
Integrated Science: Plate Tectonic Unit Study Guide

Wow you've made it to the end of the semester!

This is the LAST unit test you have until the final exam so make it count (I know I will)!

Geological Time:

Let's begin with the beginning of the Universe!

Match the following Era's with the statement that best describes them.

- | | | |
|----------------|-------|---|
| 1. Precambrian | _____ | a. current era |
| 2. Paleozoic | _____ | b. Dinosaurs ruled |
| 3. Mesozoic | _____ | c. Rock cycle has destroyed much of the history of this era |
| 4. Cenozoic | _____ | d. Vertebrates appear in the fossil record |

When it comes to Dating you Rock!:

What type of dating uses the law of superposition?

What type of dating is used to determine the actual age of the rock?

Review of an Atom:

In the space provided draw a picture of an atom and label the electrons, protons, neutrons, and the nucleus.



Determine the atomic mass of an atom that has 3 electrons, 4 protons and 5 neutrons?

What is the atomic number of the atom above?

An isotope is an atom with a different number of _____.

The number of _____ defines an atom.

Isotopes: Label the atomic mass and atomic number in the pretend isotopes below.



How many neutrons are in the Sl atom?

How many neutrons are in the Hj atom?

Which of the isotopes is more stable? How do you know?

Get a Half-Life:

If there is originally 20 grams of element Z and 1 half-life has passed, how many grams are left?

If a bone is found with 25 grams of X and 75 grams of Y, how many grams of X were originally in the bone?

How many half-lives have passed?

How old is this bone if a half-life is 1,500 years?

The Theory of Plate Tectonics

What key evidence did Alfred Wegener use to support his idea of continental drift?

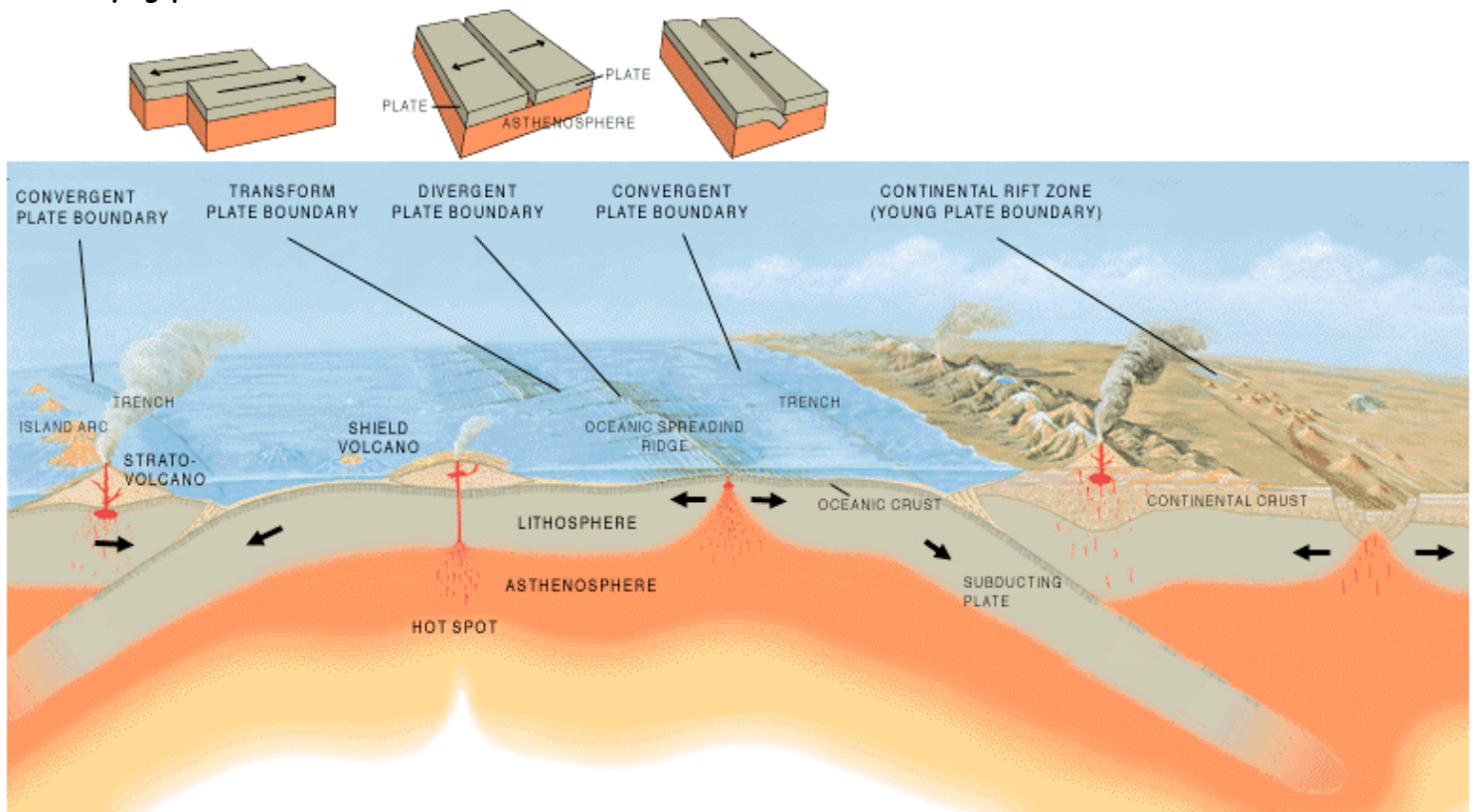
What information can be learned from a rock's magnetic record (left where seafloor spreading occurs)?

Where are the deepest parts of the ocean? What type of plate boundaries are involved?

In what way does seafloor spreading support continental drift?

What feature of the ocean floor provides the best evidence for plate tectonics?

Identifying plates boundaries



Where are the youngest rocks on the ocean floor found?

Rift zones occur because of what type of plate movement? Do these occur on land or in the ocean?

What geological features occurs along oceanic continental boundaries where Subduction happens?

What type force is associated with the following types of plate movement:

Continental-Continental

Seafloor Spreading

Transform/ strike-slip

Explain and diagram a Hot Spot