Chapter 4: The Dynamic Crust Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Lesson: Earth’s Interior

I Can…/Main Ideas Notes

Explain how

Scientists study through \_\_\_\_\_\_\_\_\_\_\_\_\_ (**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**) waves

**CRUST** - **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** most part of Earth; Mostly \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Crust** - Continents & Larger islands, \_\_\_\_\_\_\_\_\_\_ Ranges (deeper in Mantle), Largely of \_\_\_\_\_\_\_\_\_\_\_\_\_\_ (\_\_\_\_\_\_\_\_\_\_\_ in DENSITY)

**Oceanic Crust** - Crust beneath the \_\_\_\_\_\_\_\_\_\_\_\_, Composed of \_\_\_\_\_\_\_\_\_\_\_\_ rock (\_\_\_\_\_\_\_\_\_\_\_ in DENSITY)

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** - Below crust is the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** zone, Contains \_\_\_\_\_% of Earth’s volume, Separated by the crust by the \_\_\_\_\_

**LITHOSPHERE** -Whole \_\_\_\_\_\_\_\_\_ & the \_\_\_\_\_\_\_\_\_\_\_ portion of \_\_\_\_\_\_\_\_\_\_\_\_\_, Divided into \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** – Below the Lithosphere, Seismic waves \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in VELOCITY, Portion of upper mantle which is **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**OUTER CORE** - Has a **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** nature, \_\_\_-waves DON’T PASS through it, Partly creates the Earth’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**INNER CORE** - Extends down to Earth’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_, Believed to be a **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

\*\*BOTH are composed of **\_\_\_\_\_\_\_\_\_\_\_\_** & **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** based on studies of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\*\*

scientists know

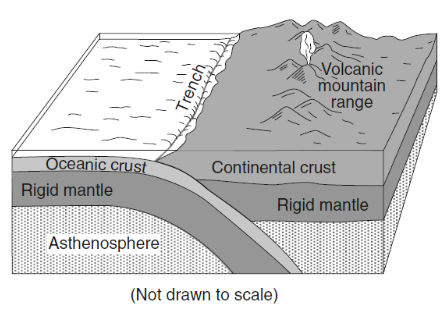
about the layers of

the Earth

Name & explain the

two types of crust

LABEL PICTURE

 BELOW

Describe the

importance of the

asthenosphere

Compare &

contrast the inner

and outer core

ESRT pg \_\_\_\_\_\_\_\_

Lesson: Plate Tectonics

I Can…/Main Ideas Notes

The Earth’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is broken into sections called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Most accepted theory is that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ drag or push the plates.

What happens to material when it is heated?

When material is heated it becomes ­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_. When the material cools it becomes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_, causing \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**PROOF:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and rocks \_\_\_\_\_\_\_\_\_\_\_\_\_\_ (\_\_\_\_\_\_\_\_\_\_\_) on opposite sides of the \_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, & \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_ cycle, \_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_ change, Major \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Continents look like they \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ like \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ crust is \_\_\_\_\_\_\_\_\_\_\_\_\_ than the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ crust.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ occur where rising \_\_\_\_\_\_\_\_\_\_\_ from the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ remains \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ while plates move \_\_\_\_\_\_\_\_\_\_\_\_ it, forming progressively \_\_\_\_\_\_\_\_\_\_\_ volcanoes; Example - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

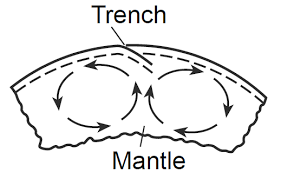
Igneous rocks close to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ than rocks further away, This is the same for the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ flow. Reversal of Earth’s Magnetic Polarity: Earth’s \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ flip flop (occurs in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of years) Magnetic \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ line up and point to the correct \_\_\_\_\_\_\_\_\_\_\_. Currently North America is moving to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_!

