

CREATE AN ANIMAL

An Integrated Pest Management Lesson

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Skill Level

Beginner (4th and 5th grades)
Intermediate (6th – 8th grades)

Educational Standards Met

- 4.LS2.2; 4.LS2.3, 6.LS2.3

Learner Outcomes

The learner will be able to:

- Create an animal and the habitat it lives in

Tag(s)

4-H Science

Success Indicator

Students are successful if they can:

- Learn about the components of a habitat
- Demonstrate their knowledge through a craft project

Time Needed – 45 minutes – 2 hours

Materials Needed

- paper (card stock or tag board are preferable)
- craft supplies such as googly eyes, pipe cleaners, tissue paper, sand, glitter, colored paper, raffia, feathers, glue, markers, scissors

Author(s)

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Introduction to Content

All living things have roles in the environment. Depending on their roles in food chains and food webs, living things can be producers, consumers, predators, prey or decomposers. Each of these roles is important for food webs to function. In this lesson, students will learn about habitats pests live in.

Terms and Concepts

Habitat – where an organism has everything it needs to survive

Habitats vary tremendously in terms of size and appearance. Regardless of size or location, a **habitat** needs to include important things such as food, water, shelter, protection, light and air.

Introduction to Methodology

Students use their knowledge of pests and their habitats to create a pest and the habitat it lives in. Students will discuss what makes up a habitat. Then they will create a pest and the habitat it lives in using craft supplies provided. Older students may be instructed to write a story with more details.

Setting the Stage

Ask, “What is a **habitat**?” Let students reply. Then say, “a **habitat** is a place where a living thing lives and gets what it needs to survive. What needs to be in a **habitat**?”

Responses may include food, water, shelter, air, light, space, temperature, humidity, protection from predators, etc. Based on their responses, discuss why each of these things is needed for living things to survive.

Remind them of the Friend or Foe Lesson. Ask them what is a pest? Remind them that a pest is any living thing (plant or animal) that bothers or annoys us, damages things we value, occurs where we do not want it, or causes or spreads disease.

Say, “A **habitat** provides an organism with everything to survive. **Habitats** vary tremendously in terms of size and appearance. Regardless of size or location, a **habitat** needs to include important things such as food, water, shelter, protection, light and air. Pests also need these things. We can use the knowledge of what specific pests need in their **habitat** to control them. Once we know what they get from a **habitat**, we can take things away or modify the habitat. In this activity you will use your knowledge of **habitats** to create a pest animal and its **habitat**.”

Experience

Say, “Your task is to create an animal and its **habitat** out of the art supplies we have provided. Keep in mind all the things needed in a habitat. The animal should also fit into the **habitat**. For example, if you create a hot pink animal, then a part of the **habitat** may need to be hot pink to provide protection for the animal from predators.”

Instruct students to write in the top corner of the paper their name, name of their pest animal, where it lives, what it eats, what eats it (its predator) and why it is a pest. Encourage the students to be creative and descriptive. This does not need to be an existing animal. See the student example.

Strategies to Increase Student Engagement

- Be sure that all students have an opportunity to answer questions about their thoughts on pests.
- Remind students what the components are of a habitat for any animal.

Teacher Notes

Remind students of the essential elements of a **habitat**: food, water, shelter, air, light, space, temperature, humidity and protection from predators.

Share

Students should describe their pest (name, where it lives, what it eats, what eats it and why it is considered a pest).

Process

Ask, “How many people created the habitat first? How many people created the animal first? What did you need to think about when you created the habitat?”

Generalize

Then say, “All animals require a specific habitat to survive. Habitats can vary tremendously. On earth, animals require food, water, shelter, protection, light and air.”

Apply

Ask, “Who can remind me of one thing that needs to be in a habitat? What would happen to your animal if we took away its food? Water? Shelter? Protection? Create the natural enemy of the pest.”

A major part of Integrated Pest Management (IPM) is modifying the habitat so the pest can no longer get what it needs there. Ask students to share with the class what they can do to the habitat they created so that the animal can't live there anymore. Some solutions include taking away the sources of water and food, changing the temperature, humidity, light, air, or protection, or adding more natural enemies. These are all things we do in IPM with real pests.

In collaboration with language arts teachers, you may have students write a story about their animal and its habitat. The older students can either read their story to the class or hang their story on a bulletin board.

Supplemental Information

Educational Standards Met

Ecosystems: Interactions, Energy, and Dynamics

4.LS2.2 Develop models of terrestrial and aquatic food chains to describe the movement of energy among producers, herbivores, carnivores, omnivores, and decomposers.

4.LS2.3 Using information about the roles of organisms (producers, consumers, decomposers), evaluate how those roles in food chains are interconnected in a food web, and communicate how the organisms are continuously able to meet their needs in a stable food web.

6.LS2.3 Draw conclusions about the transfer of energy through a food web and energy pyramid in an ecosystem.

TIPPS *Life Skills*

4th Grade

- Follow instructions.
(Heart)

5th Grade

- As part of a group, identify and agree on a common task (set a goal)
(Hands)

References

Jenkins, Erica B. "Exploring Urban Integrated Pest Management: Activities and Resources for Teaching K-6." October 2001, Michigan State University.

Supplemental Information

Example

The Black, Red-eyed Dragon, by Dezi C.
4th grade, Emerson Elementary, Saginaw,
Michigan

Name: Black, Red-eyed Dragon

Where it lives: Planet Mercury

What it eats: Meat of baby grunts

What eats it: Adult grunts

The black, red-eyed dragon is like a beast. Its habitat is on planet Mercury. It lives on a volcano. Its skin is like an egg. The skin protects its body.

The black, red-eyed dragon eats baby grunts because that is all there is to eat. Its home is a cave. The black, red-eyed dragon drinks the lava from the volcanoes. Grunts eat black, red-eyed dragons when they are weak. If a grunt tries to eat it when it's healthy, it will fly away.

The black, red-eyed dragon lives for 50 years then it lays eggs. The eggs hatch in eight months. When it's two, it grows spikes on its back. At age 10 its eyes turn red. At age 20, it grows wings and lives on.





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