

Can it Be Real? Southeastern Salamander Edition

Original Activity: <https://www.plt.org/activity-resources/prek-8-activity-11-can-it-be-real/>

This activity is a wonderful way to introduce biodiversity and adaptations of local organisms while also getting students to use their reading and analyzing skills. Use the selected cards or create your own.

Directions:

1. Print out one set of cards for each group.
2. Break participants into groups of 4-5.
3. Give each group a set of cards and tell them to read the descriptions. While listening, have the group decide if the salamander described on the card is real or not. Have participants list reasons why they believe the organism is or is not real.
4. After all groups have made their decisions, read the descriptions as a class and tally each group's vote for each organism.
5. After all animals have been voted on, reveal to the students that all of the organisms ARE REAL and, in fact, live in the southeastern United States. See if participants can name the actual organisms.
6. Show pictures of salamanders and provide additional background information on each.

Extensions:

1. Have students research other local salamander species and write their own 'Can it Be Real' prompts.

Student Cards

Salamander 1:

I can reach lengths over 2 feet long and can weigh up to 4 pounds. I have lungs, but I breathe through pores in my skin. Because of this, the Latin name for my genus means “secret gill.” Even though I am a salamander, I can’t regrow my limbs. The males of my species find a nest site and guard the eggs. I have sharp teeth and an amazing sense of smell. I can live around 30 years, but some of my kind have been found to survive well past 50 years! I go by many names, some of which include lasagna lizard and snot otter.

Salamander 2:

I am sometimes mistaken as an eel, but I am not a fish. I have a paddle-like tail, no hind legs, and a small set of front legs. I can exceed 3 feet in length. I spend most of the day hidden and come out to hunt at night. To keep moist, I have skin glands that secrete a moisture-sealing substance all over my body. I eat all sorts of things- plants, amphibian eggs, invertebrates, and more. I can lay up to 500 eggs at a time and sport external gills, even as an adult!

Salamander 3:

I am a troglobite, meaning that I have adapted to a permanent life in a cave. Because of this, I have no eyes. I use my tail and ears to “see” underground. I have a white body with a yellow or pink tint, red external gills, and a long flat head. I grow up to 2 inches in length. Human activities in the caves I live within have caused some of my species to decline.

Salamander 4:

I spend much of my time underground, but I am also solar powered! Not only do my eggs have a symbiotic relationship with algae, but recently, scientists have discovered adults can also host algae inside them. How cool?! If a predator tries to attack me, I will secrete a toxic, milky substance from my neck and back. I can live up to 32 years and migrate each spring from my underground burrow to temporary wetlands to breed. Sometimes, I migrate with hundreds of my closest pals!

Answers:

Salamander 1: Hellbender (*Cryptobranchus alleganiensis*)

Salamander 2: Greater Siren (*Siren lacertina*)

Salamander 3: Georgia Blind Salamander (*Eurycea wallacei*)

Salamander 4: Spotted Salamander (*Ambystoma maculatum*)

Hellbender by Brian Gratwicke CC by 2.0



Greater Siren by brm85 CC-BY-NC



Georgia Blind Salamander by Jake Scott CC-BY-NC



Spotted Salamander by Brian Gratwicke CC by 2.0