What is believed to

make the plates move

DRAW CONVECTION

CURRENTS BELOW



Name proof that the

Earth’s plates have

moved over time

Describe age & heat

patterns located at

the Mid Ocean Ridges

Lesson: Plate Boundaries

I Can…/Main Ideas Notes

**Convergent Plate Boundaries**: \_\_\_\_\_\_\_\_ plates \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the 2 plates \_\_\_\_\_\_\_\_\_\_\_ (\_\_\_\_\_\_\_\_\_\_\_\_\_\_)

Heat and pressure causes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Two OCEAN PLATES*Ocean \_\_\_\_\_\_\_\_\_\_\_\_ – long

steep narrow \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ &\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – some

\_\_\_\_\_\_\_\_\_\_\_ breaks through the Earth & forms a series of \_\_\_\_\_\_\_\_

*OCEAN & CONTINENTAL PLATES* **–** Young \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ – mostly \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*2 CONTINENTAL PLATES* **-** Form

\_\_\_\_\_\_\_\_\_\_\_\_\_ mountain ranges

For example - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Mountains

**Divergent Plate Boundaries**: **TWO plates** move \_\_\_\_\_\_\_\_\_\_\_\_\_\_ & magma \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, **NEW \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** forms

*Continental Plates*- Continental \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, Typically \_\_\_\_\_km – \_\_\_\_\_\_\_ km wide

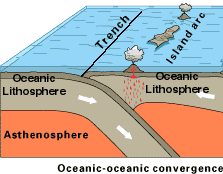
*Ocean Plates* - Mid-ocean \_\_\_\_\_\_\_\_\_\_\_\_ - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ at the bottom of the ocean, Moves \_\_\_\_\_\_cm per year

**Transform Plate Boundaries:** TWO plates \_\_\_\_\_\_\_\_\_\_\_\_\_\_ while they \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ each other. Lots of \_\_\_\_\_\_\_\_\_\_\_\_ energy \_\_\_\_\_\_\_\_\_\_\_\_\_\_ up 🡪 \_\_\_\_\_\_\_\_\_\_\_\_\_\_ energy is released as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

