# Cladograms

<http://www.pbs.org/wgbh/evolution/change/family/>

1. What was one of Darwin’s most revolutionary ideas about life on Earth?
2. When did the first simple single celled organism, possibly the ancestor of all living things, appear on Earth?

Type the animals into the boxes

1. Which two animals do you think are most closely related?

**Dolphin Shark Wolf**

Why?

Compare skeletal structures by using the “Tools” option and record similarities and differences in the anatomy for each organism (limbs, jaws and cranium)

**Similarities** (of the animals most closely related):

**Differences** (between the animals that are closely related and the one that is not closely related):

🡪 Build another tree …

1. Which two animals do you think are most closely related?

**Bear Opossum Raccoon**

 Why?

Where does Echnida fit into this tree?

Compare the Appearance, Anatomy, Development, and molecular similarities/ differences for these organisms using the tools option. Specifically look at pouch, placenta, maturity at birth and DNA sequence.

**Similarities** (of the animals most closely related):

**Differences** (between the animals that are closely related and the one that is not closely related):

🡪 Build another tree …

1. Which two animals do you think are most closely related?

**Human Sponge Tunicate**

Why?

Where does the Choanoflagellate fit into this tree?

Compare the Appearance, Anatomy, Development, and Molecular similarities/ differences for these organisms using the tools option. Specifically look at brain, notochord, gill arches and DNA sequence.

**Similarities** (of the animals most closely related):

**Differences** (between the animals that are closely related and the one that is not closely related):