

# Lions, Tigers & Monsters, Oh My!

## Week 4: Grades 3-5

Day	Topics	Related Standards
1	A Monstrous Task!	<p><b>Develop and use models</b> 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.</p>
2	A Place to Call Home	
3	It's Dinner Time!	
4	Run or Hide?	
5	Ladies & Gentlemen, I Present to You...	

# Lions, Tigers & Monsters, Oh My!

## Day 1: A Monsterous Task!

### 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.

### Overview:

In this activity, students will begin to imagine their unique monster by brainstorming the internal/external structures their monster possesses.

### 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:

- Structure - something that is made up of parts that are connected in a certain way
- Function - a purpose for a specific need/job
- Internal structure - structures found on the inside of living things
- External structure - structures found on the outside of living things

### Materials List:

- Pen/pencil
- Possible visual representation resources:
  - Colored pencils/crayons/markers
  - Internet access for images/pictures
- Internet access - optional for *Extensions*
- *Student Resources - Pages 5-7*
  - *Monster Project Details*
  - *Animal Match-Up Cards*
  - *My Monster's Portrait - Portfolio Page 1*

## Activity Description:

- Introduce students to the project goal:
  - As we have learned, animals and plants around us need certain things to help them survive and grow in their environments! All animals and plants have *internal structures*, or structures found inside them and *external structures*, or structures found on the outside of them, that help them carry out certain *functions* or jobs to survive.
    - For example, dogs have strong teeth to help them eat hard things and plants have roots that help them soak up water.
    - Or, another example might be that we have lungs that help us breathe on land whereas fish have gills that help them breathe in water.
  - We are soon going to engage in a week-long project to apply our knowledge and understanding of what living things need and how they survive in their environments by creating a brand-new, very unique animal...a monster!
    - Review the *Monster Project Details* with students.
    - Encourage students to ask clarifying questions about the project details.
    - Inform students that the “report” will be in the form of a portfolio that they work towards each day; at the end, each of their “portfolio pages” will build the “report”.
    - Inform students that they will have time on Day 5 to build a 3D model of their monster, as they may make changes to their monster throughout the week.
- Today, you are going to brainstorm the structures of your monster by answering the following questions:
  - What is your monster? What is its name?
  - What does it look like? What are its structures?
  - How does it move? How does it eat?
- To help you get started, we are going to explore examples of different external structures of animals!
  - Engage students in the following activity:
    - Using the *Animal Match-Up Cards*, pair-up the structures that best match their descriptions of how the structures help animals survive in their environments.
      - Duck feet: My two webbed feet help me swim and live in water-based environments.
      - Owl wings: My two wings help me move from place to place in search of shelter and food.
      - Cat paw/claws: My four paws and claws help me run and climb to escape predators and eat my food.

- Eagle beak: My sharp, hooked beak helps me catch and eat my prey with ease, sometimes in the air!
- Dog teeth: My sharp teeth help me protect myself when in danger and eat my food.
- Grasshopper mouth: My tong-like mouth helps me crunch and chew food, like leaves.
- After looking through a few examples of animal structures and functions, let's revisit your monster! Remember, today you are brainstorming the structures of your monster:
  - What is your monster? What is it's name?
  - What does it look like? What are its structures?
  - How does it move? How does it eat?
    - Assist and monitor as they begin brainstorming by guiding them through the *My Monster's Portrait - Portfolio Page 1*.
    - Encourage students to use colored pencils/crayons/markers to help them illustrate their monster.

### Closure:

- After the activity has concluded, engage in a discussion with students:
  - How would you best describe your monster?
  - What about your monster's structures help it survive?
  - What else might we need to know about your monster, as the project continues?

### Extensions:

Continue the Project!

- Encourage students to research ([example source 1](#) & [example source 2](#)) animal behaviorists or zoologists to learn more about what they do. For example, ask students to research:
  - What does an animal behaviorist/zoologist do?
  - What kind of training do they need?
  - What career opportunities do they have?

## Student Resources

### Monster Project Details

Dear Student,

As a local animal behaviorist, my team and I are interested in working with you to learn more about your newly discovered monster! My sources have informed me that you are currently in the process of identifying and observing this new creature. You have been tasked with presenting your findings to my team as soon as possible, so that we may study this monster as well. Please closely follow all the project details outlined below:

- 1. Your project portfolio must include labeled visual representations of the following:**
  - a. The main structures of the monster.
  - b. The monster's ecosystem.
  - c. The monster's food chain, including what/how it eats and what eats it.
  - d. The monster's adaptations, including behaviors and structures to keep it stays safe in its environment.
  
