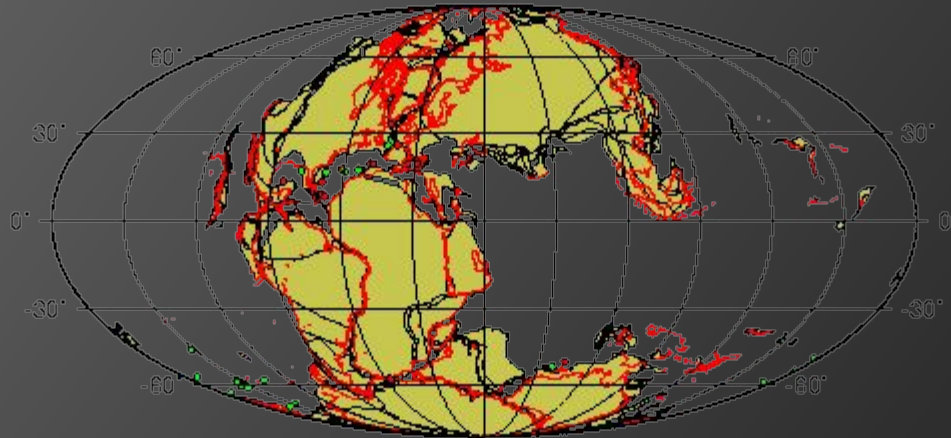




ALFRED WEGENER (1910) CONTINENTAL DRIFT



150 My Reconstruction

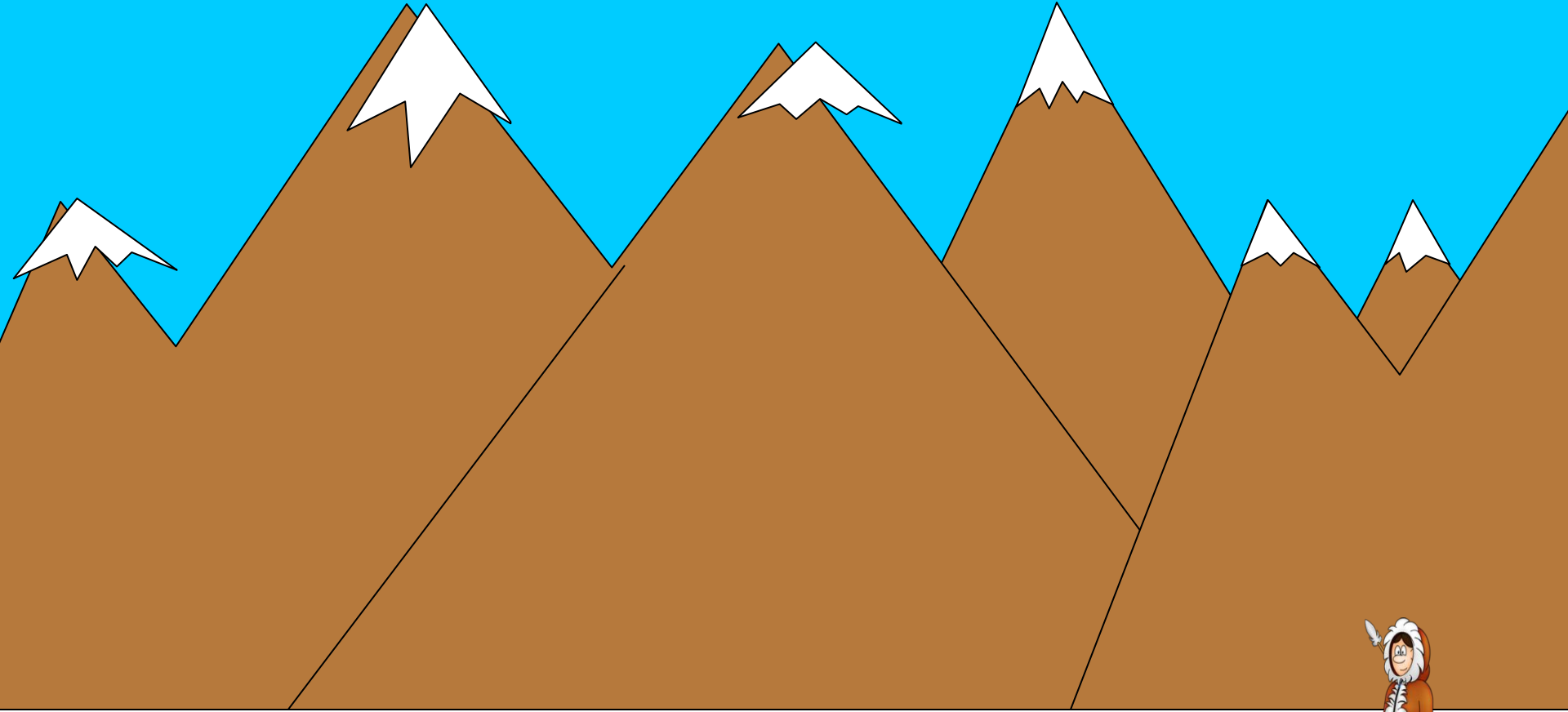


Alfred
Wegener



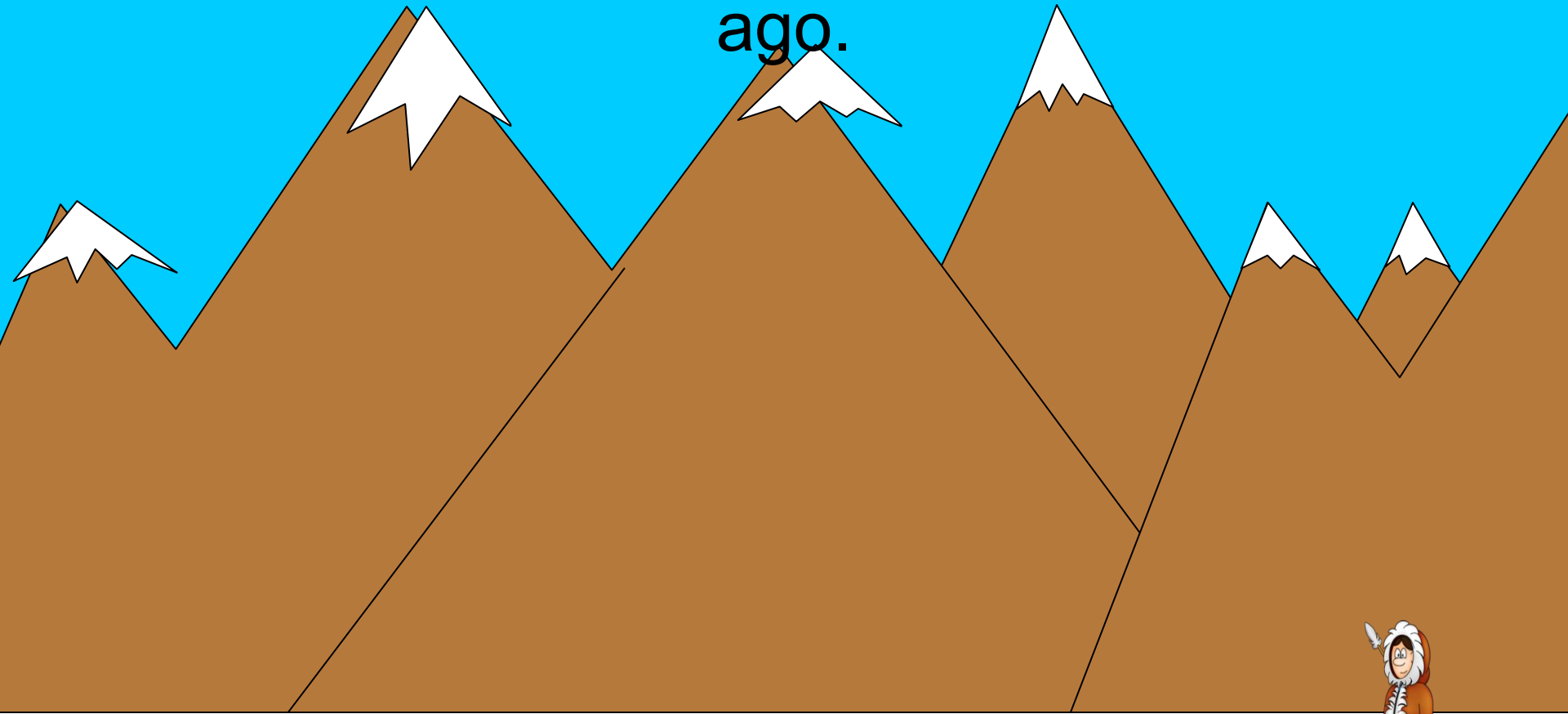
