8.2: Clues in the Crust (how do we know the crust is moving and changing?)

-ocean ridges in the middle of oceans

-continental slopes and shelves

-Abyssal plain

-mid-ocean rift

-Iceland

-Ring of Fire

-Earthquakes

-Continents fit together (Pangaea) pretty accurately

-fossils that are common across matching continents

-same rock types on matching coasts of continents

-placer diamonds on the West Coast of South Africa and east coast of South America

-fossil evidence of climate between continents no longer in the same climate zone

Spreading Sea Floor

(1960s) rock samples collected from the sea floor

-age of rocks: youngest by mid-ocean ridges, oldest by coastlines

-Maps of the sea floor made with sonar, seismic waves, and deep core samples

-rocks on sea floor have bands parallel to rifts/ridges where magnetic fields seem to reverse

-hydrothermal vents: hot water (heated by magma), sulfur containing