- 2. You may use the following resources to create visual representations:**
  - a. Drawings
  - b. Pictures/videos
  - c. 3D models (we would be interested in studying a 3D model of the monster itself!)
  
- 3. In addition to the project portfolio, you must prepare a presentation:**
  - a. Explain each part of the portfolio to a family member, friend, teacher, etc. Walk someone through your findings!
  - b. The presentation can take place through one of the following ways:
    - i. Face-to-face
    - ii. Video conferencing/recording

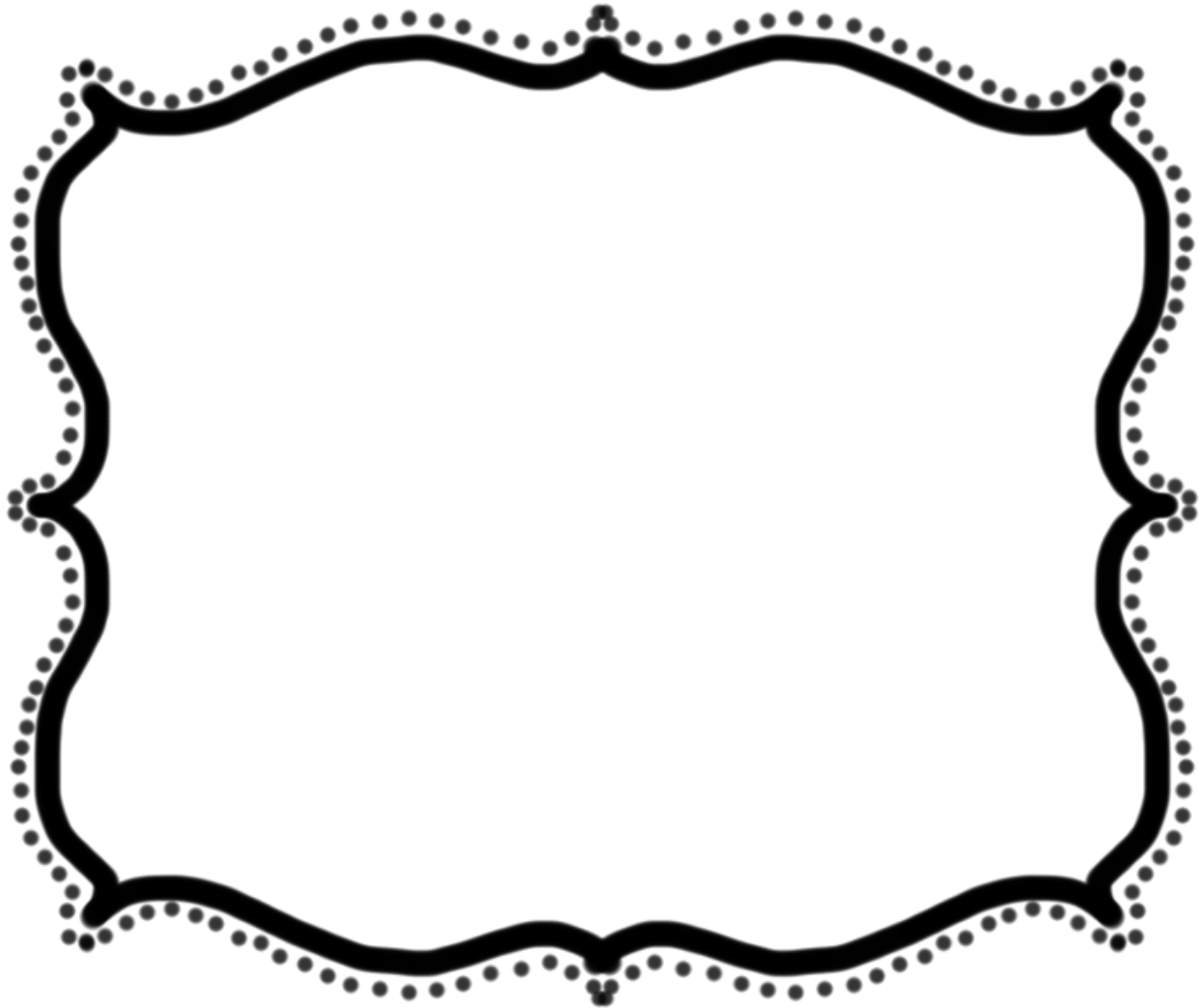
My team eagerly awaits your project's findings. Best of luck out there!

