Fossils and Evolution

What is Evolution? (YouTube Video)

http://www.youtube.com/watch?v=GhHOjC4oxh8

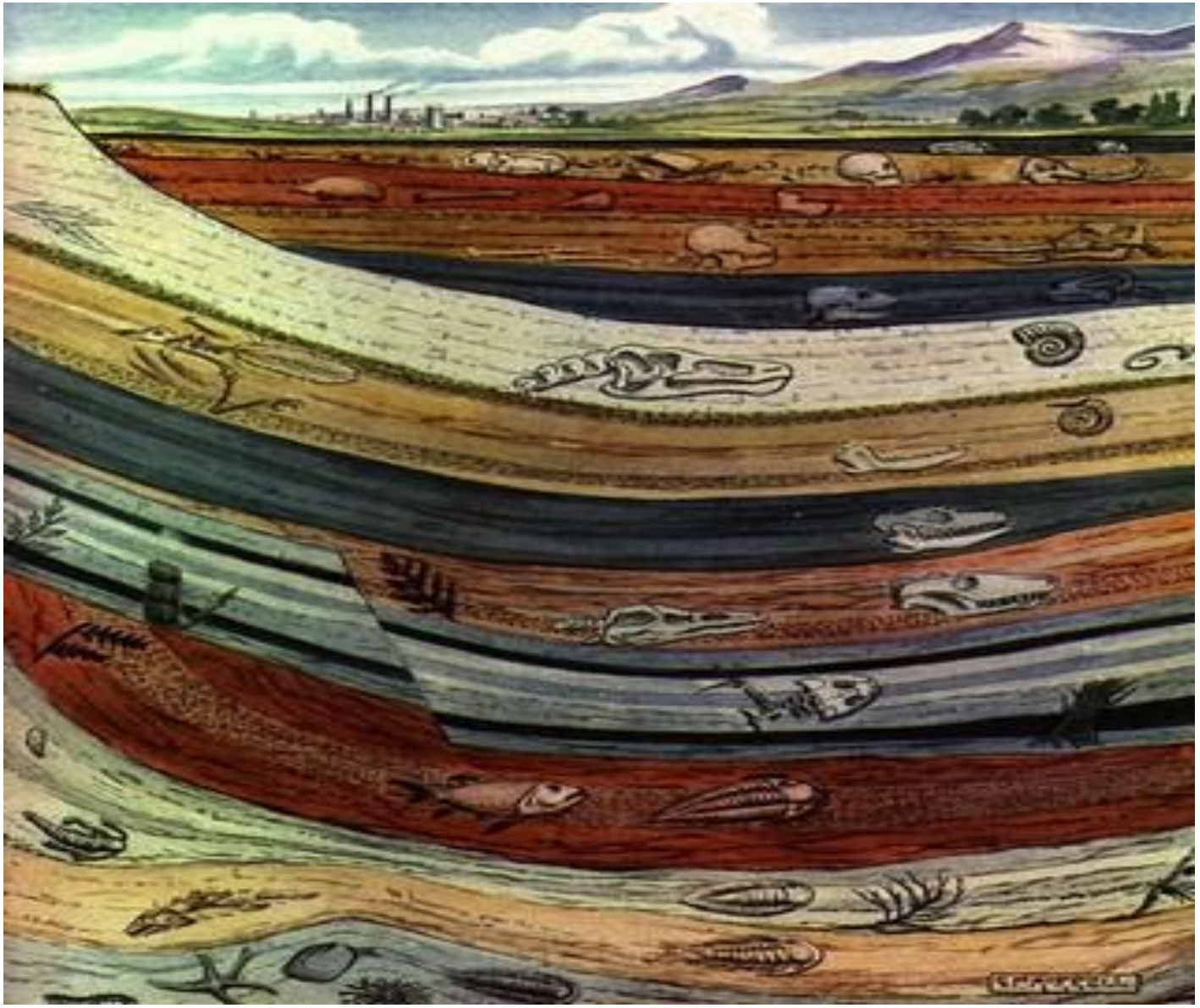
- Earth formed about 4.5 billion years ago.

- In that time, life has evolved from a few simple single-celled organisms to many different single-celled and multi-celled organisms.

- The fossil record shows that Earth's living things have evolved.
- Fossils provide evidence of past life forms.
- Fossils are preserved imprints or remains of once-living organisms.

- Most fossils form in sedimentary rock.

- Sedimentary rock forms gradually as layers of sediment are compacted or pressed and cemented together.




The Virtual Fossil Museum
www.fossilmuseum.net

- Body fossils are the preserved remains of an organism (actual body, bones etc.).

