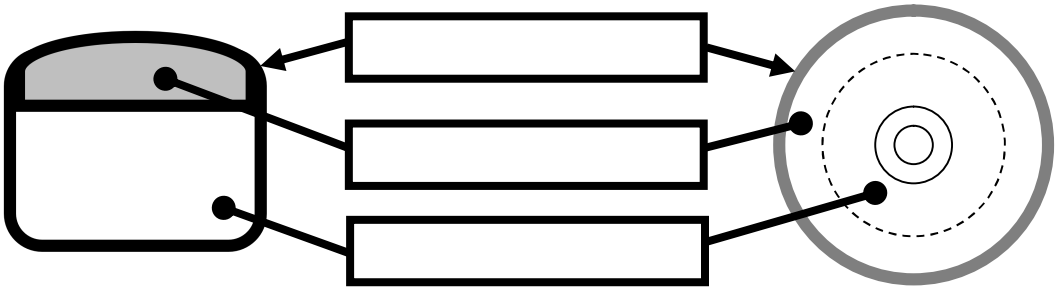
Candy Bar Tectonics Name _____

Part A: Getting Ready

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



2. Which layers are not shown in the candy bar? _____ _____

3. 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? _____

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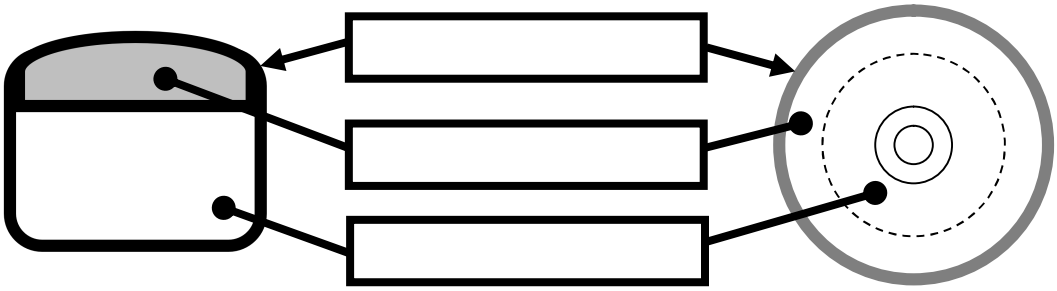

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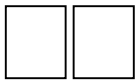
Part B: Observing Forces

COMPRESSION - What do you observe? _____

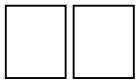
TENSION - What do you observe? _____

SHEARING - What do you observe? _____

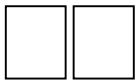
Part C: Real World Connections - Identify the type of force involved in each plate boundary and draw arrows to show how the plates move.



_____ - Plates move away from each other due to _____;
may form _____ valleys



_____ - Plates move together due to _____, such as the
_____ mountains or _____ zones.



_____ - Plates slide past one another horizontally due to _____,
such as the _____ _____ fault

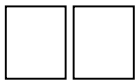
Part B: Observing Forces

COMPRESSION - What do you observe? _____

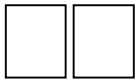
TENSION - What do you observe? _____

SHEARING - What do you observe? _____

Part C: Real World Connections - Identify the type of force involved in each plate boundary and draw arrows to show how the plates move.



_____ - Plates move away from each other due to _____;
may form _____ valleys



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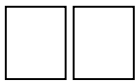
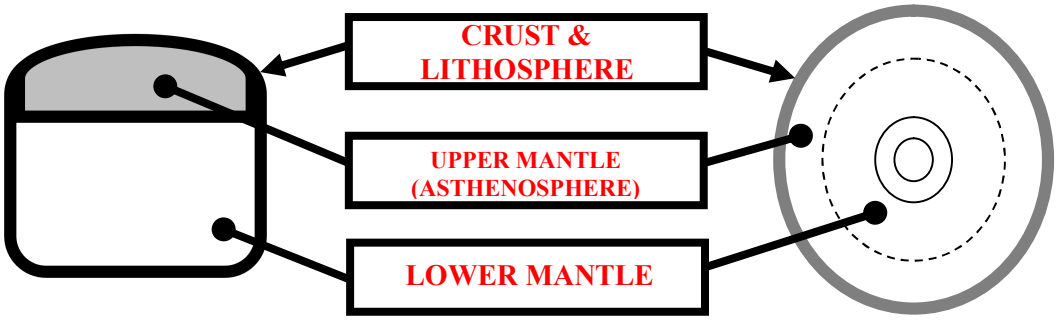


_____ - Plates slide past one another horizontally due to _____,
such as the _____ _____ fault

Candy Bar Tectonics **Answer Key**

Part A: Getting Ready

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



2. Which layers are not shown in the candy bar? **INNER AND OUTER CORE**

3. 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**

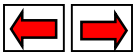
Part B: Observing Forces

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

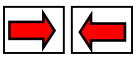
TENSION - What do you observe? **The pieces of chocolate spread apart; some may "drop" into the caramel layer**

SHEARING - What do you observe? **The pieces of chocolate "slide" in different directions**

Part C: Real World Connections - Identify the type of force involved in each plate boundary and draw arrows to show how the plates move.



DIVERGENT - Plates move away from each other due to **TENSION**; may form **RIFT** valleys



CONVERGENT - Plates move together due to **COMPRESSION**, such as the **ANDES** mountains or **SUBDUCTION** zones.

TRANSFORM (LATERAL) - Plates slide past one another horizontally due to **SHEARING**, such as the **SAN ANDREAS** fault