What is Pangaea?

A quick look at the super-continent!

What do YOU know?? (Students, tell me now!) ©

Set Up Your Note Sheet:

What is Pangaea?

Who?

What?

How do we know?

What happened?

Pangaea

WHO? Alfred

Wegener (1880-1930) first proposed the theory of *Continental Drift*, which states that the Earth's *continents* float on a more dense layer of rock

WHAT? He

hypothesized that there was an original, *gigantic supercontinent 300 million years ago*, which he named *Pangaea* (greek for "all earth/land").



WHAT are the names of the land pieces?

Eur-Asia North America South America Africa India Australia Antarctica

How do we KNOW Pangaea existed? (Anyone?)

HOW DO WE KNOW? Scientific Evidence!

Fossil Evidence –

- There are similar fossil remains found on more than one continent.
- organisms that couldn't live in certain present-day areas have had their fossils found there!

More Scientific Evidence

Land Features

- Mountain Ranges line up on different continents.
 - European coal fields match up with North American coal fields.
- The shapes of the landmasses fit together when joined

Climate

Scratches in rocks show that glaciers covered Africa....so it must have been closer to the poles.

Cold Arctic Islands have fossils from warm climate animals...so it must have been near the equator.

Is Continental Drift REAL?

- Pangaea IS, but Continental Drift is NOT!
- Scientists do not accept Wegener's Theory (continents do NOT float on more dense rock!).
- BUT, the theory of PLATE TECTONICS is real and accepted by scientists!

What happened to Pangaea?

 Over time the plates began to drift apart.
This was caused by convection currents in the asthenosphere.

The Break-up of Pangaea ©ZoomDinosaurs.com