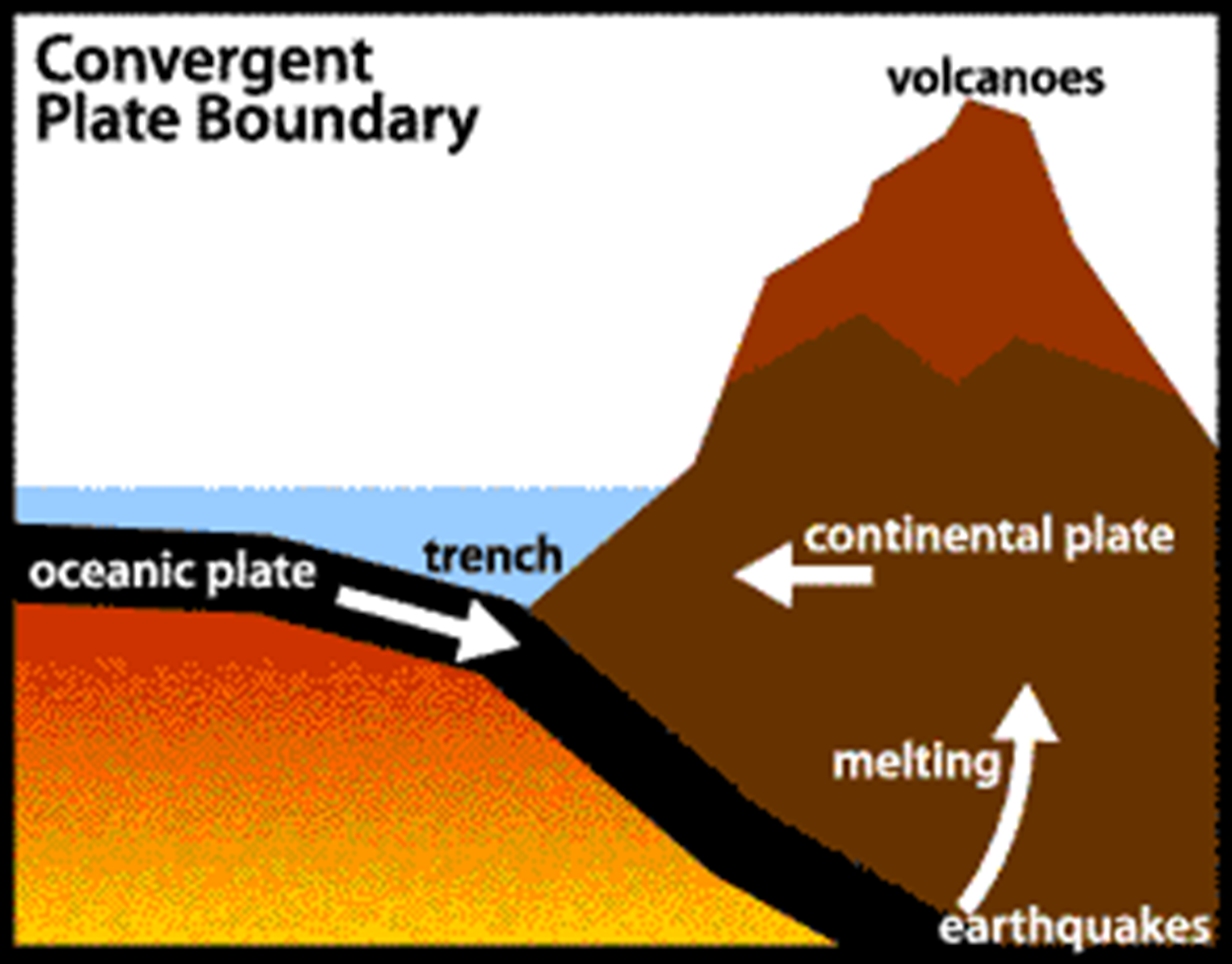
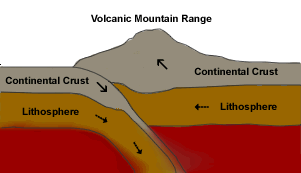
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 🡪 in California moves \_\_\_\_\_\_\_cm a year; \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that were split

Convergent plate

boundaries



ESRT pg \_\_\_\_\_\_\_\_



Divergent plate

boundaries

Transform plate

boundaries

ESRT pg \_\_\_\_\_\_\_\_

Lesson: Earthquakes

I Can…/Main Ideas Notes

-MOST sedimentary rocks show **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**DEFORMED LAYERS** - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_– RAISED UP Ex: Fossil 100 meters \_\_\_\_\_\_\_\_\_\_\_\_\_\_ sea level

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ -displaced along a **\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_- **\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**LABEL** the following pictures as either *Fault, Fold,* or *Uplift.*

Earthquake is - Natural rapid shaking of the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (**\_\_\_\_\_\_\_\_\_\_\_\_\_\_**)**, Releases **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** stored in rocks

Start at one Point **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** earth’s surface where

rock breaks under stress called **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**. Point

**\_\_\_\_\_\_** surface directly \_\_\_\_\_\_\_\_\_\_\_ focus is called **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**LABEL** focus, epicenter & fault in the picture.

Instruments used to measure earthquake called **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

The recording is called a **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Energy of quake is carried through \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ WAVES

1. TYPES: \_\_\_\_ waves, \_\_\_\_ waves, \_\_\_\_\_\_\_\_\_\_ waves

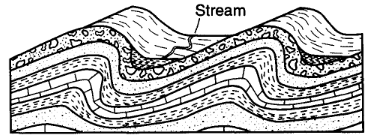
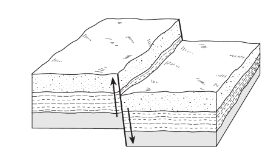
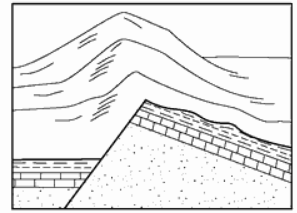
P-Waves – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ waves, Vibrate in the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_** direction, Move through **\_\_\_\_\_\_\_\_\_** & **\_\_\_\_\_\_\_\_\_\_\_\_**, **\_\_\_\_\_\_\_\_\_\_\_** to arrive at epicenter,

