

CREATE A HABITAT

Wildlife Champions at Home Science Experiment

2-LS4-1: Make observations of plants and animals to compare the diversity of life in different habitats.

4-LS1-1: Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

What is a habitat?

A habitat is a home for a plant or animal. Living things are found only in habitats that can support their specific needs. Food, water, shelter and space are the four basic needs of an animal. **Food** is fairly self-explanatory, though methods of finding and catching food differs from species to species. Animals can meet their **water** needs by drinking, absorbing or living in water. **Shelter** is anything an animal can use to stay safe from predators or weather. All animals need **space** to move around and be comfortable, though some species need more space than others. Living things have special adaptations to help them survive in their habitat and meet their needs.

An **adaptation** is something that helps a plant or animal survive in their habitat. Animals have adaptations to help them find and catch food, defend themselves, move around in their environment or find a mate. Many adaptations develop in a population or species over a long period of time, such as polar bears gaining their white fur to camouflage with the arctic tundra. Other adaptations develop quickly in individual organisms such as a human rock climber developing calluses on their hands or a raccoon learning to beg for food around a new neighborhood. Animals have two different kinds of adaptations: physical adaptations and behavioral adaptations. A **physical adaptation** is an adaptation of the physical body. Examples of physical adaptations include a porcupine's quills, the sharp teeth of a tiger or the fins of a fish. A **behavioral adaptation** is an adaptation of behaviors or habits. Examples of behavioral adaptations include orcas working together to hunt, meerkats screaming when they spot danger or a cat giving a warning hiss to a stranger.

Directions

Create a habitat for an animal using items around your home and your imagination.

Materials: One stuffed or plastic animal, one *Adaptations and Needs* page (below, optional), one pencil and various everyday items from around your home

Step 1. Find an animal! It can be stuffed, plastic or drawn on a piece of paper.



Nature at Home

Step 2. (Optional) Print the *Animal Adaptations and Needs* page (below) or write the questions onto another piece of paper. These questions will help you remember what you will need to add to your habitat later.

Step 3. What adaptations does this animal have for surviving in its environment? Think about how it finds and catches food, defends itself and moves around. Using the *Animal Adaptations and Needs* page, write down all the **physical** and **behavioral** adaptations you can think of. For extra fun, find a friend or family member to discuss these adaptations with.

Step 4. What does this animal need to survive? Think about its **food**, **water**, **shelter** and **space** needs. You may need to do some research to figure this out. Record your findings on the *Animal Adaptations and Needs* page.

Step 5. Find a space to create your animal's ideal habitat and start building! Use items from around your home or yard. Make sure your animal has everything it needs to survive. You can use your *Adaptations and Needs* page to help you remember what you need to include in your habitat. **Get creative and use your imagination!**



The example above is a **leopard shark** habitat. Leopard sharks eat fish (drawn & stuffed), use salt water to breathe (blue t-shirts), take shelter in rock piles or reefs (sock pile), and need plenty of space to swim around.

Reflection

1. What adaptation does your animal have that you wish you had?
2. What are things that you need to survive?
3. Do you need anything else to survive other than food, water, shelter and space?

Helpful Links

<https://www.youtube.com/watch?v=oBx7eDBNRM8>



Nature at Home

CREATE A HABITAT

Animal Adaptations and Needs

My animal is a _____

Some **adaptations** of my animal are...

- | | |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | 6. _____ |

My animal needs food, water, shelter and space in its habitat to survive.

What does your animal eat? _____

How does your animal drink or use water? _____

What does your animal use as shelter against weather or predators? _____

How much space does your animal need? _____



Nature at Home