Unit overview and background information:
Nature forms a complex web connecting the living to the nonliving. Our garden as a whole functions as an ecosystem and the better we care for it as a whole, the more it will produce for us. A large ecosystem is made up of several smaller ecosystems and within each dozens of different habitats. In order for our students to begin to understand how the entire garden functions they first must care for our habitats.

ESYNOLA Garden Core Concepts:

Objectives:
SWBAT:
1. When given a garden creature student will be able to identify 2 adaptations and explain how those features help it survive.

Assessment plan (formal or informal):
1. Students will create a new garden creature adapted for a new habitat. For example - create a worm that can live in the pond.

Academic component:
As an introduction to animal adaptations, students will learn about what camouflage is, and how animals and insects use camouflage in nature. Animals and insects use plants and other parts of nature to hide themselves from predators or prey. This is called camouflage. Camouflage is like a disguise for an animal or an insect. It helps them hide. People can use camouflage too!

<table>
<thead>
<tr>
<th>Key Academic and Culinary Vocabulary (intentionally taught)</th>
<th>Secondary Vocabulary (language used in other classes; increase exposure)</th>
<th>Student Agenda (optional)</th>
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<td>Adaptation - a characteristic that helps an organism survive in its habitat.</td>
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**Key Preparation/Materials:** Pipe cleaner worms hidden in a section in the garden (40 pieces in 2 different colors - green & red),
Photos of animals that use camouflage,
Cups for collecting, small whiteboard and marker
Cut outs of different garden animals, crayons, list of different habitats in the garden cut up into slips

**Lesson Flow**

**Driving Question:** How do animals survive in their habitat?

**Lesson Intro - Engagement/Inquiry:** (5 min)
Tell students to imagine that they are all birds and soon they will be flying over part of the garden hunting for their favorite snack - worms!
Show students the boundaries of the hunt area. Challenge students to go out and “hunt” the first “worm” they spot, but they are only to grab the first worm they spot and return to the table.
Go hunt!

Layout all the worms that were hunted.
Think Pair Share - Which color was hunted more? Why?
Introduce the concept of camouflage, but in the context of adaptations in general.
How else might an creature survive in its habitat?

**Body - Exploration:** (30 min)
Examine the pictures (below).
How are these animals adapted to their habitats? - push students to look beyond just the camouflage.
Teacher creates a list of general adaptations.

Visit a garden habitat (or 2). Collect small critter in cups and bring back to the table.
How are these animals adapted to their habitats?
Teacher adds to the adaptations list.

**Closing - Final check for Understanding/Summarization:** (10 min)
Each student will choose a garden creature cut-out and a habitat.
Modify the creature to be adapted to the habitat picked. (If a student happens to pick the appropriate habitat for their creature then have them pick again). In addition to camouflage students must add at least one other adaptation to their creature.
Students share out.