Moves **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Identify the different

types of crustal

features

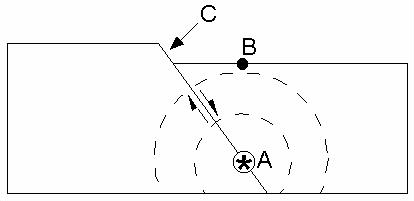


I can describe what

an earthquake is &

where earthquakes

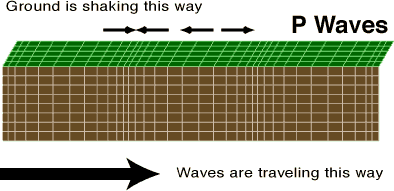
start

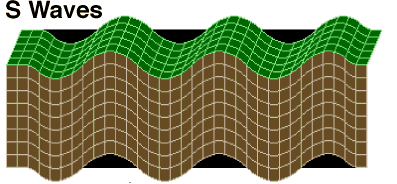


How to measure an

Earthquake

Describe P & S waves





S-Waves - **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** waves, Vibrate at **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,** Move ONLY through **\_\_\_\_\_\_\_\_\_\_\_\_\_\_**, **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** to arrive at epicenter, Moves \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3 rating scales to measure earthquakes: 1) **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ scale** 2) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **scale** 3) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **scale**

Moment Magnitude Scale - \_\_\_\_\_\_\_\_\_\_\_\_\_ **OFTEN** used to measure \_\_\_\_\_\_\_\_\_\_\_\_\_\_ of earthquake, Use **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** of wiggles on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to infer total amount of \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Prepare for a future Earthquake - 1) Earthquake \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2) Proper \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ & \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of building

During an Earthquake: 1) Stand in a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2) \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_

Tsunami - A **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** wave caused by an **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Scales used to measure

earthquake damage

Earthquake safety

Tsunami

Lesson: Reading P & S Wave Chart

P waves and S waves travel at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_, so scientists were able to make travel time graphs.

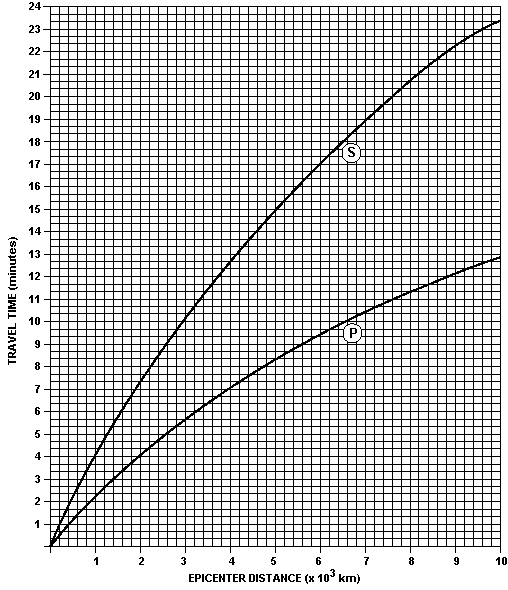
Time goes by : \_\_\_\_\_\_\_\_\_\_\_\_ Distance goes by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

