudden release of stress which has gradually developed along the plane.

Origin or Focus: This is the point from which an earthquake originates i.e. the shock waves are sent out from this point. The focus is sometimes several kilometers below the earth.

Epicentre: This is the point on the earth's surface directly on top of the origin where the effect of the earthquake is greatest.

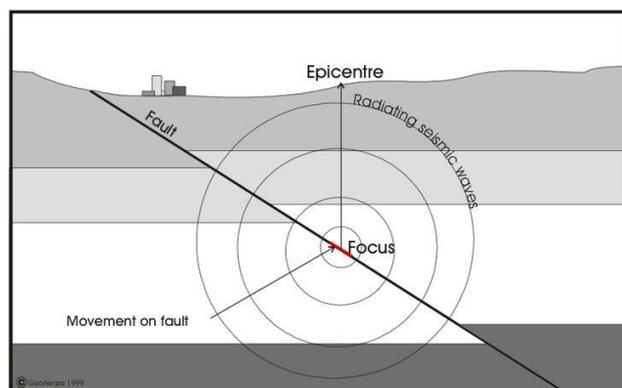


Diagram showing depicting the cause of earthquakes

Types of shock waves

There are two types of shock waves released by earthquakes which are :

- A. Body waves:** which travel through the crust and are of two types namely, primary and secondary waves
- b. Surface waves and;**

B. Surface waves: which travel through the surface rocks and are of two types namely, Love and Rayleigh waves

Seismograph: This is the instrument used to measure the intensity of the earthquake.

Richter scale: This is the scale used to measure the magnitude of the shock.

EFFECTS OF EARTHQUAKE

1. They are disastrous and destructive to life and property.
2. They destroy roads, railways, bridges, power line and telecommunication lines.
3. They can cause and create large openings on lands.
4. They can raise and lower coastal regions e.g Alaska 1899
5. They also displace parts of the earth's crust either vertically or laterally.
6. They can also raise or lower parts of the ocean floor.
7. They can cause landslides and open up deep cracks in surface rock
8. It can raise and lower parts of the sea floor e.g. Sagami Bay, Japan in 1923



HOMEWORK

1. What is an earthquake?
2. List and briefly explain two types of shock waves.
3. State four effects of earthquakes
4. List out two historic earthquakes and three recent earthquakes.