Continental Drift

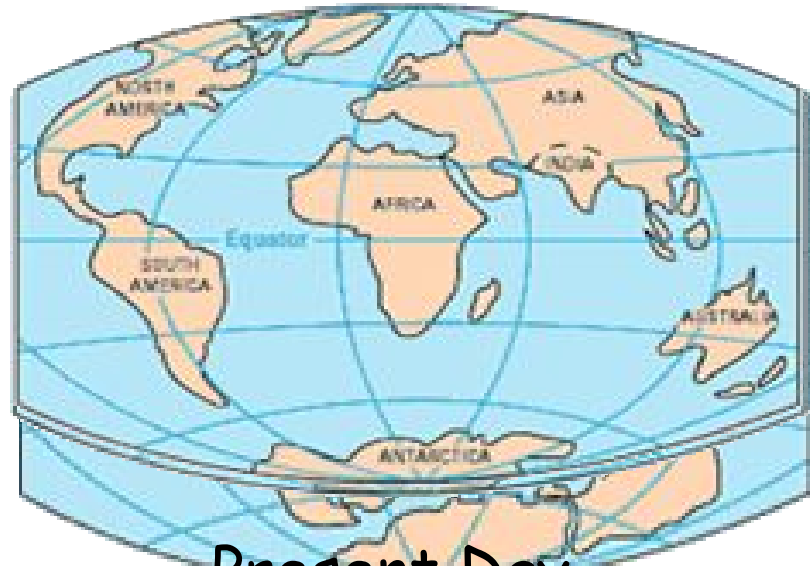
The idea that the world's land masses are slowly moving over time



Pangaea

The supercontinent made of all continents that existed millions of years ago.