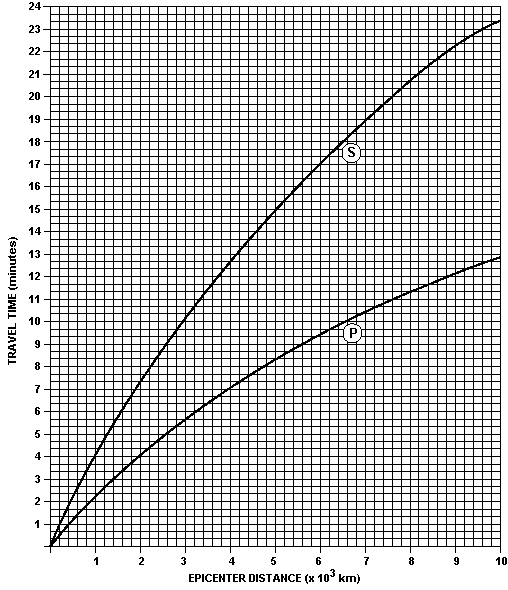
**Q**: Seismic station is 2,000 km from epicenter. **How long** did it take for **P-wave** to reach there?

**S wave travel =**

**Q**: Approximately **how long** does an earthquake *P-wave* take to travel the 1st 6500 km after the earthquake occurs?

ESRT pg \_\_\_\_\_\_\_\_





**Q:** An earthquake occurred at 5:00:00 am. **At what** **time** would the *P-wave* reach a seismic station 3,000 km from the epicenter?

**P-**Wave travel time = \_\_\_\_\_\_\_\_\_\_\_\_\_

**Work:**

* Reading a Seismogram - P-waves are \_\_\_\_\_\_\_\_\_ & \_\_\_\_\_\_\_\_\_\_
* S-waves are \_\_\_\_\_ & \_\_\_\_\_\_\_\_\_\_\_\_\_

S – Arrival = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

P – Arrival = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Difference = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the \_\_\_\_\_\_\_\_\_ away waves are from the Epicenter.

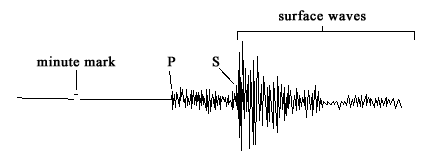
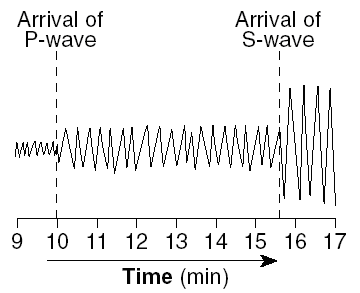
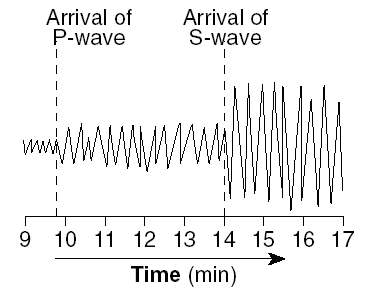
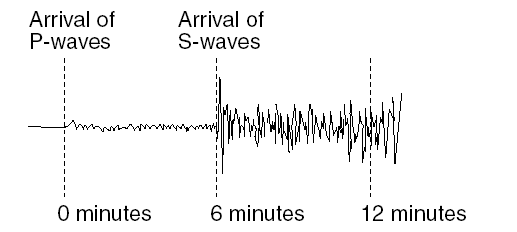
S – Arrival = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

