Activity 5:
Maine Amphibian ID Practice

Target Grade: 1st-12th

Learning Targets:

- Practice comparing physical characteristics to identify species in the field.
- Practice using the Vernal Pools Maine Amphibian ID guide.
- Learn key identifying features of Maine amphibians.
- Understand that it can be difficult identifying species in the field because you cannot always see the whole organism.

Length: 15-20 minutes

Essential Questions:

1. What are important physical features to focus on when trying to identify Maine amphibians?

Enduring Understandings:

1. The amphibians you see in the field will often differ in color than the illustrations on the Vernal Pool Maine Amphibian ID guide. Some amphibians can change their color based on what life stage they are in (i.e. Eastern Newt) or what their surroundings look like (i.e. Gray Treefrog).

2. Identifying organisms in the field requires a lot of patience and practice. In the case of animals, it is also important to move slowly and quietly!

Background for Facilitator:

Before going **in the field** (i.e. outside), it is best to prepare your students on what to expect. Finding **amphibians** (not to mention identifying them) is often a process that

takes time and patience. When learning how to identify **organisms** (i.e. living things) that are new, people often use a **guide**. In the case of this lesson, the guides are illustrations that show you most of the physical characteristics that are important to look for when identifying a species.

When you are in the field, amphibians are rarely in a position that shows you all the physical characteristics you need to see in order to identify what it is. There are also many color variations, because amphibians are found in different **habitats**. The more you practice identifying amphibians, the easier it gets!

Vocabulary List:

Amphibian - cold-blooded vertebrates (animals with a backbone) that do not have scales. Part of their life cycle is spent in the water, and part of their life cycle is on land.
Guide - a document that helps the user make a decision about something. In this lesson it is helping you identify an amphibian!
Habitat - the natural habitat an organism lives or reproduces in. An example habitat would be a forest.
In the field - going outside into the natural environment to collect/learn information.
Organism - a living thing. This includes plants, animals, insects, fungus, algae, etc.

Materials:

Vernal Pool Maine Amphibian ID guide (10)
Maine Amphibian ID slides

Items not in the toolkit that you will need:
Computer with internet access
Projector

Methods:

Engage

1. Start a conversation with your group on how we know the names of living things. How do you know a fish is different from a monkey? How do you know that a horse is not a zebra?

2. When we see organisms in the field or in pictures we can identify it (usually) by their physical features. Have the group come up with examples of physical characteristics:
    a. **Facilitator Note: does the animal have fur, what color is it, how many limbs does it have, scales, etc.**
3. Today we are going to be focusing on learning physical characteristics that help identify Maine amphibians. We will do this by using a guide. This will help prepare us when we go into the field.

Explore

1. Place students in groups of 2 to 3 and give them the Vernal Pool Maine Amphibian ID guide.
2. Project the Maine Amphibian ID PowerPoint and have the group work through identifying each amphibian.
    a. **Facilitator Note: the first image of the amphibian is just a photo. Students can study the image and debate which physical features are important and come up with an answer. Having group discussions (even if an answer is wrong) is a powerful tool for remembering information, so encourage conversations!**
    b. **Facilitator Note: the second image of the amphibian points out key physical features that make that amphibian unique.**
3. Work through all the slides.

Evaluate

1. How well did everyone do? Were there certain amphibians that were more difficult to identify than others?
2. If we were out in the field, what do you think we might encounter that would make it difficult to identify species there?
    a. **Answer: animals move! You might only see an eyeball and then the animal is gone.**
    b. **Answer: amphibians are really good at hiding and camouflage.**
    c. Sometimes you can only hear amphibians, so practice identifying frog sounds in **Activity 2 Maine Amphibians.**
    d. You have to move slowly and be really quiet and patient.

Extension Ideas:

- Take the USGS Frog Quiz for the state of Maine and test your knowledge!

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