Present: Day
Cretaceous period
65 mya
200 mya



Evidence: _____
Explain the evidence:

Evidence: _____
Explain the evidence:

REASON #1 - _____

CONTINENTAL DRIFT

State Alfred Wegener's claim:

REASON #2 - _____

REASON #3 - _____

Evidence: _____
Explain the evidence:

Evidence: _____
Explain the evidence:

Evidence: _____
Explain the evidence:

Evidence: _____
Explain the evidence:

REASON #1: LAND FEATURES

1) Land features: Shape of continents



1) Land Features

Shape of continents



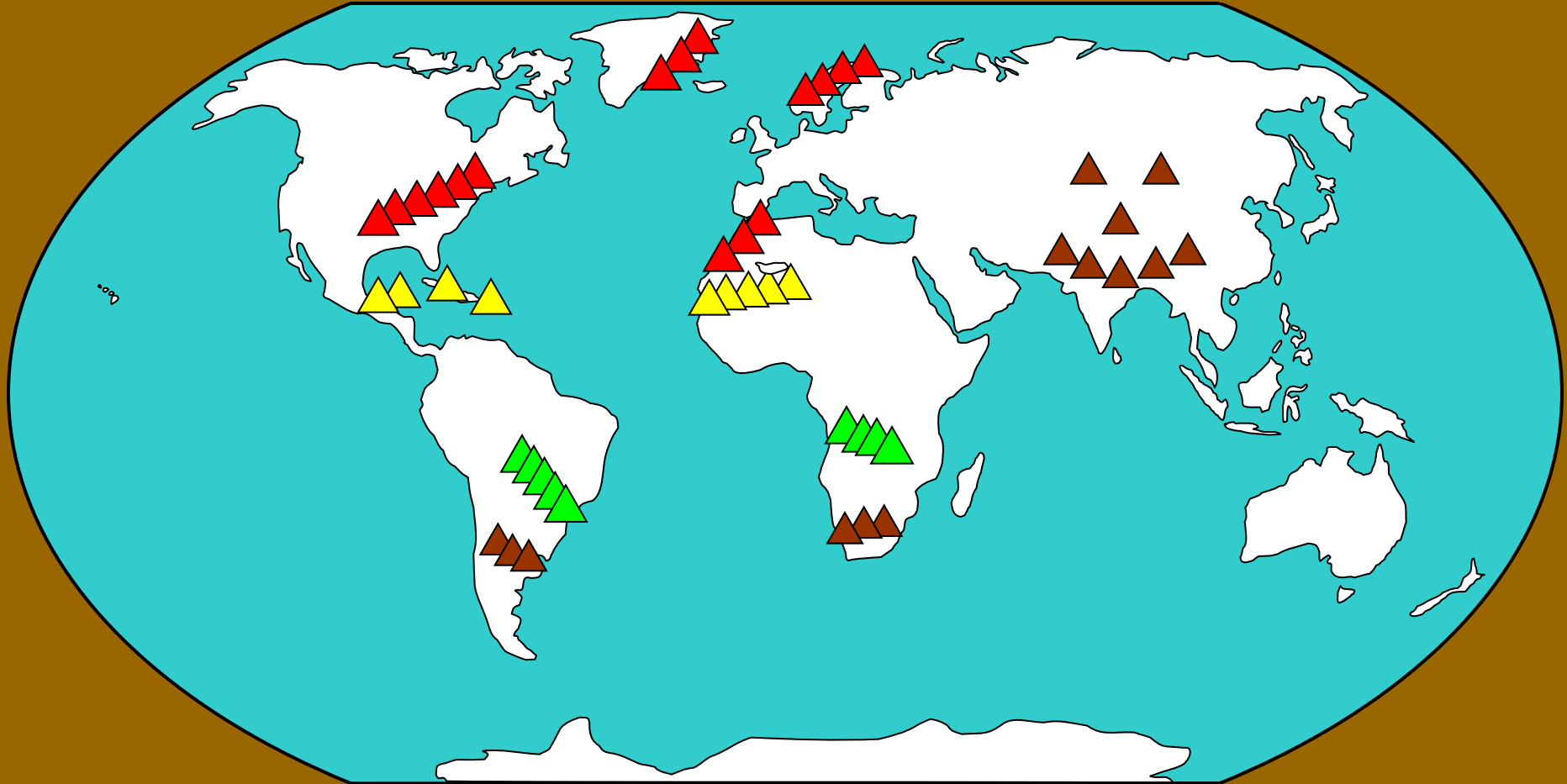
1) Land features

Shape of continents

The continents appear
to fit together like
pieces of a puzzle



1) Land Features: Mountain Evidence



Mountain Evidence



Mountain Evidence



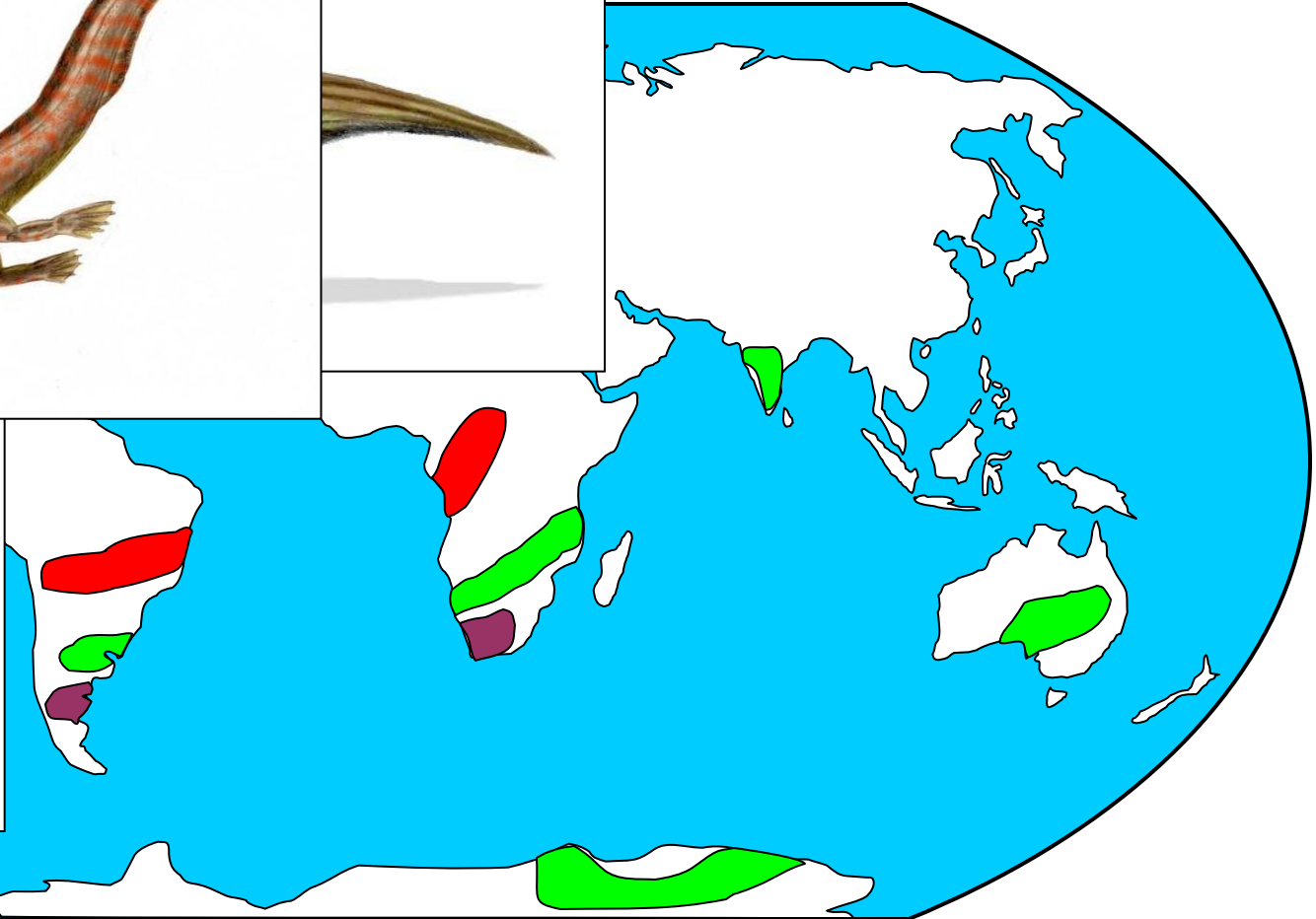
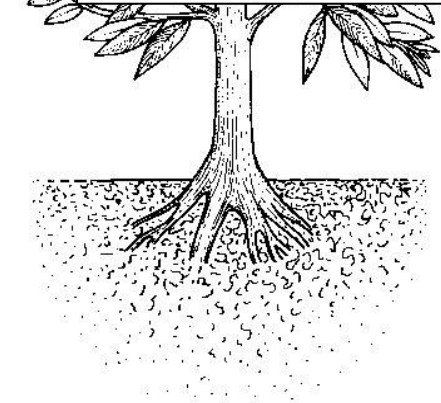
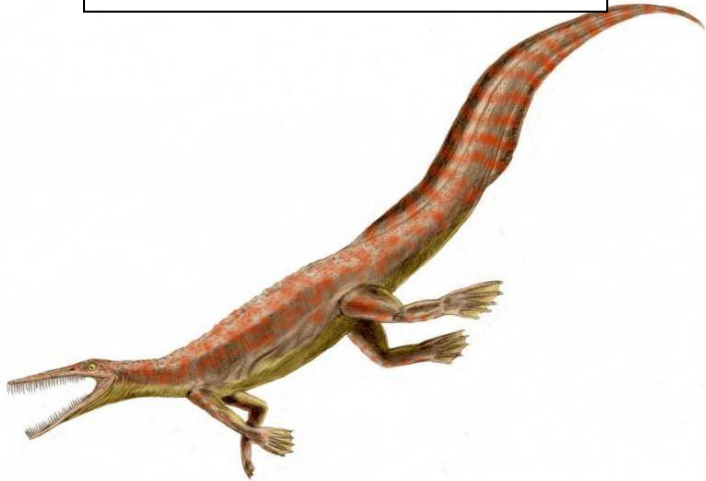
Mountain ranges end on one coastline and pick back up on another. The rock patterns of these mountains match up.

