Virtual Discovery Swap* presented by Warner Park Nature Center
Instructor Support

Students will:

- Practice making and recording observations through drawing and writing
- Identify and research organisms using a dichotomous key and field guide
- Present their findings to their peers
- Think about animals in an ecosystem through the lens of structure and function

Science Standards

Disciplinary Core Ideas

- Analyze the internal and external structures that aquatic and land animals and plants have to support survival, growth, behavior and reproduction (3.LS1.1)
- Infer that plant and animal adaptations help them survive in land and aquatic biomes (3.LS4.2)

Science Practices

- Asking questions
- Obtaining, evaluating & communicating information

Cross-cutting Concepts

- Structure & function

Student Materials Needed:

- Paper or Journal
- Pen or Dark Pencil

Asynchronous Lesson – approx. 15 min video

Students make observations and follow along as Naturalists explore the pond habitat. Students will have opportunities to observe animals' body parts and behaviors and think about how those might help them survive in an aquatic habitat.

Naturalists model how to effectively sketch an organism to record information as a scientific tool.

Students are given a choice between 3 animals found in the pond. Their task is to become an expert on their chosen animal by observing the videos and still images, journaling their organism and identifying it using a dichotomous key.

Students research their organism on their own using at-home resources, the internet (with the assistance of a parent or older family member) or using the summary field guide provided in this packet.

NOTE: It is suggested this summary field guide is not accessible to the students until after they have completed their journaling and finished watching the video.

Synchronous Lesson – approx. 15 min
If possible, it is recommended students have the opportunity to discuss their findings, questions and ideas like scientists do.

During in-person class time explain to students that they will be participating in a "Cool Critter Convention" and will be discussing one another's research, like scientists do.

Remind students this should be a discussion, not a one-way lecture. Explain that one student will share observations, questions and ideas and then another student will have an opportunity to share what they think about those ideas, or if they had a different thought.

Below are some suggested broad questions to help students share and discuss:

- What do you mean by that?
- Does anyone that chose the same animal notice something additional/different/similar?
- How does that body structure compare to someone else's animal they chose?
- What body parts did you observe that might help them survive underwater? What is your evidence for that idea?
- Can anyone add to that idea or have a different observation?

In addition, below are some suggested specific questions to aid in understanding:

- How does your animal begin life? (As an egg laid in the water)
- Does your animal change how it feeds, breathes and protects itself as it grows? If so, how?
- What do you notice about the life cycle of these three animals? (they all undergo metamorphosis)
- Draw a food web with these three animals. (They all eat at least one of the other!)