

Cornell Notes

12/5/16

Some 12/6, 12/7, 12/8

Topic: Continental Drift

E.Q: Can you Identify the Supporting Evidence for Continental Drift?

I. Earth's Surface

- a. Edges of some continents look as though they could fit together - Like fitting puzzle pieces

II Pangaea

- a. Alfred Wegener - ~~German~~ Scientist

suggested were joined together in the past

- b. Proposed Hypothesis of Continental Drift.

- c. Hypothesis: From Pangaea, continents have moved slowly to their current locations as Pangaea

Means:
ALL
LAND

↙ broke apart

- d. Pangaea - One large land-mass 200 million years ago

III Evidence - Continental Drift

- a. Fossil Clues - Mesosaurus
a Reptile, lived in
Fresh Water Not
Salt water and Land
- b. Mesosaurus Found
on Continents Separated
by Salt Water
- c. Mesosaurs Couldn't
Swim in Saltwater
and survive
- d. Wegener - Hypothesized
the reptile Lived on
both Continents
When Pangaea existed.
(When all continents)
(were joined as Pangaea)

IV Evidence - Plants

- a. Glossopteris Plant
- b. Found on separate
Continents with Oceans
in between
- c. Wegener - all of these
continents were

once joined as, "Pangaea",
and had similar climates or
weather

V Evidence - Climate Clues

a. Fossils of warm weather
plants found in Arctic
areas on Earth

b. Glaciers, evidence of
glacial deposits and
rock found in Temperate
(mild temperatures), and
Tropical (warm climates)

c. Parts of the continents
that are warm are -
~~South America, Africa, India,~~ South
America, Africa, India,
Australia.

d. All covered by glaciers
in the past - How?

e. Wegener hypothesized
these continents were
once connected and
partly covered with ice
near the South Pole
during Pangaea.

VI Evidence - Rock Clues

- a. Similar rock structures are found on different continents (Mountians)
- b. Similar Rocks (same kinds) Found in Appalachin Mountains, U.S. and in Greenland & Europe.
(Same Rock in Mountain Chains)

~~GO TO VI~~

- c. Wegener - Hypothesized if continents were pushed back together these Mountain Chains ~~WOULD~~ would line up together.

VIII. How Continents drifted

- a. From the All Landmass of Pangaea - Continents drifted to the Present day Positions of the Continents Worldwide
- b. Force that moved Continents - ~~Low~~ Density Continental Plates Crashed into High Density Oceanic Plates
- c. Low Density Continental plate was Subducted or Forced down into Earth's mantle and Melted - becoming a part of Molten (Semi-Liquid) Mantle Material
- d. Evidence For Wegener's Theory of Continental Drift based on -
Rocks, Fossils, ; Climates
- e. After Wegener's death More evidence was Found - called, "Sea Floor Spreading"