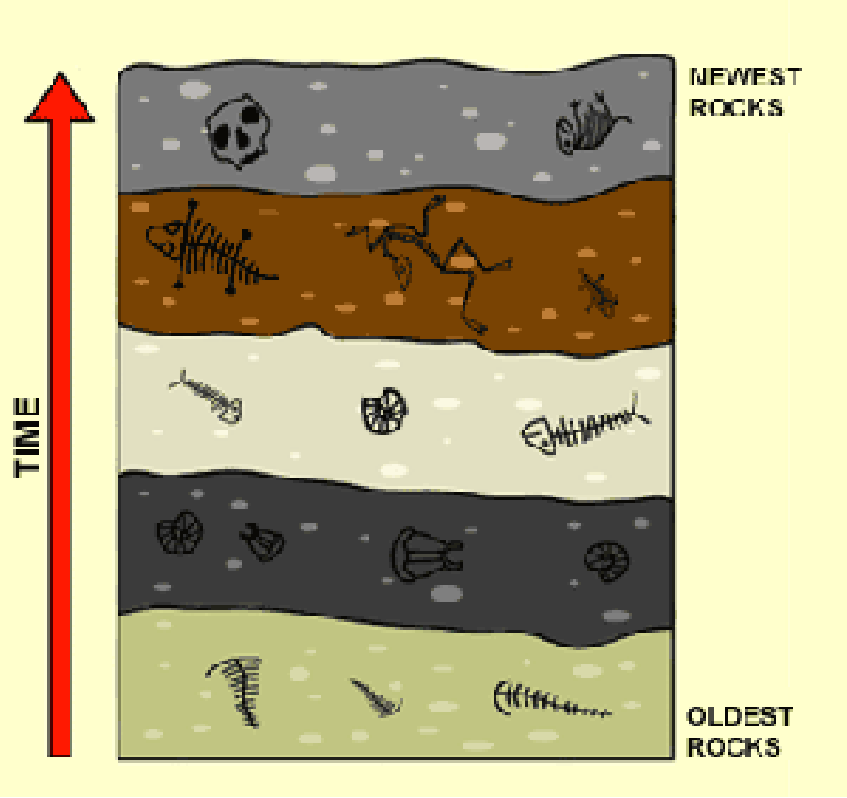
- Trace fossils are imprints left behind by organisms (tracks, nests, etc.)

- Scientist can tell when organisms lived by comparing them to other fossils of a known certain age called index fossils.

- Scientists can also use the positions of fossils in rock layers to determine which organisms came first.

Relative Dating

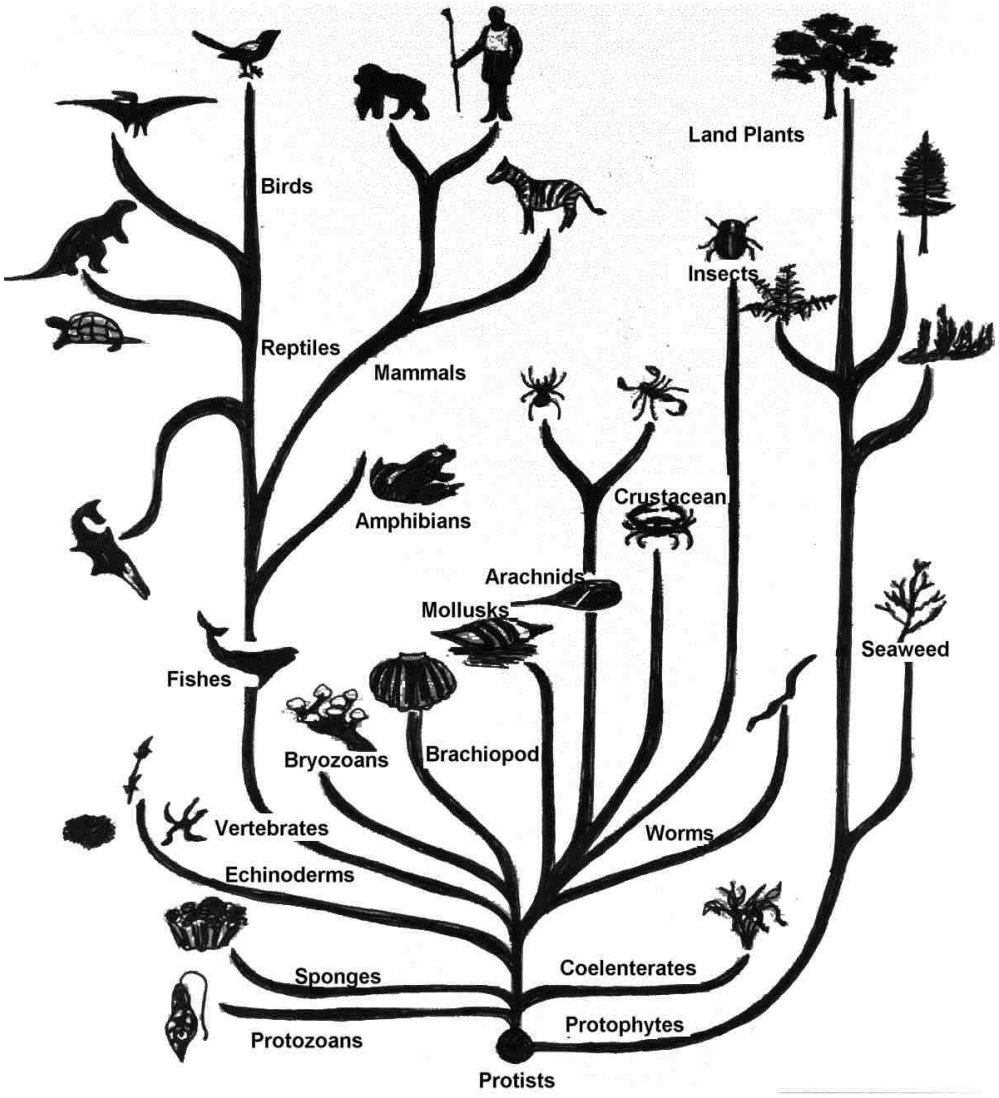
- The older a fossil is the deeper it will be buried in sedimentary rock compared to other fossils.



- The oldest fossils known were from single-celled organisms nearly 3 billion years ago.

- For 2 billion years all life on Earth was comprised of only single-celled organisms.

- By comparing fossils with each other and creatures today, scientists can determine how organisms are related and how evolution has occurred to produce the organisms we see today.


Land Plants
Birds
Insects
Reptiles
Mammals
Crustacean
Amphibians
Arachnids
Mollusks
Seaweed
Fishes
Brachiopod
Bryozoans
Worms
Vertebrates
Echinoderms
Coelenterates
Sponges
Protophytes
Protozoans
Protists