REASON #2: Fossils

Mesosaurus

Cynognathus

Distribution



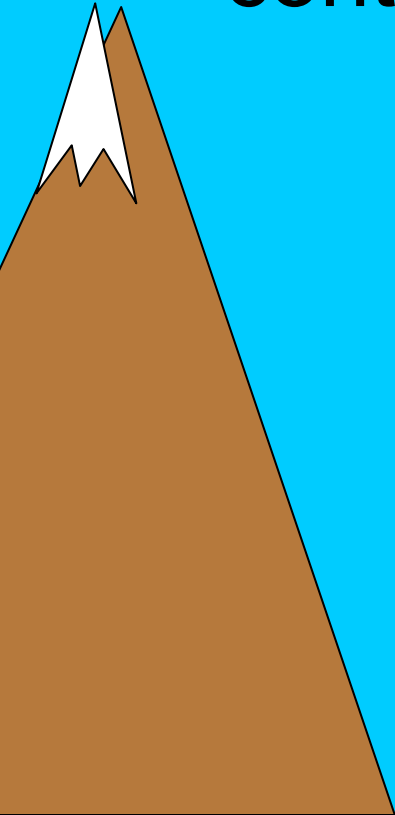
Distribution of
Cynognathus

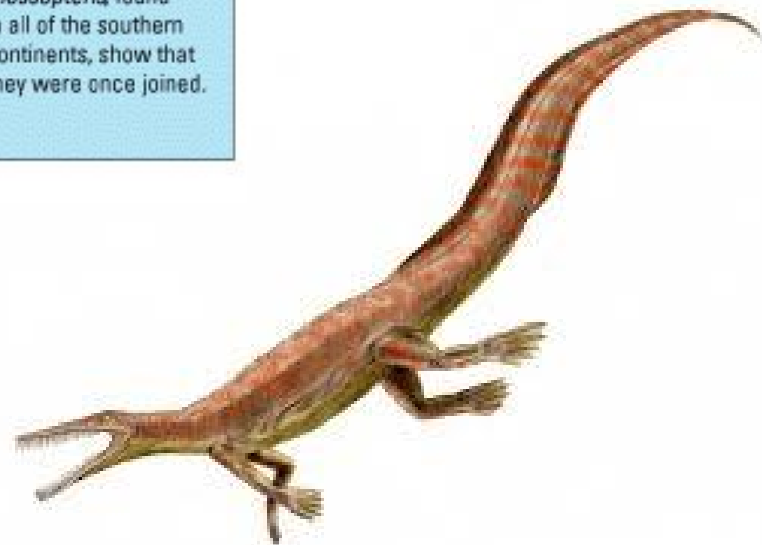
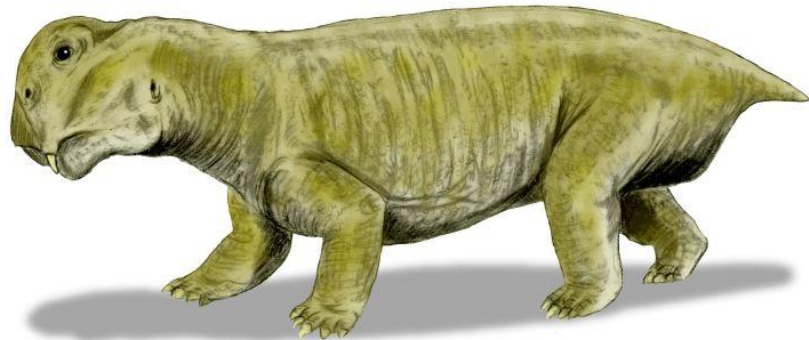
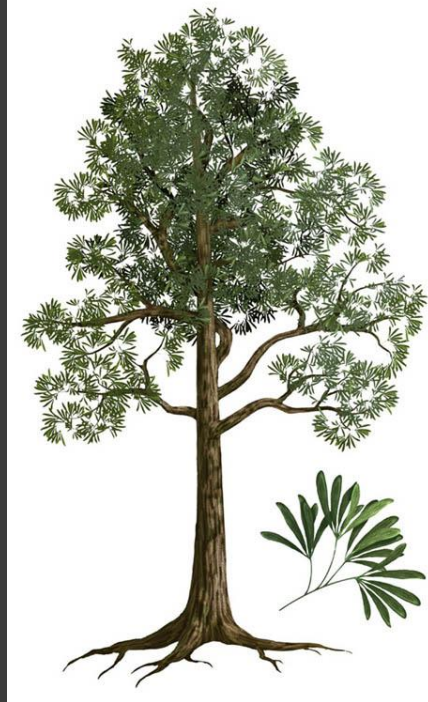
