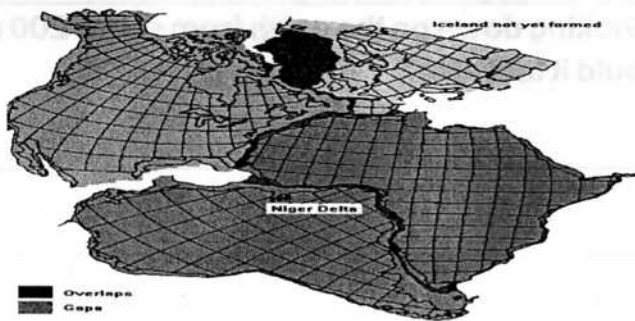


# Scientific Revolution: The Development of the Theory of Plate Tectonics



## Things you need to understand.

- ✓ *The theory of plate tectonics was once a new idea; it is now widely accepted by most scientists because the evidence that has been collected which supports it.*
- ✓ *Continents are part of the earth's plates, when the plates are moved the continents also move.*
- ✓ *The intense heat of the earth's core is responsible for the movement of the tectonic plates.*
- ✓ *Over millions of years the continuous movement of the Earth causes the continents (landmasses) to merge and divide repeatedly.*

## The Essential Questions you will be able to answer!

- *How did the theory of plate tectonics evolve?*
- *What is the mechanism that drives the movement of the continents? What is its fuel?*
- *What allows the continents to move?*
- *What evidence supports the theory of plate tectonics?*
- *Why did competent scientists reject the idea of continental drift?*
- *Why is this theory a revolution?*

Name: \_\_\_\_\_

Section: \_\_\_\_\_



**Plate Tectonics Pre-Conception Survey**

**Directions:** Answer the following questions in complete sentences using pictures to support your ideas.

**1. If you were looking down on the earth from space 200 million years ago what would it look like?**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**2. What does the ocean floor between North America and Europe look like?**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**3. Describe what is under the continents.**

---

---

---

**4. Has earth's crust changed over the history of the earth? If so how if not why not?**

---

---

---

**SECTION:** \_\_\_\_\_

## PRE-CONCEPTIONS SURVEY PART 2

**DIRECTIONS: ANSWER THE FOLLOWING QUESTIONS USING COMPLETE SENTENCES AND USE PICTURES TO SUPPORT YOUR IDEAS.**

- 1. DESCRIBE WHAT HAPPENS TO THE OCEAN FLOOR WHEN THE CONTINENTS MOVE DURING CONTINENTAL DRIFT.**

- ## 2. WHAT ALLOWS THE CONTINENTS TO MOVE?

- 3. WHERE DOES THE ENERGY NEEDED TO MOVE THE CONTINENTS COME FROM? EXPLAIN HOW THIS ENERGY MOVES THE CONTINENTS.**