

Grade 2: Science

Habitats

This resource can be used to plan an individual science lesson or a unit of study. The suggested activities can be used in the order presented here, or they can be adapted for your lesson plan and classroom.

CURRICULUM OBJECTIVES

VIDEO OUTCOMES

Science / Interdependent Relationships in Ecosystems

Classify living organisms according to variations in specific physical features and describe how those features may provide an advantage for survival in different environments.

TEACHER PACK OUTCOMES

Science / Interdependent Relationships in Ecosystems

Classify living organisms according to variations in specific physical features and describe how those features may provide an advantage for survival in different environments.

Science / Science and Engineering Practices

Ask questions based on observations to find more information about the natural world.

Develop and/or use a model to represent amounts, relationships, relative scales (bigger, smaller), and/or patterns in the natural and designed world(s).

Make observations (firsthand or from media) and/or measurements to collect data that can be used to make comparisons.

Use and share pictures, drawings, and/or writings of observations.

English Language Arts / Writing

Write to inform or explain, using details to show understanding of the topic.

Activity

Resources

Outcomes

Activity 1: Populating Habitats

Timeframe: 1 hour

Lesson overview: Students will be introduced to a variety of habitats, and brainstorm animals native to each habitat type.

Watch the ClickView Miniclip *Habitats*.

Print out pictures of several habitats (e.g. rainforest, Arctic, desert, grasslands, ocean, alpine) and ask students to brainstorm animals that might occupy each type.

Divide students into six groups and provide each one with a habitat. Students should use a poster size piece of paper/cardboard to draw their chosen habitat (you might provide them with the pictures you printed for assistance), and draw animals that fit into this habitat on separate pieces of paper.

They should then cut these animals out and paste it into their habitat to populate it. You might want to put these up in your classroom!

Smartboard / Digital display

ClickView Miniclip - *Habitats*

Google Images

Printouts of habitats

Students will:

- Classify living organisms according to variations in specific physical features and describe how those features may provide an advantage for survival in different environments.

Activity

Resources

Outcomes

Activity 2: Wild Thing

Timeframe: 40 minutes (allocate additional time for extension activity, if desired)

Lesson overview: Students will label the parts of an animal introduced in a narrative story, and compare its form and characteristics to their own.

Choose a book about an animal. Some titles you might read include:

- *King Kong* by Anthony Browne
- *One Hungry Spider* by Jeannie Baker
- *Home in the Sky* by Jeannie Baker

After you have read the book, draw (or scan if you are able to) a picture of the animal character and put it up on your whiteboard. Ask students to observe and label parts of the animal (head, arms, feet, ears, tail, hair/fur, claws, etc.) – they might come up write the parts they identify on the whiteboard.

In pairs, ask students to discuss the differences and similarities between what that animal looks like, and what they look like. Some prompting questions might include: Does the animal have the same amount of arms/legs? Does their hair cover their whole body? Do they have feathers? Each pair should share their conclusions with the class.

Narrative story about an animal character

Students will:

- Classify living organisms according to variations in specific physical features and describe how those features may provide an advantage for survival in different environments.
- Ask questions based on observations to find more information about the natural world.

Activity

Resources

Outcomes

Activity 3: Write a Class Story About an Animal

Timeframe: 1 hour

Lesson overview: Students will write a narrative story about an animal in its natural habitat.

Reread the book you chose for the previous lesson.

Following this, ask students:

- Is the animal in its normal habitat? If yes, do you think it enjoys living there? If no, how do you think it feels being in a different environment? Ask students to explain their answers.
- How important to do you think the setting is to the story? Would the story change if it happened elsewhere?

Ask students to recall different animals and habitats and write these in two columns on the board. As a class, choose one animal and one habitat that you think might be an interesting combination for a story.

Introduce/recap the narrative structure, and jointly write an introduction for your story. Ask students what events might complicate this story, and write some suggestions on the board. You might then ask students to continue to write this story independently, or continue to write this story as a joint exercise. Students independently illustrate their story.

Narrative story about an animal character

Writing books

Students will:

- Ask questions based on observations to find more information about the natural world.
- Write to inform or explain, using details to show understanding of the topic.

Activity

Resources

Outcomes

Activity 4: Your School is a Habitat

Timeframe: 1.5 hours

Lesson overview: Students will investigate, photograph, and graph the animals living around their school.

In the classroom, discuss:

- What animals might you find at school?
- Are they typically big animals or small animals?
- What factors might affect the types of animals you can find (e.g. availability of food, urban/rural setting, etc.)?

Give groups of four or five students a camera or a tablet, and explore your school's playground together, to see if you can find an animal in its habitat. Students should take photos of these when encountered.

