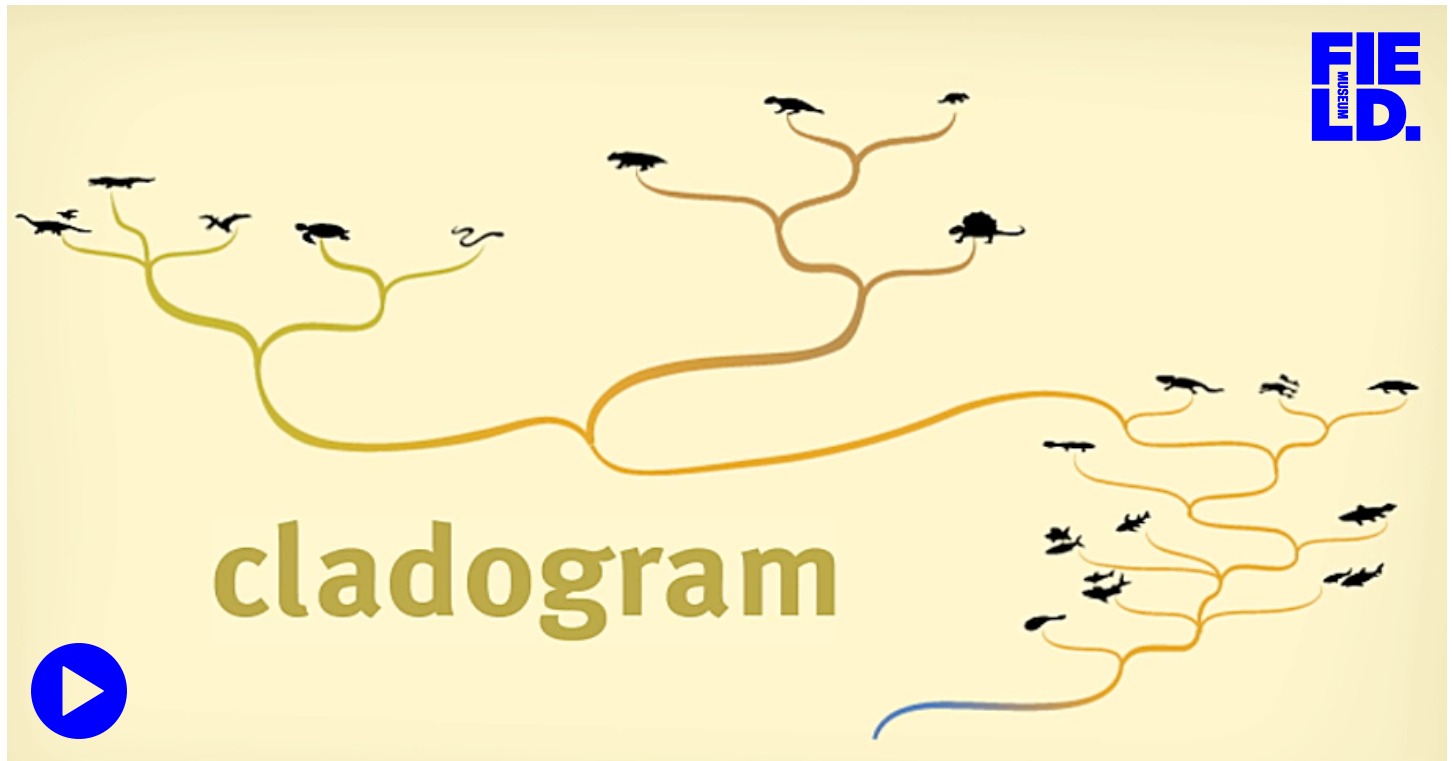


Looking for a way to engage with your learner more deeply through our videos? Use these guiding questions to dig a little deeper as you explore Field Museum collections and research at home!

PHYLOGENY



Run time: 3:06

Suggested age level: tweens and teens

Essential question: How do we know where mammals came from?

Key vocabulary:

Cladogram – A diagram that shows a group of organisms and how they relate to their ancestors. Similar to a “family tree” of different species

Ancestor (biological) – a species of organisms from which a current species has descended

Guiding questions:

1. Mammals are part of the group called vertebrates, which is made up of animals that have a backbone. Can you think of some other animals besides mammals that have backbones?
2. Organisms with backbones are more closely related to humans than species without backbones. Can you name some different species that have no backbones?

Take action:

As new species evolve, sometimes they don't use some of their features that they still retain from their ancestors. These are called vestigial features, and humans have them as well. One example is getting goosebumps, which was used to puff up hair for added insulation.

1. Look up some other human vestigial features like Darwin's tubercle, Plica Semilunaris, or the Palmaris Longus Muscle and see if you can find them on your body.
2. Why do you think our ancestors needed these features in the past?