

# GRADE 3 SCIENCE

## Environmental Changes & Animal Adaptation

### SURVIVING, GROWING, THRIVING

In this unit, your child will explore how animals and plants adapt and respond to environmental changes. They will construct arguments using evidence to explain how organisms help each other to survive, and how some habitats are better suited for some organisms than others. Your child will explore the following ideas: How do animals and plants in an ecosystem depend on each other? What happens to organisms when their environment changes? How are the plants, animals and environments from the past different from the plants, animals, and environments in our world today?

You can support your child's curiosity about the world, and the animals and plants that live here, by taking them on **Nature Walks!** Perhaps you will come across a butterfly, an organism that starts as a caterpillar and evolves into a beautiful **butterfly** in the adult stage in their life cycle.



**Butterflies go through a complete transformation throughout their life cycle, allowing them to thrive in their environment!**



### AMAZING ADAPTATIONS

Did you know that octopus have camouflage capabilities that allow them to change colors to blend in with their environment? This is an example of adaptation and a trait that supports this animal's survival in their environment. How about spiders that live underwater? Lizards that can glide from tree to tree? Lungless salamanders that breathe through their skin? The list goes on and on! Adaptations aren't just for show -- they allow animals to live in a vast variety of environments, capture prey, and avoid predators.

As part of this unit, your child will design an animal with traits that would allow them to survive in a given environment. They will discuss the behaviors and adaptations best suitable for growth and survival.

## CAREER SPOTLIGHT: MICROBIOLOGIST

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Microbiologists study microorganisms like parasites, bacteria, viruses, and fungi. They try to understand how these organisms live, grow, and interact with their environments. Knowing this information helps us understand how organisms change over time, and how they respond to their environment. They help us understand why certain animal groups share the same traits, and how and why organisms evolve over time. Your child will explore these ideas and develop their own understandings about the natural world!

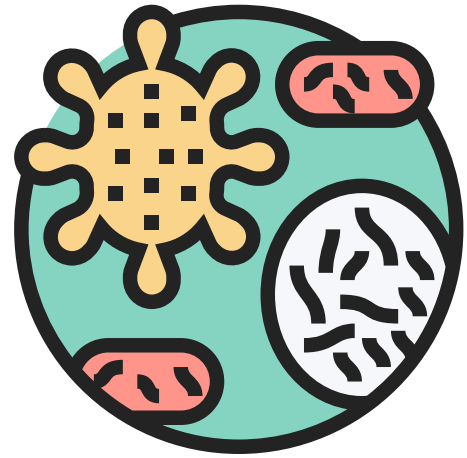
## DID YOU KNOW?

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The plants and animals in our environment today may have different traits than the plants and animals in the past. An organism's environment can directly impact their traits. In fact, environmental changes may force animals and plants to find new ways to survive and thrive in their environment. Some may need to find new sources of food, new shelter, or new reproductive partners. We can observe these amazing adaptations here in our city, and can learn more about plant and animal resilience by taking nature walks that allow us to closely observe and interact with our environment.



Prepare•Empower•Inspire



Microorganisms are too small for us to see without extra help. Microscopes allow us to take a closer look!



## READERS' CORNER

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Here are some articles to learn more about animal and plant adaptation and behaviors, available on Newsela:

**Plant and Animal Reproduction** by National Geographic Society, adapted by Newsela

**The Longest Living Animals on Earth** by Future plc, adapted by Newsela

**From Turtles to Whales Marine Animals have the same moves** by Cara Giaimo, Atlas Obscura

**Adaptación** by National Geographic Society, adapted by Newsela