

### 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.**

<b>Era</b>	<b>Period</b>	<b>MYA</b>
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