

Lions, Tigers & Monsters, Oh My!

Day 4: Run or Hide?

Teacher/Parent Background:

Lions, tigers and monsters? Yes, you read that correctly; monsters! By creating a unique monster, students will apply their understanding of the needs of living things and their roles in their environments. All animals and plants (including monsters!) have internal structures and external structures that help them survive, grow and behave in their environments. Structures or behaviors that help living things survive in their ecosystems are called adaptations. Adaptations give living things a great survival advantage, giving them the best chance at living in their ecosystems.

Overview:

In this activity, students will choose their monster's adaptations, in order to ensure it can survive well in its particular ecosystem.

Related Standards:

- Develop and use models to explain that plants and animals (including humans) have internal and external structures that serve various functions that aid in growth, survival, behavior, and reproduction.

Key Terms:

- Adaptations - structures or behaviors that help living things survive in their habitats.
- Camouflage - the process of living things blending into their surroundings.

Materials List:

- Pen/pencil
- Internet access
- Computer/phone with audio
- Possible visual representation resources:
 - Colored pencils/crayons/markers
 - Internet access for images/pictures
- *Student Resources - Pages 5-6*
 - *Awesome Adaptations!*
 - *My Monster's Survival Strategies - Portfolio Page 4*

Activity Description:

- Revisit student ideas from *Day 3's: It's Dinner Time*.
 - Now that you have created your monster's food chain, did you make changes to your monster/monster's structures to make sure it is best suited to live in its ecosystem? Why or why not?
- So far, we have learned so much about your monster, including its:
 - Structures
 - Ecosystem
 - Food chain
- As we continue this project, we still need to know one more thing about your monster: How does it *best* survive in its ecosystem?
 - As you learned yesterday, your monster eats other living things and is eaten by other living things. How does your monster protect itself from being eaten? What structures or behaviors/actions can it use to stay safe?
- Structures or behaviors that help living things survive in their ecosystems are called *adaptations*. Adaptations give living things a great survival advantage, giving them the best chance at living in their ecosystems!
- Today, you are going to choose your monster's adaptations, in order to ensure it can survive well in its particular ecosystem. Some things to consider are:
 - What kind of adaptations (structures and/or behaviors) does your monster have?
 - How do these adaptations help it best survive in its ecosystem?
- To help you get started, we are going to explore a few examples of awesome adaptations!
 - Engage students in the following activity:
 - Using the images and slideshow/video links in the *Awesome Adaptations!*, identify the cheetah's and dolphin's adaptations.
 - **Note:** Guide students through the process of identifying adaptations (structures and/or behaviors), first by using the images and next, by accessing the animal slideshow/video links.
 - Access to the [cheetah](#) and [dolphin](#) links.
 - During this time, facilitate a discussion:
 - What structures does the cheetah have that help it survive in its ecosystem?
 - Cheetahs have a unique spine and long, lean legs that help them run really fast/far to hunt. Their spots and coloring help them blend into their environment's grass/dirt. They also have claws that help them catch prey.

- Yes! When you use the phrase “blending into their environment”, we call that *camouflage* in the science community. The cheetah's fur color and spots help it hide in it's grassy ecosystem.
- What behaviors does the cheetah do that help it survive in its ecosystem?
 - It sneaks-up on its prey so that it can hunt, since it can only run fast/far for a short while. Young cheetahs also learn how to hunt together.
- What structures does the Bottlenose Dolphin have that help it survive in its ecosystem?
 - Since dolphins travel in groups, they use their heads to push fish or other food up onto the shore to trap and eat easily. Their sleek bodies help dolphins swim fast to hunt prey or to out-swim something hunting it.
- What behaviors does the Bottlenose Dolphin do that help it survive in its ecosystem?
 - Dolphins will travel in groups called pods for socializing and hunting. They will also use different noises to help locate food.
- Now that we have looked at examples of animal adaptations, let's revisit your monster! Remember, today you are going to choose your monster's adaptations, in order to ensure it can survive well in its particular ecosystem. Use the following questions to guide you:
 - What kind of adaptations (structures and/or behaviors) does your monster have?
 - How do these adaptations help it best survive in its ecosystem?
 - Assist and monitor students as they begin choosing their monster's adaptations, by guiding them through the *My Monster's Survival Strategies - Portfolio Page 4*.
 - Encourage students to use colored pencils/crayons/markers to help them illustrate the adaptations.

Closure:

- After the activity has concluded, engage in a discussion with students:
 - How would you describe your monster's adaptations?

- Now that you have chosen your monster's adaptations, what changes do you want to make to your monster/monster's structures to make sure it is best suited to live in its ecosystem? Are there any changes you want to make to your ecosystem or other living things in the ecosystem?
 - Feel free to update your *Monster's Portrait* from Day 1, your *Monster's Home* from Day 2, and your *Monster's Dinner Plate* from Day 3, as wanted!

Extensions:

Watch! Crash Course Kids - [Living Things Change](#)

Student Resources

Awesome Adaptations!

Cheetah



Google Image, American Association for the Advancement of Science, Cheetahs' ears are crucial for catching dinner, 2018.

Dolphin



Google Image, The National Wildlife Federation, Ranger Rick, Dolphins, 2020.

My Monster's Survival Strategies - Portfolio Page 4

Adaptations

- Be sure to include labels and drawings of your monster's adaptations.
- Don't forget to briefly describe how the adaptations are beneficial!

Adaptation Brainstorming!

Think back to your monster's structures, ecosystem and food chain. What kind of adaptations (structures) does your monster have? Does it have long legs to run quickly? Does it have webbed feet to swim easily in water?

Think back to your monster's structures, ecosystem and food chain. What kind of adaptations (behaviors) does your monster have? Does it only come out at night because it is cooler? Does it team-up in a group to hunt easily?

How do these adaptations (structures and behaviors) help it best survive in its ecosystem?