\*\*TYPE ALL INFORMATION/ANSWERS IN **RED** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Inside Earth WebQuest: Worksheet**

**Part 1: Earth's Interior**

**Compositional Layers:**

How is Earth’s interior like an apple?

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What causes the mantle to "flow"?

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Describe in your own words how the earth's layers were formed.

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**Structural Layers:**

What is the Lithosphere and describe its characteristics?

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What is the Asthenosphere and describe its characteristics?

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What is the Mesosphere (or Mantle) and describe its characteristics?

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Describe differences in characteristics between the Outer Core and Inner Core?

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**Part 2: Convection Currents and the Mantle**

How is heat transferred by conduction?

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Explain the process of convection.

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How is heat transferred by radiation?

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If air is a fluid, why isn’t convection responsible for transferring heat to Earth from the sun?

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Test your knowledge! Scroll down to the bottom of the Heat Transfer Web page and take the "Mini Quiz".

Describe how convection currents occur in Earth's mantle.

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**Part 3: Drifting Continents**

What 5 factors did Wegener use to support his theory?

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List three of the arguments of geologists that disproved Wegener's theory.

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Arthur Holmes came up with his own theory of drifting continents in 1928. What was his theory?

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**Part 4: Sea-Floor Spreading**

What is an ocean ridge?

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Why are two plates spreading considered to be 'constructive'?

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What is the Mid-Atlantic Ridge? How many miles does it stretch?

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**Part 5: The Theory of Plate Tectonics**

What is the theory of plate tectonics?

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What new information led to the theory of plate tectonics?

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About how fast do the plates move in relation to each other each year?

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What is it called when two plates meet?

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**Convergent Boundaries:**

What are convergent boundaries?

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What occurs when a continental and oceanic plate collide?

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When an oceanic plate digs into Earth's hot interior, what occurs?

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How were the Andes Mountains in South America formed?

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**Divergent Boundaries**

What are divergent boundaries?

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Explain how volcanoes form in the central rift valley of a divergent boundary?

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How much does the Atlantic ocean widen per year due to divergent boundaries?

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**Transform Boundaries**

What are transform boundaries?

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What could happen to a stream bed that is split by a transform boundary?

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Name one of Earth's most famous transform boundaries? Where is it located?

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True or False? Due to transforming plates, Los Angeles will break away from California. Explain your answer.

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