

# Station 1 - Atmospheric Layers and Relationships with Weather

## STEP ONE:

Create a FLOW MAP using the words in the baggie and copy your flow map onto your sheet.

## STEP TWO:

Using your finished flow map and your knowledge of the layers and categories of weather. Hypothesize what will happen to the weather patterns if the levels of carbon dioxide will increase and discuss possible causes of the higher levels of carbon dioxide.

Troposphere	Mesosphere	Thermosphere	Weather
Decreasing temperatures With Increasing Altitude	Increasing temperatures With Increasing Altitude	Constant temperature then increasing	Decreasing temperatures With Increasing Altitude
Stratosphere	Asteroids Burn Up	Above the Mesosphere	Ozone Layer

## **Station 2 - Revolution, Rotation, Barycenter, Nutation and Precession**

**STEP ONE:** <https://goo.gl/bq6grL>

Watch the video: The Axis of Rotation

### **STEP TWO:**

After watching the video: The Axis of Rotation, discuss with your group and explain **each** one of the Earth's motions were being explained in the video.

\*Keep in mind three were at least 4 discussed\*

Explanation includes the definition of the motion and how it affects the planet in terms of weather.

## **Station 3 - Theories of Earth's Formation**

### **STEP ONE:**

Read the articles at the station and discuss as a group to review the Theories of Earth's Formation.

### **STEP TWO:**

Create a Double Bubble Map that analyzes the similarities and differences between two of the theories of Earth's formation. Includes three differences for each theory and three similarities. Be specific!

## **Station 4 - Unit 2 Card Sort & Explanation**

### **STEP ONE:**

Each person needs to complete their own Unit 2 card sort and have it checked by Ms. B

### **STEP TWO:**

Use at least FIVE of the vocabulary words to develop a detailed explanation of how Earth's movements create seasons include what causes seasons, what happens if one of Earth's movements stopped and what is occurring due to a change in the atmosphere.

## **Station 1 - Plate Tectonics**

### **STEP ONE:**

Examine the 3D model of tectonic plates, read all the information and discuss the models associated with information.

### **STEP TWO:**

Create a thinking map that includes all the information about convergent, divergent and transform boundaries. Ensure that the information discusses what makes them difference, what landforms are created and diagrams that represent their movement.

## **Station 2 - Unit 4 Card Sort & Explanation**

### **STEP ONE:**

Each person needs to complete their own Unit 4 card sort and have it checked by Ms. B

### **STEP TWO:**

Use at least FIVE of the vocabulary words to defend the theory of continental drift, be sure to include how tectonic plate move, how they are created and evidence of the theory.

## **Station 4 - Earthquakes & Volcanoes**

### **STEP ONE:**

Analyze the data about the locations of earthquakes and volcanoes, use this information for step two!

### **STEP TWO:**

Answer the questions on your sheet!

### **STEP THREE:**

Summarize earthquakes by discussing how they occur, how magnitude and depth of the focus affect the damage that occurs and where they tend to occur more often.

## **Station 3 - Earthquakes**

### **STEP ONE:**

Review the images of the anatomy of an earthquake and the different waves created by the earthquakes.

### **STEP TWO:**

Answer the questions in your packet using the images from Step One.

**STATION  
ONE**

**STATION  
FOUR**

**STATION  
THREE**

# ANATOMY OF AN EARTHQUAKE

AN EARTHQUAKE IS THE SHAKING OF THE GROUND CAUSED BY SUDDEN MOTIONS ALONG FAULTS, OR FRACTURES IN THE EARTH'S CRUST

## FAULT

A FRACTURE IN THE ROCKS THAT MAKE UP THE EARTH'S CRUST

## EPICENTER

THE POINT AT THE SURFACE OF THE EARTH DIRECTLY ABOVE THE FOCUS

## FOCUS (HYPOCENTER)

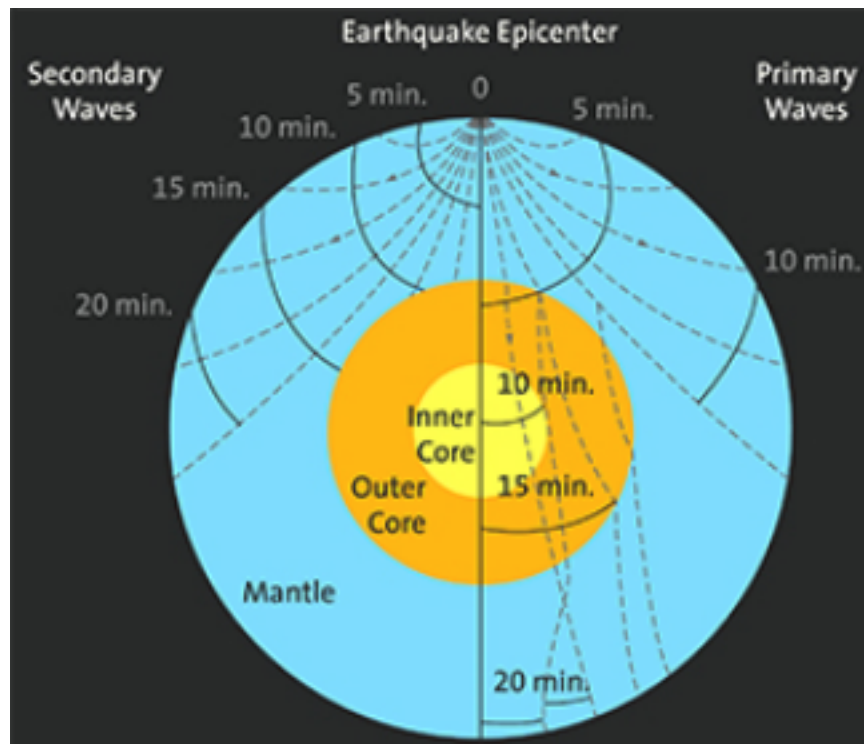
THE POINT WITHIN THE EARTH WHERE AN EARTHQUAKE RUPTURE STARTS

## PLATES

MASSIVE ROCKS THAT MAKE UP THE OUTER LAYER OF THE EARTH'S SURFACE, AND WHOSE MOVEMENT ALONG FAULTS TRIGGERS EARTHQUAKES

## SEISMIC WAVES

WAVES THAT TRANSMIT THE ENERGY RELEASED BY AN EARTHQUAKE



STATION  
TWO

STATION  
FIVE