*Dr. Lilly Padton*

## Animal Match-Up Cards

Duck Feet	Owl Wings	Cat Paw/Claws
		
Eagle Beak	Dog Teeth	Grasshopper Mouth
		
<p>My two webbed feet help me swim and live in water-based environments.</p>	<p>My two wings help me move from place to place in search of shelter and food.</p>	<p>My four paws and claws help me run and climb to escape predators and eat my food.</p>
<p>My sharp, hooked beak helps me catch and eat my prey with ease, sometimes in the air!</p>	<p>My sharp teeth help me protect myself when in danger and eat my food.</p>	<p>My tong-like mouth helps me crunch and chew food, like leaves.</p>

## My Monster's Portrait - Portfolio Page 1



### Monster Brainstorming!

What do you want your monster's body to look like? Will it be hairy, scaly, fluffy? Will it be large or small?

How will your monster move around? Will it need wings, webbed feet, fins, paws/claws?

How will your monster eat? What will its face/mouth look like? Will it need a beak, sharp teeth, a straw-like or tong-like mouth?

# Lions, Tigers & Monsters, Oh My!

## Day 2: A Place to Call Home

### 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. A living thing's environment is like its home, providing shelter/protection, access to water/food and space. In science, we describe an ecosystem as an environment in which plants, animals and non-living things can be found. There are different types of ecosystems, catering to the needs of its various living things.

### Overview:

In this activity, students will create an ecosystem that best suits the needs of their monsters.

### 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:

- Ecosystem: An environment in which plants, animals and non-living things can be found.
- Non-living: Things that have never lived.

### Materials List:

- Pen/pencil
- Possible visual representation resources:
  - Colored pencils/crayons/markers
  - Internet access for images/pictures
- Internet access - optional for *Extensions*
- Computer/phone with audio - optional for *Extensions*
- *Student Resources - Pages 4-6*
  - *Freshwater Ecosystem*
  - *Desert Ecosystem*
  - *My Monster's Home - Portfolio Page 2*



## Activity Description:

- Revisit student ideas from *Day 1's: A Monsterous Task!*,
  - How would you best describe your monster?
  - What about your monster's structures help it survive?
  - What else might we need to know about your monster as the project continues?
- As we continue this project, we still need to know a few things about your monster! One of which is where your monster lives. As we have learned, plants and animals live in different environments. A living thing's environment is like its home, providing shelter/protection, access to water/food and space.
  - For example, the birds outside the house have an environment that includes trees for protection/shelter, a water dish for access to water, various seeds in the grass for food, and other trees in the neighborhood for space.
- In addition to the living things, (trees/bushes and seeds) the birds also rely on non-living things. The birds need water to survive in their environment. Water is an example of a *non-living* thing, as it has never been alive. Other examples of non-living things are conditions, for example, the temperature, wind and rainfall of an area. Just like the birds, all plants and animals need to live in an environment that includes living and non-living things. In the science community, we call this an *ecosystem*.
- Today, you are going to create your monster's ecosystem by answering the following questions:
  - Where does your monster live?
  - What other living things are in your monster's ecosystem?
  - What non-living things and conditions does your monster need in its ecosystem? (ex: cold temperature, lots of rainfall, consistent, direct sunlight, etc.)
- To help you get started, we are going to explore examples of two different types of ecosystems!
  - Engage students in the following activity:
    - Using the images in the *Freshwater Ecosystem* and *Desert Ecosystem*, identify living and non-living things.
    - Then, discuss the questions below the images.
      - Freshwater Ecosystem - possible responses may include:
        - Living things are the trees, bushes, plants, and fish.
        - Non-living things are the rocks, gravel, sunlight, and water.
        - The fish may need living things like, smaller fish/animals to eat and plants to hide in.
        - The fish may need non-living things like water, sunlight, rocks for shade and for protection.