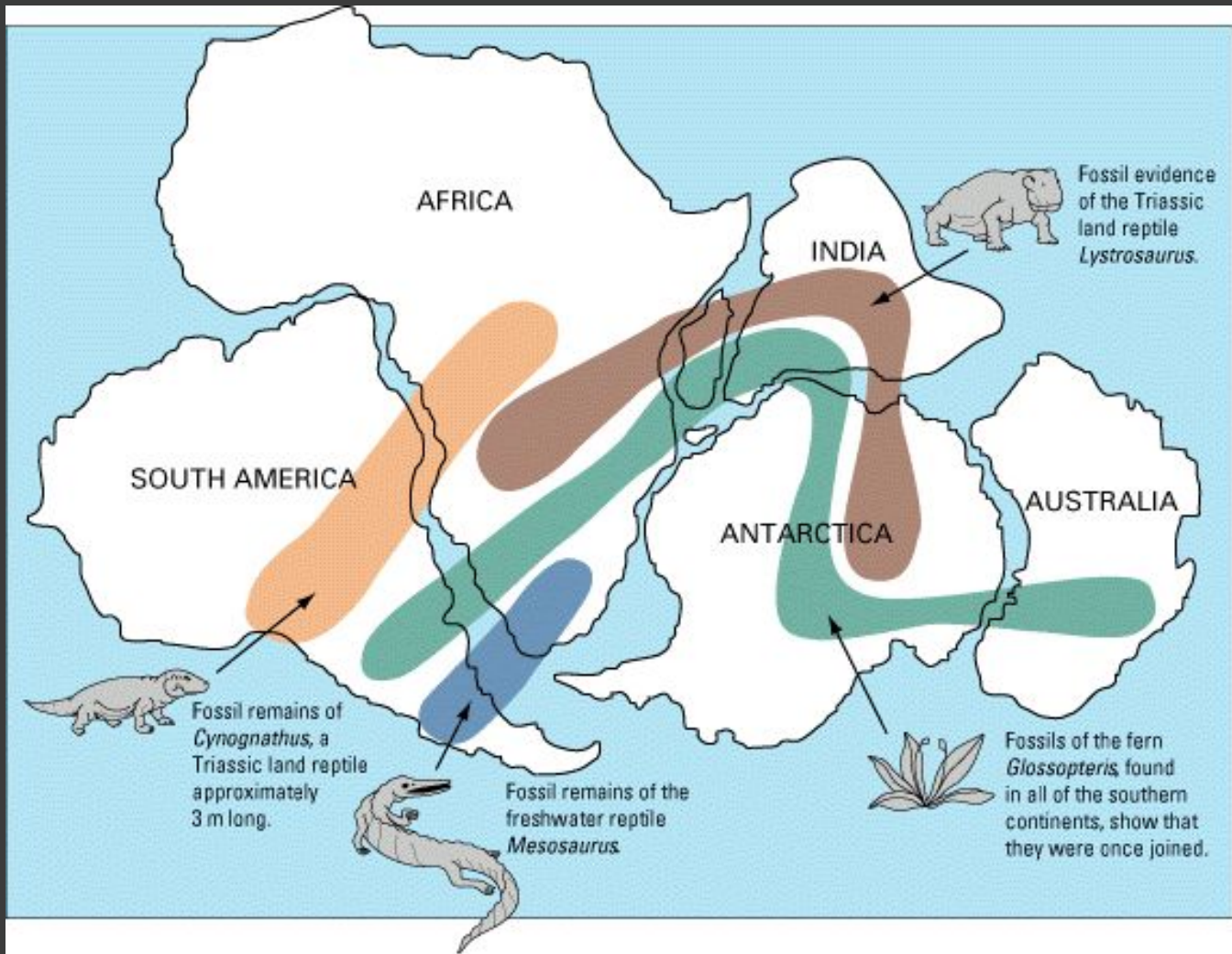
Distribution of
Glossopterus

Distribution of
Mesosaurus

3. Fossil Evidence

Fossils of some species are only found on the matching coastlines of continents now separated by oceans



