Formative Assessment #1

Concept(s) Addressed

Movement at plate boundaries produces different types of faults: normal, reverse/thrust, and strike-slip. Exposed rock layers indicate the type of fault. California has a strike-slip fault where constant movement occurs over millions of years(San Andreas) on the transform boundary between the Pacific and North American Plate.

Time

30 minutes

Materials

Individual

Prompt

Advance Preparation

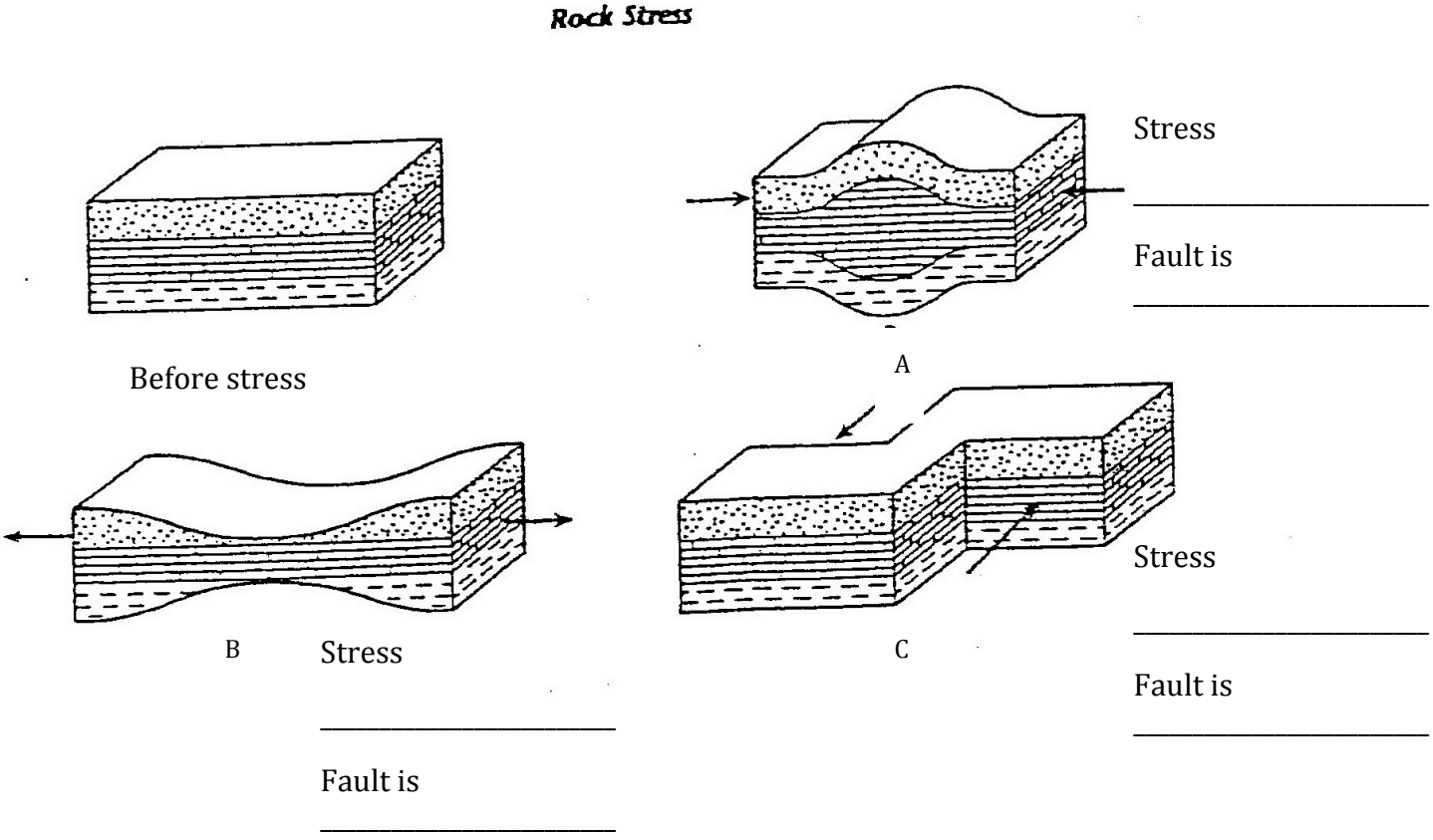
1. Duplicate prompt for each student.

Procedure:

1. Tell students they will have an opportunity to share what they understand about using models to explain different types of faults.
2. Distribute the prompt to each student and ask him/her to do his/her best work.

Formative Assessment #1

Directions: Use your notes to label each diagram with the type of stress indicated and the type of fault.



