

**Candy Bar Tectonics**

Name \_\_\_\_\_

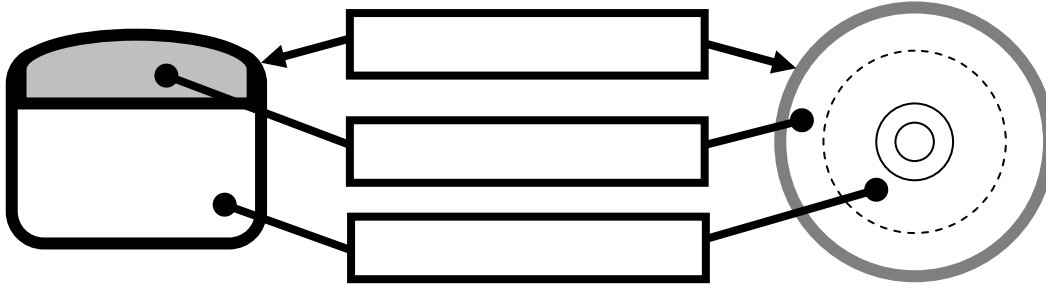
**Part A: Getting Ready**

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.

## Candy Bar Tectonics

## Answer Key

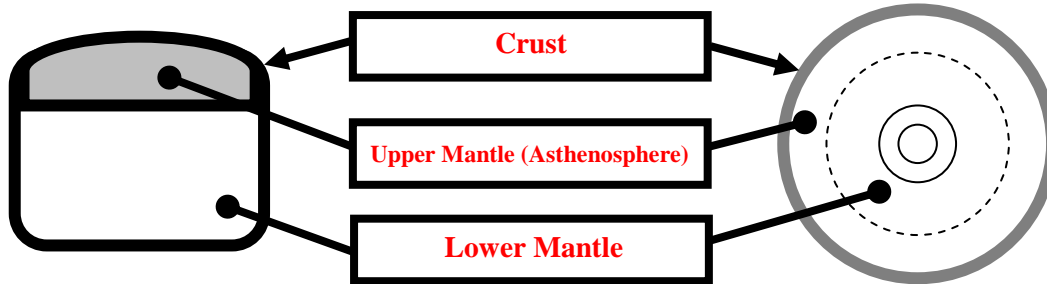
### Part A: Getting Ready

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.**