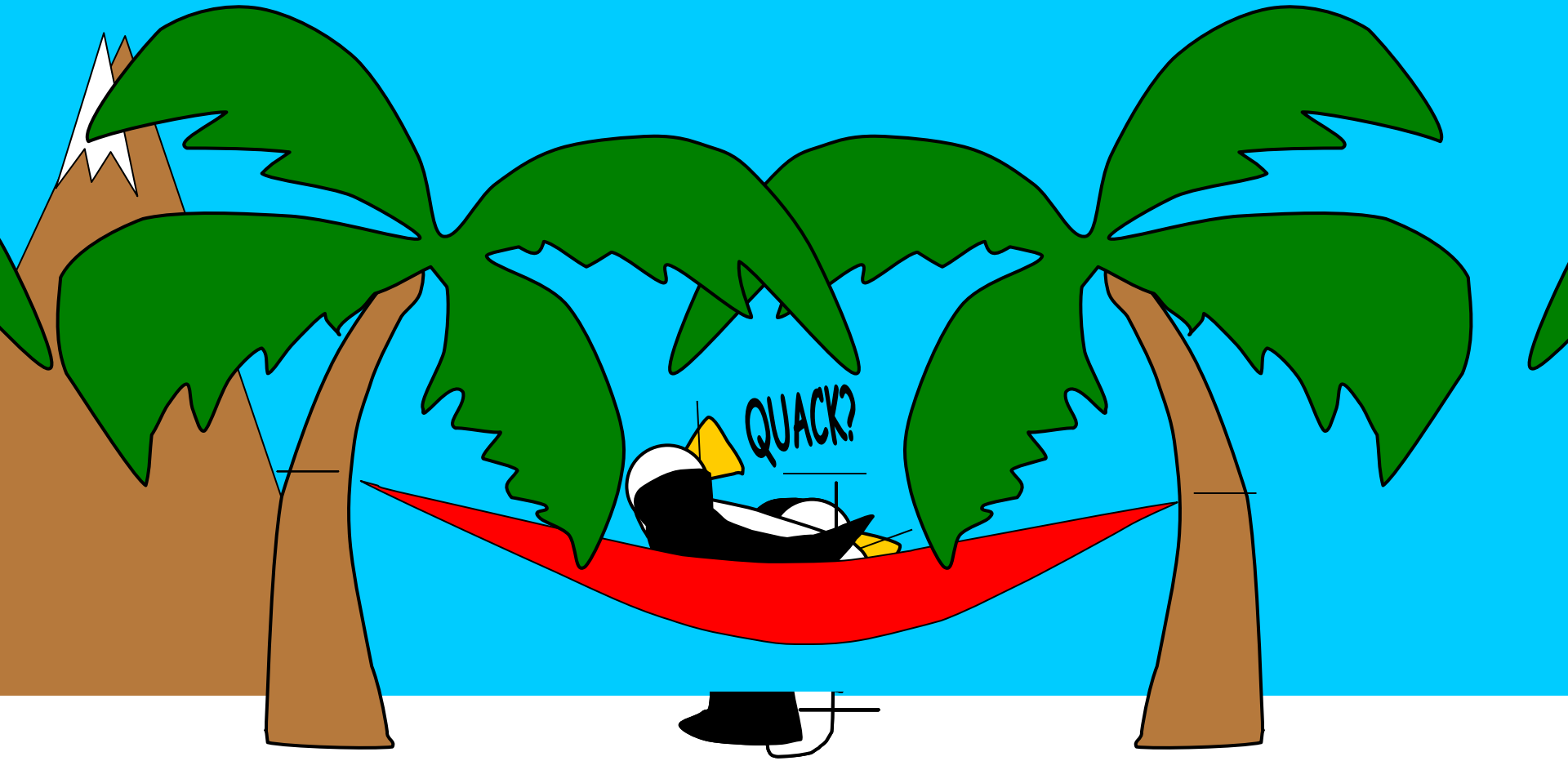


REASON 3 – Mismatched Climate

3) Climate Evidence:

Coal deposits

Deposits of coal prove that *tropical plants* used to grow in *cold areas* like Antarctica . . .