- The fish will need a temperature that is not too hot or too cold and freshwater to live in that is not polluted.
- Desert Ecosystem - possible responses may include:
  - Living things are the cacti, trees, plants, and rabbits.
  - Non-living things are the rocks, gravel and sunlight.
  - The rabbits may need living things like plants to eat and bushes to hide in.
  - The rabbits may need non-living things like water to drink, sunlight, rocks/ground for a space to burrow inside.
  - These rabbits will need a temperature that is not too cold and not too much rainfall, as they are used to warm temperatures and dry periods.
- After looking through a few examples of ecosystems, let's revisit your monster! Remember, today you are creating its ecosystem?
  - Where does your monster live?
  - What other living things are in your monster's ecosystem?
  - What non-living things and conditions does your monster need in its ecosystem?
    - Assist and monitor students as they begin creating their ecosystems, by guiding them through the *My Monster's Home - Portfolio Page 2*.
    - Encourage students to use colored pencils/crayons/markers to help them illustrate the parts of their monster's ecosystem.

### Closure:

- After the activity has concluded, engage in a discussion with students:
  - How would you best describe your monster's ecosystem?
  - Now that you have created your monster's ecosystem, 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?
    - Feel free to update your *Monster's Portrait* from Day 1!

### Extensions:

Watch & Play! BrainPOP - [Ecosystems](#) (free access to BrainPOP at this [link](#))

## Student Resources

### Freshwater Ecosystem



Google Image, Conservation Gateway, Healthy Rivers in Colorado Assessing Freshwater Ecosystems for Conservation Outcomes, 2018.



Google Image, Synchronicity Earth, Freshwater Programme: Conserving Freshwater Fish and Ecosystems, 2020.

Circle the living things you can see. Box the non-living things you can see.

- Consider the fish. What living things do they need in their freshwater ecosystem?
- What non-living things do they need in their ecosystem? What conditions do the fish need in their ecosystem?

## Desert Ecosystem



Google Image, Arizona Important Bird Area Program, Cave Creek Ecosystem, 2011.



Google Image, KCET, Architects of The Desert: Jackrabbits and Cottontails, 2012.

Circle the living things you can see. Box the non-living things you can see.

- Consider the jack rabbits. What living things do they need in their desert ecosystem?
- What non-living things do they need in their ecosystem? What conditions do the rabbits need in their ecosystem?

## My Monster's Home - Portfolio Page 2

### Ecosystem

#### Ecosystem Brainstorming!

Where does your monster live? What is its ecosystem like? Will it be underwater, in a forest, in the arctic or somewhere else?

What other living things are in your monster's ecosystem? Will there be lots of plants and other animals? What do those plants and animals look like?

What non-living things and conditions does your monster need in its ecosystem? What kind of temperatures will it need? What kind of protection/shelter does it need?

# Lions, Tigers & Monsters, Oh My!

## Day 3: It's Dinner Time!

### 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. Living things need ways/strategies to obtain the energy they need to survive in their environments. Some living things, called consumers, directly consume other living things for food. Other living things, called producers, produce their own food using sunlight, water and gases in the surrounding air. In science, we describe the possible path energy can take through an ecosystem, between one living thing to the next, as a food chain.

### Overview:

In this activity, students will create a food chain to show the feeding relationships between their monster and other living things in their ecosystems.

### 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:

- Producers: living things that make their own food.
- Consumers: living things that eat other living things for food.
- Food chain: a path energy can take through an ecosystem, from one living thing to the next.

### Materials List:

- Pen/pencil
- Scissors
- Glue/tape
- Possible visual representation resources:
  - Colored pencils/crayons/markers
  - Internet access for images/pictures
- Internet access - optional for *Extensions*
- Computer/phone with audio - optional for *Extensions*

- *Student Resources - Pages 4-6*
  - *Food Chain Puzzle - Story & Pieces*
  - *Food Chain Puzzle - Puzzle Mat*
  - *My Monster's Dinner - Portfolio Page 3*

