A fault is.

A crack or breaks in the earth’s surface were movement occurs.

What is the lithosphere? The rigid layer that encompasses the crust and upper mantle.

What is the Asthenosphere? It is a highly viscous layer beneath the lithosphere that consists of the upper mantle.

Draw and label the parts of the earth?

Crust, mantle, "Moho", outer core, inner core

What is the Moho? The space that divides the crust and mantle.

What alloy is the earth’s core made of?  Why is the inner core solid? Iron nickel alloy. It is under extreme pressure.

What was Wagner's continental drift hypothesis?

The continents were once joined together in a supercontinent.

What was the supercontinent called? What kind of evidence was used to support Wagner's hypothesis? Pangaea.

1. Paleomagnetism and Sea floor spreading

2. Fossil evidence

3. Ancient climates

4. Matching mountain terrain's

5. The shapes of the shorelines on continents.

What is the theory of plate tectonics?

The lithosphere is broken up into plates and moves over top of the Asthenosphere.

What is happening with the Red Sea? It is on a divergent boundary, which is causing it to spread open which will eventually open into an ocean.

What evidence was used to support seafloor spreading? Paleomagnetism, how magnetic field lines were created when rocks were born.

Because of the properties of paleomagnetism,

(rocks take the properties of the magnetic lines of the day they were created)

What is thermal convection (convection currents)?

It is the unequal distribution of heat "Hot air rises, cools, heat back up and complete the cycle again"

What is uniformitarianism? Physical, chemical, and biological processes that existed in the past continue to exist today.

What is the principle of crosscutting?

Extrusive magma is younger than the rock that it cuts through.

What is relative dating?

The process of using clues in the rock to accurately predict their age

What is the law of superposition? Rocks that are on the bottom are older than the rocks that above them.

What are the three types of unconformities? What is an unconformity? And unconformity is a destruction in the rock layer from erosion and deposition. Angular unconformity, disconformity, non-conformity.

A break that separates older metamorphic rock from younger sedimentary rock immediately above them is a type of unconformity called? Nonconformity

What is a fossil? And where are they found?

Evidence and remains of once living organisms.

What is a trace fossil?

Imprints, footprints, and boroughs of once living organisms.

What type of burial does an organism need to be to become a fossil?

A rapid burial and it must have hard parts.

What is an index fossil?

It is a fossil that gives a rock layer a specific age due to the time that it was alive.

How is radioactivity produced with an unstable nuclei?

It starts to pull apart.

How is radiometric dating possible?

Look for unstable isotopes that change through time.

What 2 substances do we use in radiocarbon dating? And how far back can we go in time with carbon dating? Carbon 14, carbon 12.  75,000 years.

What length of time does the geologic time scale cover?

4.6 billion years

Put the geologic times in order from longest to shortest?

Eon, Era, Period, Epoch.

Which eon of the geologic time scale means visible life?

Phanerozoic

The era of ancient life is known as the ? Paleozoic

88% of earth’s history is within this expanse of time? Pre-Cambrian eon

The most common Precambrian fossils are layered mounds of calcium Carbonite called? Trilobite

Which title describes the current geologic age? The age of mammals