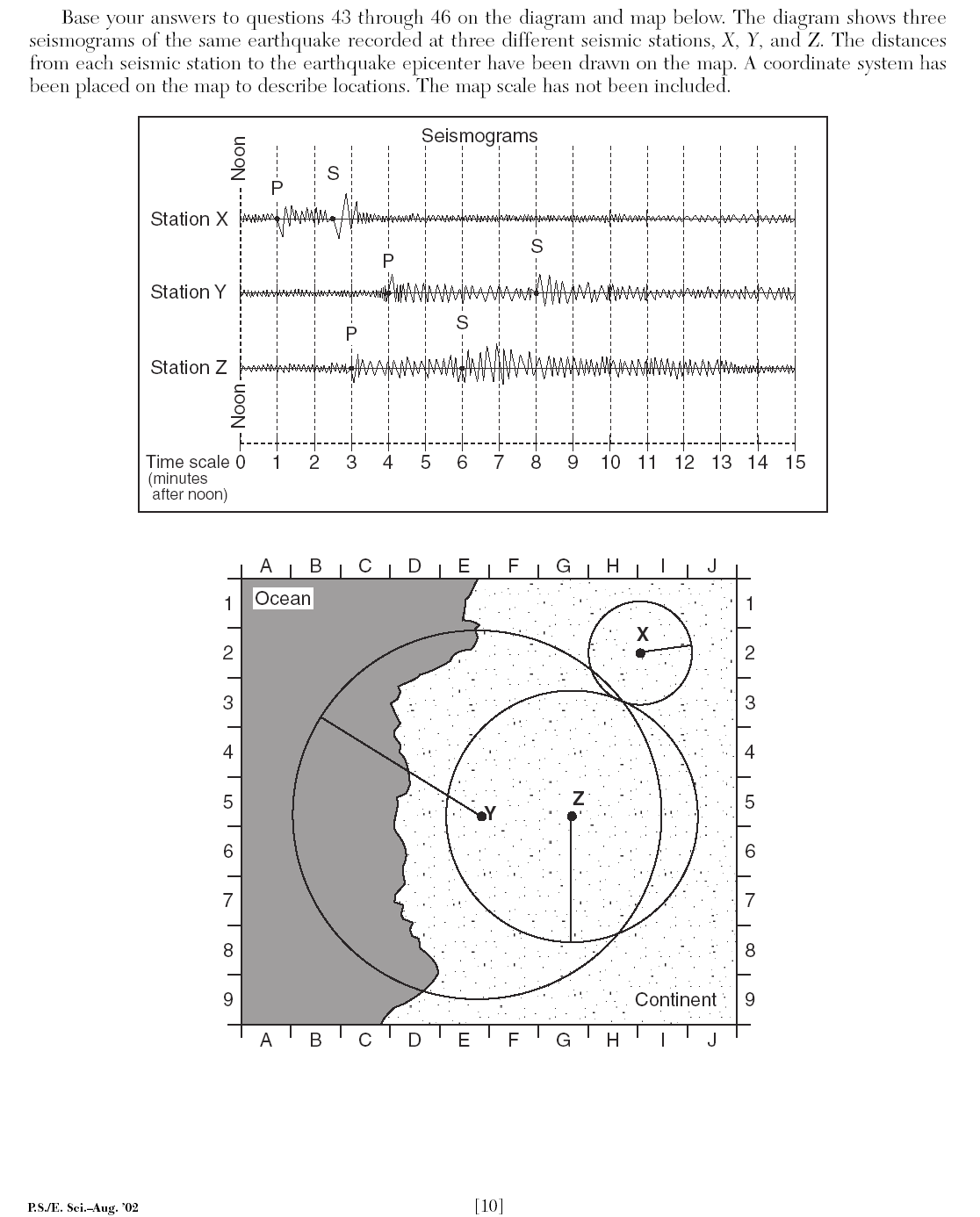
P – Arrival = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Difference = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

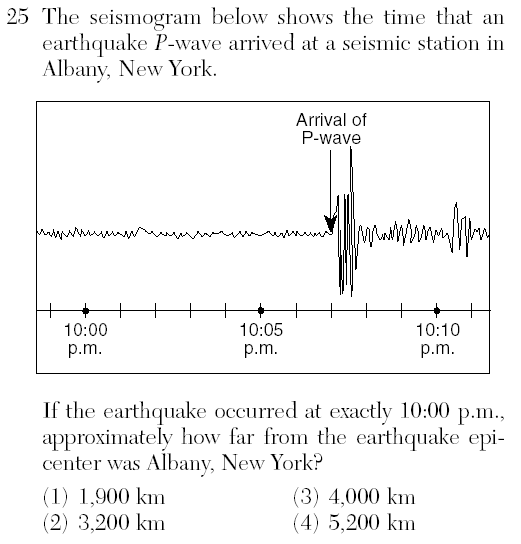
**Calculating Epicenter Difference:**

1. Measure the distance between the start of the first P wave and the start of the first S wave. ­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Use the chart on page 11 and measure the time on the side of the chart with a piece of paper.
3. Put a dash at 0 & 6 mins
4. Keep moving your paper along the P-wave line until the 6 min dash is on the S-wave line & look down for DISTANCE = \_\_\_\_\_\_\_\_\_km



