

Benchmark Review Evolution and Earth History

1. Charles Darwin was famous for his **theory** of evolution by **natural selection**.
2. The theory of evolution is based on evidence from **DNA, comparative anatomy,** and **fossils**.
3. The earth's plate (on land and under water) move **slowly** over time and can cause earthquakes, volcanoes, and the creation of mountain ranges.
4. Most fossils form by being covered with **sediment** which later turns into **sedimentary** rock.
5. Adaptation is a change in organisms to better survive in its **environment**. What are some examples of adaptive change?
6. Know that the movement of tectonic plates over **millions** of years changes the environment for organisms. And since the **environment** changes the organisms habitat will also changes.
7. The earliest type of organism was **bacteria**.
8. If a continent moves away from all other continents, what effect will this have on the organisms living there? **Organisms will evolve differently.**
9. A species is a group of similar living things that can **reproduce and produce fertile offspring**.
10. Scientists estimate that the earth is about **(4.6)** billion years old.
11. Evidence that organisms have changed over time is shown by the **fossil** record.
12. The rock layers are useful to determine the **relative age** of fossils.
13. From the geologic time scale how many periods are in the Paleozoic Era? **6**
14. Life on earth has changed many times due to **environmental** changes.
15. **Tectonic** plates move very slowly. Where they collide **mountains** can form from uplifting. This can take millions of years.
16. When did the geologic time scale begin?
Precambrian.

Era	Period	MYA
Cenozoic	Quaternary	1.8
	Tertiary	65
Mesozoic	Cretaceous	144
	Jurassic	206
	Triassic	248
Paleozoic	Permian	290
	Carboniferous	354
	Devonian	417
	Silurian	443
	Ordovician	490
	Cambrian	540
Precambrian		4600