Section 9.2 Notes:

Earthquakes

-Related to convergent plate boundaries!

-Movement of the Earth’s crust is along a FAULT LINE (text pages 245, 246, 247, 249, 270) have examples of fault lines.

-You need to know three general types of faults;

Normal, where the two sides move apart, and one slips down/the other may move up. This type of fault can cause Tsunamis when they occur under water.

Reverse, where the two sides move toward each other, and one side moves up/the other moves down. As with a Normal fault, this type can cause Tsunamis when the fault line is under water.

Strike/slip, where the two sides slide/slip sideways past each other.

Seismic waves

-caused by the sudden movement of land (earthquakes) which makes the ground shake (like waves on water)

-three types of waves (Primary, Secondary, and Surface), and each one behaves differently.

-they are important indirect evidence for the structure of the Earth

Primary:

-travel the fastest.

-move through solids, liquids and gases.

-‘push/pull’ or compression-type waves

-make things rattle

-arrive first

Secondary:

-slower than primary waves

-only move through solids

Surface:

-Slowest moving of the three types

-like up/down waves in water

-cause much destruction

Page 266 diagram shows how waves provide indirect evidence of Earth structure

-shadow areas, speed, reflections, refraction

Location;

Epicentre = the point on the surface directly above the point of the quake

Focus = the point where the Earthquake began

Seismograph = the graph that shows the strength and type of waves caused by an Earthquake.

Richter Scale = measurement of the strength of an Earthquake (page 268)

Locations (page 270 for images) = show plate boundaries and directions under the surface

Tsunamis = waves caused by the movement of the Earth’s crust (Earthquakes)

Liquifaction = when the ground vibrates, and the ground has lots of water in it, the particles vibrate apart and the solid ground suddenly acts like a liquid, so buildings sink and shift. (stand on a beach at the edge of the water, and shuffle your feet – they will sink into the sand as it liquefies under your feet.)