### Activity Description:

- Revisit student ideas from *Day 2's: A Place to Call Home*.
  - How would you now describe your monster and your monster's ecosystem?
  - What else might we need to know about your monster as the project continues?
- As we continue this project, we still need to know a few things about your monster! One of which is how your monster gets the energy it needs to survive and grow. Just like us, some living things called *consumers*, eat other living things for food.
  - For example:
    - A wolf eats a deer to get the energy it needs.
    - A rabbit eats a plant to get the energy it needs.
- Other living things call *producers*, make their own food using resources in its environment, like sunlight and water.
  - For example:
    - Plants, trees and bushes make their own food to get the energy they need.
- In science, we organize these feeding relationships using a food chain. A *food chain* shows a path energy can take through an ecosystem, from one living thing to the next.
- Today, you are going to create your monster's food chain by answering the following questions:
  - What does your monster eat in its ecosystem?
  - How does it eat? What structures help it eat?
  - What eats your monster in its ecosystem?
  - How does that living thing eat? What structures help it eat?
- To help you get started, we are going to explore an example of a food chain!
  - Engage students in the following activity:
    - Using the story and images in the *Food Chain Puzzle*, organize the feeding relationships into a food chain.
      - **Note:** Guide students through cutting the puzzle pieces and glueing/taping the pieces into the puzzle mat. Always monitor and assist students with scissors. During this time, share the following main ideas:
        - Remember, food chains show a path energy can take through an ecosystem, from one living thing to the next.

- Food chains are organized a certain way. They always start with producers, since they get their energy from sunlight and other resources. The Sun is how energy first enters the ecosystem.
  - Feel free to draw in a picture of the Sun to the left of the grass, if wanted!
- We can use arrows to show the flow of energy in an ecosystem, from one living thing to the next. The arrows represent the flow of energy.
  - You can glue/tape in the arrows below the mat or below the puzzle piece image of the living thing.
  - Feel free to draw an arrow from the Sun to the grass, to show that the grass gets energy from the Sun!
- After creating an example of a food chain, let's revisit your monster! Remember, today you are creating your monster's food chain! Focus on the following questions to guide you:
  - What does your monster eat in its ecosystem?
  - How does it eat? What structures help it eat?
  - What eats your monster in its ecosystem?
  - How does that living thing eat? What structures help it eat?
    - Assist and monitor students as they begin creating their ecosystems, by guiding them through the *My Monster's Dinner - Portfolio Page 3*.
    - Encourage students to use colored pencils/crayons/markers to help them illustrate the food chain.

### Closure:

- After the activity has concluded, engage in a discussion with students:
  - How would you describe your monster's food chain?
  - Now that you have created your monster's food chain, 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's living things?
    - Feel free to update your *Monster's Portrait* from Day 1 and your *Monster's Ecosystem* from Day 2!

### Extensions:

Watch! Crash Course Kids - [Fabulous Food Chains](#) & [Food Webs](#)



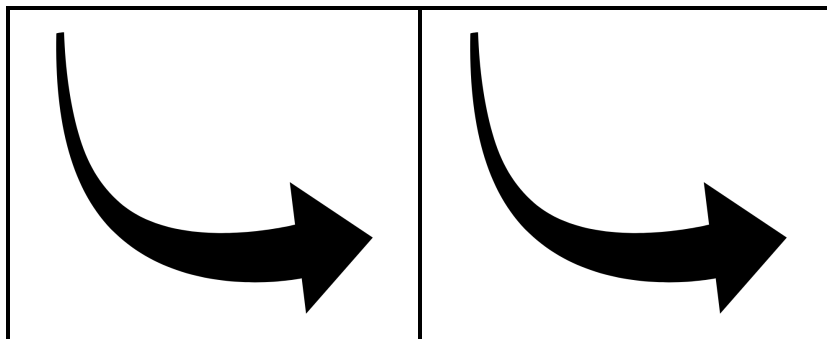
## Student Resources

### Food Chain Puzzle - Story & Pieces

#### Story:

On one sunny day in the forest, a deer awoke and was feeling very hungry! Using its rough-textured teeth, the deer grinds-up and eats lots of grass and plants. Feeling full of energy, the deer runs through the forest and comes face-to-face with a wolf! The wolf, who hasn't eaten in a long time, needs energy to survive. The wolf chases the deer and uses its sharp and strong teeth to eat the deer. Just around the trees, three, small wolf cubs join their mom and eat their first meal together.

#### Puzzle Pieces:



## Food Chain Puzzle - Puzzle Mat

--	--	--

## My Monster's Dinner - Portfolio Page 3

### Food Chain

- Be sure to include names and drawings of the living things and your monster.
- Don't forget to include arrows to show the path of energy!