Directions: Use the terms in the word bank and the diagram below to answer the following questions. Be sure to use complete sentences.

tension	normal fault	reverse/thrust fault	compression
strike-slip fault	model	plate boundaries	shearing

1. Explain the movement of a normal fault. Use your notes and class activities as evidence to support your explanation.

Justified Multiple Choice

Directions: Please circle the best answer and explain why it is the best answer using science terms.

2. San Andres fault
   a. takes energy out of rock.
   b. adds energy to the rock.
   c. changes the rock's volume.
   d. makes the rock harder.

"Science reason": _____

_____

_____

3. Which type of stress force produces reverse faults?
   a. shearing
   b. tension
   c. compression
   d. deformation

"Science reason": _____

_____

_____

KEY

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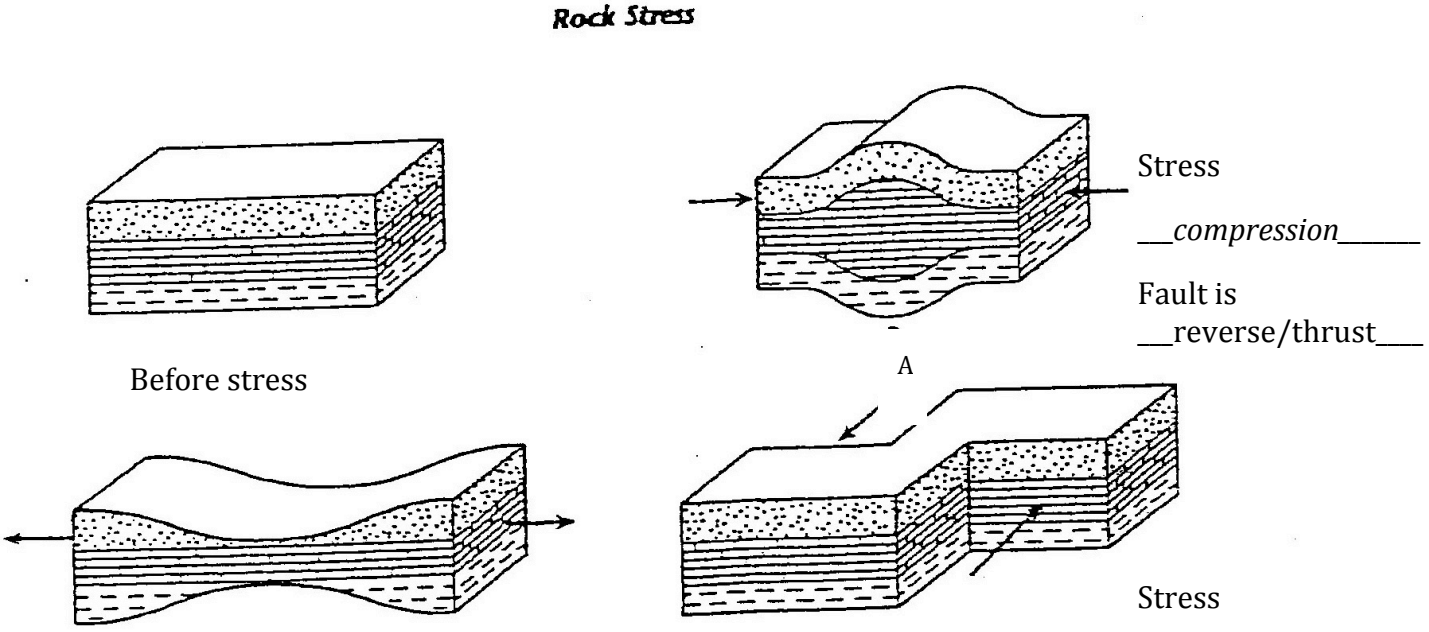

Directions: Use the terms in the word bank and the diagram below to answer the following questions. Be sure to use complete sentences.

tension	normal fault	reverse/thrust fault	compression
strike-slip fault	model	plate boundaries	shearing

1. Explain the movement of a normal fault. Use your notes and class activities as evidence to support your explanation.

Normal fault is caused by tension at the plate boundary causing rocks to crack. One rock layer moves down away from the other.

Justified Multiple Choice

Directions: Please circle the best answer and explain why it is the best answer using science terms.

2. San Andres fault
   e. takes energy out of rock.
   f. adds energy to the rock.
   g. changes the rock's volume.
   h. makes the rock harder.

"Science reason": _____*Tectonic pressure is putting energy into the rock until it moves at the plate boundary.*

_____

3. Which type of stress force produces reverse faults?
   e. shearing
   f. tension
   g. compression
   h. deformation

"Science reason":____*Compression of the rocks causes one rock layer to move up as it is being pushed by the other rock layer.*

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