By Madeline Anscombe

TMSE-Overview

Third Graders

Eight Sessions

Previous Lesson: Primates

Lesson: Evolution

Materials:

* Pipe Cleaner
* Foam Ball
* Paint
* Scissors

Review:

* What is bipedal locomotion?

Focus:

* This history of evolution
* What a scientific theory is

Objectives:

* Students will briefly learnt he history of evolution
	+ Charles Darwin-the first person to publish their theory of evolution
	+ The Origin of Spcies-the book by Charles Darwin about how different animals changed over time in order to fit their environment
* Students will be able to understand a scientific theory
	+ Scientific theory: the most well proven form of a scientific explanation that must be tested many times and cannot be false in any test.
* Understand what adaptation means, and how this relates to evolution
	+ Adaptation: a change that happens in reaction to an organism’s environment
	+ Natural selection: some individuals are better at surviving, their adaptations are carried on for future generations.
* Students will understand that if we go back far enough, all things are related
* The students will come up with adaptations for a new animal in an environment.

Independent Practice (Activity)

* Students are given three environments and challenged to make up new animals that are adapted to those environments.

Group name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Animal name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

How has your animal adapted to its environment? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Group name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Animal name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

How has your animal adapted to its environment? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Group name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Animal name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

How has your animal adapted to its environment? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Environment 1: Cold, wet (lots of snow!), little vegetation

Environment 2: Warm, wet, heavy vegetation

Environment 3: Cold, dry, mountainous terrain

Powerpoint script

1. Today we will cover evolution!
2. To talk about evolution, it is important to look at the history of how we found it
* Lots of people were doing research at the time but Charles Darwin spent 22 years gathering information and he published his book “on the origin of species” in 1859
* When he published it, it was a big deal!

4. This was an important book because it was the first to propose that animals could change over time

5. What is a theory?

6. Explain what a theory is

7. Read slides and example—in a cold environment an animal may grow more fur to stay warm/ elephant tusks

define adaptation: a change that happens in reaction to an organism’s environment

8. Example: rabbits live all over and some have dark fur. In a place where it snows a lot, it would be an advantage to have white fur because it would be harder to see and more likely to have children

9. Why is evolution important?

10. Activity