### Food Chain Brainstorming!

Think back to the other living things in your monster's ecosystem. What does your monster eat in its ecosystem?

Think back to your monster's structures. How does it eat? What structures (mouth, legs/arms, etc.) help it eat?

What eats your monster in its ecosystem? How does that living thing eat? What structures (mouth, legs/arms, etc.) help it eat?

# 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?

# Lions, Tigers & Monsters, Oh My!

## Day 5: Ladies & Gentlemen, I Present to You...

### 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. In the science community, scientists and engineers communicate their findings with others to share their work and receive feedback. Just like scientists and engineers, students will also prepare a brief presentation of their monster projects to share with others.

### Overview:

In this activity, students will present their monster projects with others.

### 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.

### Materials List:

- Pen/pencil
- Possible materials for 3D model:
  - Popsicle sticks
  - Clay/Playdough
  - Feathers/fabric
  - Cardboard/wood
  - Construction paper
  - Aluminum foil
  - Markers
  - Glue/tape and scissors
- Possible video conferencing/recording resources:
  - [Google Hangouts](#)
  - [Zoom](#)
  - [iMovie](#)
  - [Flipgrid](#)
  - Record a video and email it to a friend or teacher
  - FaceTime

## Activity Description:

- Revisit student ideas from *Day 4's: Run or Hide?*
  - Now that you have chosen your monster's adaptations, did you make changes to your monster's structures, ecosystem or food chain, to make sure it is best suited to survive in its ecosystem? Why or why not?
- So far, we have learned so much about your monster, including its:
  - structures
  - ecosystem
  - food chain
  - adaptations
- As we near the end of this project, we still need to complete one more task...the presentation! Let's revisit the *Monster Project Details* to check our progress so far and to recall details of the presentation.
  - Review the *Monster Project Details* with students.
  - Remind students that the "report" will be in the form of a portfolio that they have worked towards each day; each of their "portfolio pages" will build the "report".
    - Assist students in checking their progress to ensure they have completed all details listed under Step 1 and 2.
      - **Note:** Students will have time during this activity to build a 3D model of their monster.
    - Encourage students to ask questions about the project details.
- Today, you are going to prepare a brief presentation of your monster project to share with others! You will need to walk someone else through your findings, using and sharing your portfolio pages and model.
  - Looking back through the project details, it seems like Dr. Lilly Padton's team would be interested in studying a 3D model of your monster. This would make a great addition to your presentation, helping your drawings/pictures come alive!
    - Encourage students to use simple, household materials to create a model of their monster. Some may include:
      - Popsicle sticks
      - Clay/Playdough
      - Feathers/fabric
      - Cardboard/wood
      - Construction paper
      - Aluminum foil
      - Markers
      - Glue/tape and scissors
    - Assist students as they begin creating a 3D model of their monster. Closely monitor students when using scissors.
- Now that our monster models are completed, you will present your portfolio pages and model with someone else! Scientists and engineers

not only communicate their findings with others, but they also ask for feedback. Ask your audience for feedback, asking questions like:

- What do you like?
- What do you have questions about?
- What would you change or do differently? Why?
  - Assist students in choosing an audience to share their project with. This may include a family member, friend or teacher.
  - Students may decide to present face-to-face with a family member or use video recordings/conferencing options. Some examples include:
    - Google Hangouts
    - Zoom
    - iMovie
    - Flipgrid
    - Record a video and email it to a family member, friend or teacher
    - FaceTime

### Closure:

- After the activity has concluded, engage in a discussion with students:
  - What did you enjoy the most about this project? What did you find the most challenging and why? What helped you overcome the challenge?
  - What was your audience's feedback from the presentation? What did you learn from their feedback?
  - Thinking about what scientists and engineers are and what they do, how does your work and skills you used throughout the project relate to the work and skills of scientists and engineers?

### Extensions:

#### Continue the Project!

- Encourage students to make revisions to their projects based on feedback they received from audience members.
  - Prompt students to make changes to their portfolio pages/model.
- Encourage students to formalize their presentation using tools such as:
  - Google Slides
  - Microsoft PowerPoint
  - Posters/chart paper
- Then, prompt students to re-present to their audience, sharing their improvements and asking for additional feedback.