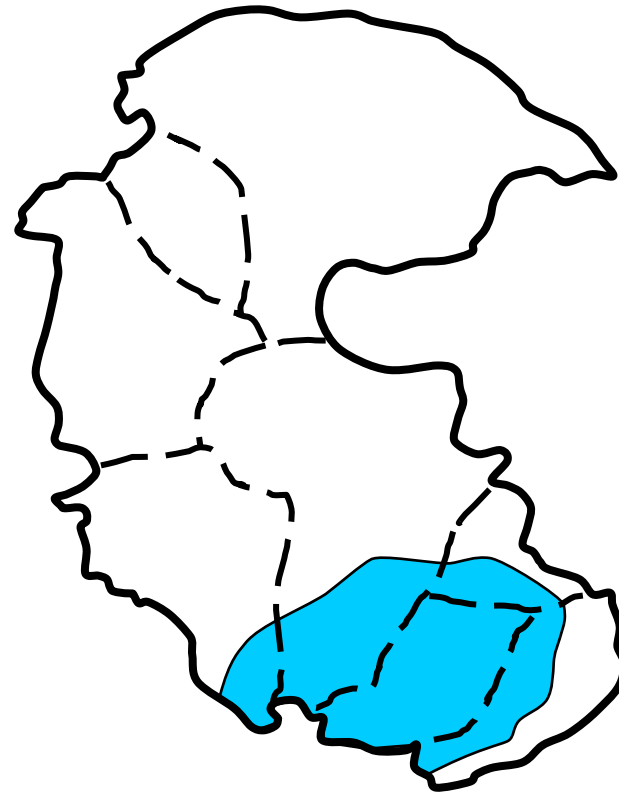


3) Climate evidence Spitsbergen

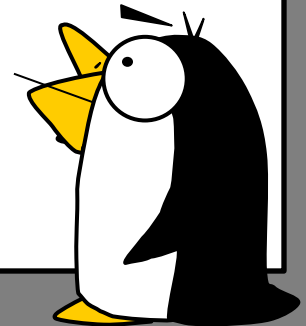


5) Climate Evidence: Glacier Scratches

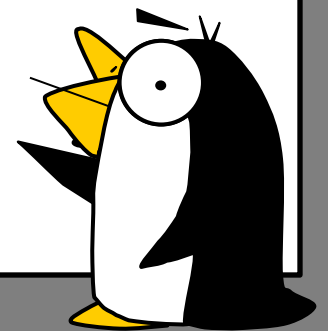
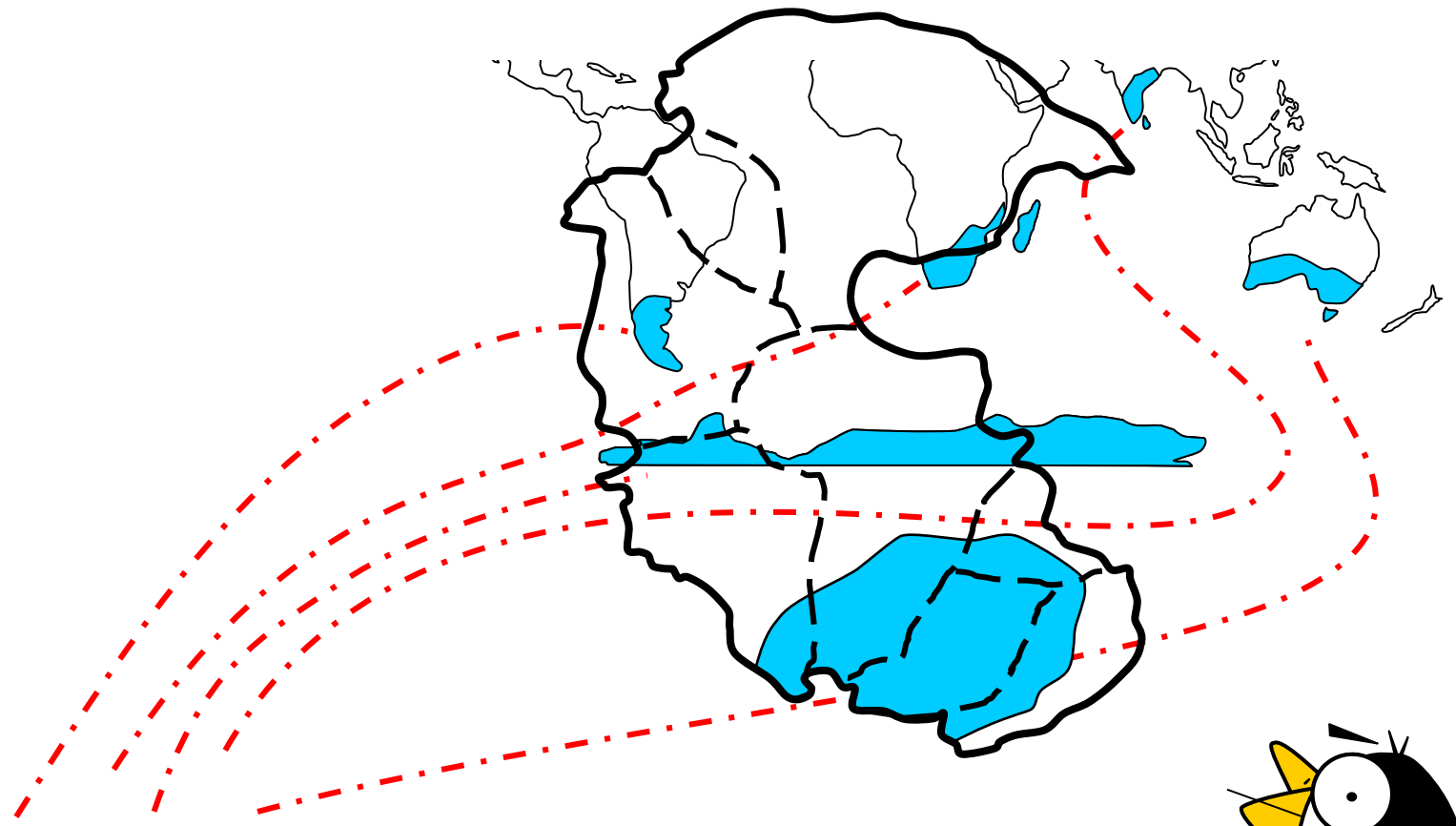
. . . also,
evidence of
past glaciers
found in places
that are too hot
today.



Pangaea



... and evidence of past glaciers is found in places that are too hot today.



Alfred's Evidences

1. Land Features
2. Fossil Evidence
3. Climate Evidence



REJECTED



The problem

Despite all of his evidence, Wegener could not explain ***HOW*** it all happened.

In other words, he had...

No Mechanism !

So it all makes a very convincing
case, except...

There's just one problem...

How the heck did the continents
move??

[http://www.youtube.com/watch?v=T1-cES
1Ekto](http://www.youtube.com/watch?v=T1-cES1Ekto)