

Pre-Assessment

**Concept(s)
Addressed**

Earthquakes indicate plate movement along faults in California. Movement at plate boundaries produces different types of faults: normal, reverse/thrust, and strike-slip. Exposed rock layers indicate the type of fault. Magma reaches the surface through volcanic structures. Volcano eruptions can be of various types: quiet and explosive. Earthquakes and volcanic activity form and shape California's geologic features.

Time

20 minutes

Materials

Individual
Prompt

**Advance
Preparation**

1. Duplicate prompt for each student

Teacher Note: The pre-assessment is designed to provide patterns in student understanding through revealing what students know in open ended prompts and defining important concept ideas. These patterns are used to provide interventions in areas of greatest need.

Procedure:

1. Tell students they will have an opportunity to share what they understand about earthquakes and volcanoes.
2. Distribute the prompt to each student and ask him/her to do his/her best work.

Name _____
Date _____ Period _____

Grade Six: Earthquakes/Volcanoes
Pre-Assessment

1. **Directions:** Complete the table.

Science Word	Do you know the meaning of the word? Yes/No	It means.....
fault		
stress		
plate boundaries		
earthquake		
convection		

Directions: Complete the following questions using drawings or sentences.

2. What causes earthquakes?

3. What happens to Earth's crust during an earthquake?

4. Directions: Complete the table.

Science Word	Do you know the meaning of the word? Yes/No	It means.....
Ring of Fire		
magma		
lava		
eruption		
volcano		

Directions: Complete the following questions using drawings or sentences.

5. How are volcanoes formed?

6. How are volcanoes and earthquakes related?

KEY

Grade Six: Earthquakes/Volcanoes
Pre-Assessment

Key: If student says Yes the meaning needs to be accurate or partially accurate.

1. **Directions:** Complete the table.

Science Word	Do you know the meaning of the word? Yes/No	It means.....
fault		
stress		
plate boundaries		
earthquake		
convection		

Directions: Complete the following questions using drawings or sentences.

2. What causes earthquakes?
Tectonic pressure builds up near plate boundaries and causes movement along the faults. Forces in the Earth (tension, compression, shearing) build up at plate boundaries and cause stress.
3. What happens to Earth's crust during an earthquake?
Movement at plate boundaries produces different kinds of faults including normal, strike slip, or reverse/thrust.

Key: If student says Yes..is the meaning accurate or partially accurate?

4. Directions: Complete the table.

Science Word	Do you know the meaning of the word? Yes/No	It means.....
Ring of Fire		
magma		
lava		
eruption		
volcano		

Directions: Complete the following questions using drawings or sentences.

5. How are volcanoes formed? *Magma reaches the surface through volcanic structures. Volcano eruptions can be of various types: quiet and explosive. Volcanoes are classified by how they are formed (quiet or explosive eruption) and the resulting land formation (shield, cinder cone, or composite/stratovolcano)*
6. How are volcanoes and earthquakes related? *Earthquakes and volcanoes are both the result of seismic activity in the magma of the Earth. Both earthquakes and volcanoes usually occur along plate boundaries.*