**Q:** Approximately how far away from Station Y is the epicenter?

Epicenter = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Sometimes they just give you the P-arrival time & ask you for distance.

Difference = \_\_\_\_\_\_\_\_\_\_\_\_\_\_

If earthquake occurred at exactly 10:00 pm, approximately how far from the earthquake epicenter was Albany, NY?

1) Find the P-wave travel time on the LEFT of the Chart

DISTANCE = \_\_\_\_\_\_\_\_\_\_\_\_\_

2) Continue until you get to the P-line & look down to see Distance

**Calculate Origin Time**

* Origin time is when the earthquake \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* It’s determined by the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ & \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* The **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** the epicenter is, the **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**  will be between the P and S waves.

**Q:** P wave arrived at a station at 10 hr: 12 min: 30 sec & the seismograph is 5600 km away from the epicenter, when did the earthquake occur?

**10 hr: 12 min: 30 sec**

**- min: sec**

**Finding Earthquake Epicenters**

* \_\_\_\_\_\_\_ seismic stations must be used
* Each seismic station only tells you the \_\_\_\_\_\_\_\_\_\_\_\_\_ NOT \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_!
* Find epicenter distance for each seismograph station
  + Distance is used as a \_\_\_\_\_\_\_\_\_\_\_ and circles are drawn on a map
  + Where the \_\_\_\_\_\_\_\_\_\_\_ circles \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is where the epicenter was

Lesson: Volcanoes

I Can…/Main Ideas Notes

Mountain composed of **\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ROCKS**

Occur at \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_or

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Ring of Fire:** Boundary around the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Plate, Over \_\_\_\_\_\_% of the world's active and dormant \_\_\_\_\_\_\_\_\_\_\_\_ occur here

DURING ERUPTION:

–**\_\_\_\_\_\_\_\_\_\_\_\_ & \_\_\_\_\_\_\_\_\_\_\_\_\_** escape onto EARTH’S SURFACE or ATMOSPHERE, Exit through opening or \_\_\_\_\_\_\_\_\_\_\_ of a volcano

**INTRUSIONS** - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Igneous rocks from \_\_\_\_\_\_\_\_\_\_ stays within the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**EXTRUSIONS** - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Igneous rock from \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ occur

Dangers - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ & \_\_\_\_\_\_\_\_\_\_\_\_\_\_ GAS RELEASE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, & \_\_\_\_\_\_\_\_\_ Volcanic ASH: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Sun’s Ray (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of Earth)

**SATELLITES** - Report on increasing **\_\_\_\_\_\_\_\_\_\_\_\_** from magma

**TILT METERS** - Increased **\_\_\_\_\_\_\_\_\_\_\_\_** as volcano **\_\_\_\_\_\_\_\_\_\_\_\_** with magma, Monitor **INCREASES** in 1) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, 2) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3) Number of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Before** - Have a disaster \_\_\_\_\_\_\_\_\_\_\_\_\_

**During** - Get to \_\_\_\_\_\_\_\_\_\_ ground & \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ poisons gas

**After** - Cover your \_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_.

- Wear \_\_\_\_\_\_\_\_\_\_\_\_\_\_ to protect your \_\_\_\_\_\_\_\_\_\_\_

- Keep your \_\_\_\_\_\_\_\_\_\_\_\_\_ covered.

A volcano is

What is occurring

during eruptions &

what features are

being formed

Dangers & how to

predict eruptions

Volcano safety