

Candy Bar Tectonics

Name _____

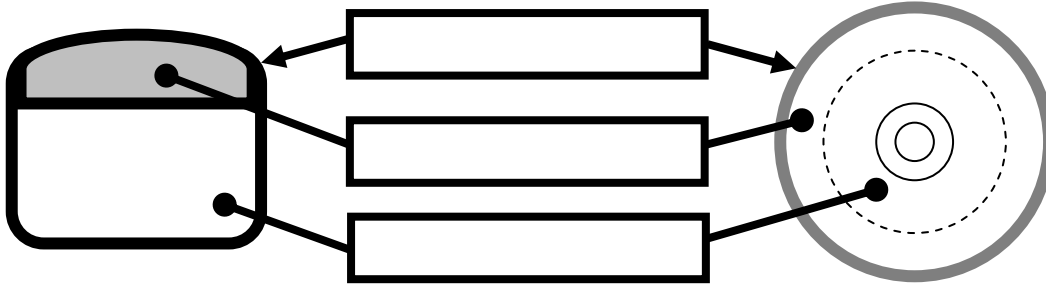
Part A: Getting Ready

1. Use your fingernail to make small cracks in the surface of your "Earth" or candy bar. Place on a paper towel.

What do we call the cracks in the Earth's surface? _____

What do we call the large pieces of Earth's crust? _____

2. Compare the candy bar to the Earth's structure. Label the parts of the candy bar to correspond to the layers of the Earth.



3. Which layer is "missing" in the candy bar? _____

Part B: Observing Forces

COMPRESSION

What do you observe as you apply this force? _____

At what type of plate boundary would this force occur? _____

At what type of fault would this force occur? _____

TENSION

What do you observe as you apply this force? _____

At what type of plate boundary would this force occur? _____

At what type of fault would this force occur? _____

SHEARING

What do you observe as you apply this force? _____

At what type of plate boundary would this force occur? _____

At what type of fault would this force occur? _____

Part C: Applications

Where else might we observe the three types of forces? Give at least three examples.

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Answer Key

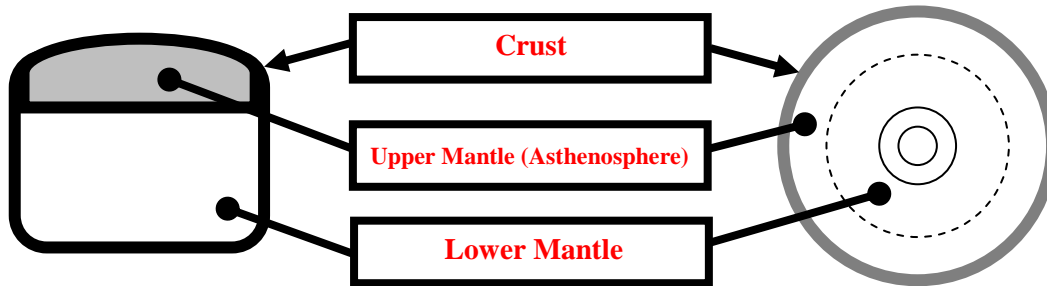
Part A: Getting Ready

1. Use your fingernail to make small cracks in the surface of your "Earth" or candy bar. Place on a paper towel.

What do we call the cracks in the Earth's surface? **Faults**

What do we call the large pieces of Earth's crust? **Plates**

2. Compare the candy bar to the Earth's structure. Label the parts of the candy bar to correspond to the layers of the Earth.



3. Which layer is "missing" in the candy bar? **Core**

Part B: Observing Forces

COMPRESSION

What do you observe as you apply this force? **The pieces of chocolate move together with some going over the others or two pieces push upwards together (arch)**

At what type of plate boundary would this force occur? **Convergent**

At what type of fault would this force occur? **Reverse (& thrust)**

TENSION

What do you observe as you apply this force? **The pieces of chocolate spread apart; some may "drop" into the caramel layer**

At what type of plate boundary would this force occur? **Divergent**

At what type of fault would this force occur? **Normal**

SHEARING

What do you observe as you apply this force? **The pieces of chocolate "slide" in different directions**

At what type of plate boundary would this force occur? **Transform (or lateral)**

At what type of fault would this force occur? **Strike-Slip**

Part C: Applications

Where else might we observe the three types of forces? Give at least three examples.

Answers will vary

Sample: Winds can cause shearing to occur on skyscrapers or the weight of the building might cause compression in the lower levels.