When you return to class, compile a list of the different animals students discovered. You should tally the amount of times each animal was found and jointly construct a picture graph of this information. Students should copy this into their notebooks.

When time permits, print out the photos that were taken by students and display them in the classroom.

Tablets or camera

Maths notebooks

Students will:

- Classify living organisms according to variations in specific physical features and describe how those features may provide an advantage for survival in different environments.
- Ask questions based on observations to find more information about the natural world.
- Make observations (firsthand or from media) and/or measurements to collect data that can be used to make comparisons.
- Use and share pictures, drawings, and/or writings of observations.

Activity

Resources

Outcomes

Activity 5: Camouflage

Timeframe: 1 hour

Lesson overview: Students will explore the nature and function of camouflage in a variety of animals, and the relationship between habitats and camouflage.

Rewatch the ClickView Miniclip *Habitats*. Draw students' attention to the camel and brainstorm some of the traits it possesses that helps it survive in the desert.

Show your students images of Arctic wolves, polar bears, harp seals, and Arctic foxes.

Discuss:

- What do these animals have in common?
- Why do you think there are so many white animals in the Arctic? How do you think it helps them survive?

Give groups of four or five students some images of Arctic animals and sheet of green, yellow, blue, dark brown and white paper. Explain to students that each colored piece of paper represents a different habitat: green is a grassland, yellow is a desert, blue is an ocean, dark brown is a forest, and white is the Arctic.

Choose one color at a time, and ask each group to position these animals on their piece of paper. Ask students how easy it would be to spot these Arctic animals in each habitat. Encourage students to arrive at the conclusion that the Arctic is where these animals are most camouflaged and, thus, likely to thrive. Looking at the colored pieces of paper again, ask students if they can think of animals that live in these habitats and match their color (e.g. desert – camel, ocean – blue whale, brown – bear).

Ask students:

- Do animals always match the color of their habitats? Why not? Relate this conversation to the fact that camouflage is only one type of advantage a species might have.

Smartboard / Digital display

ClickView Miniclip - *Habitats*

Colored paper (brown, blue, yellow, green, white)

Students will:

- Classify living organisms according to variations in specific physical features and describe how those features may provide an advantage for survival in different environments.
- Ask questions based on observations to find more information about the natural world.

Activity

Resources

Outcomes

Activity 6: Habitat Web

Timeframe: 1 hour

Lesson overview: Students will explore the interconnected nature of habitats and food webs by engaging in a class case study of the impact of habitat loss on red squirrels. They will then participate in a class inquiry of the interconnections between other animals in a chosen habitat.

Explain to students that the habitat an animal lives in is important to preserve, because it contains the food and shelter it needs to survive. Using red squirrels as an example, explain to students that a squirrel needs to live in or near forests for food and shelter. Discuss what might happen if forests were being cut down. How might this affect a population of red squirrels?

Explain to students that these sorts of relationships need to be maintained for animals to survive.

As a class, choose a habitat and determine examples of the following that can be found in this habitat:

- Two large mammals
- Three small mammals
- Five plants
- Three birds
- Three insects
- Three inanimate parts of the habitat (e.g. mountains, snow, soil)

Write the names of these animals/plants/objects on individual cards and explore how these items are related to one another. Some prompting questions you might like to ask include:

- Is there a small mammal that is eaten by a larger mammal?
- Does one of the smaller mammals eat one the plants?
- How do the inanimate objects affect which types of plants grow?

Draw lines or pin strings between the cards to show these connections.

Introduce the Sun as a part of your habitat web and ask students what role it has to play. Explain that the Sun is required for plants to grow and is thus a crucial part of any habitat.

Cards

String (optional)

Students will:

- Classify living organisms according to variations in specific physical features and describe how those features may provide an advantage for survival in different environments.
- Develop and/or use a model to represent amounts, relationships, relative scales (bigger, smaller), and/or patterns in the natural and designed world(s).

Activity

Resources

Outcomes

Activity 7: Interactive Video

Timeframe: 15 minutes

Lesson overview: Students will watch the ClickView Miniclip and answer the interactive questions to show their understanding of animal habitats.

ClickView has created an interactive video lesson to accompany the Miniclip *Habitats*. It includes a range of question types such as multiple choice, missing word, and true or false.

You can assign the interactive video to your students to do at any suitable point in your unit. Alternatively, you can edit the premade questions to suit your students or create your own interactive video.

To share the interactive video with your students, follow these steps:

1. Search for the Miniclip *Habitats* that has the interactive logo (**Interactive**).
2. Click to view the video.
3. Click on the "Interactive videos" tab beneath the video.
4. Click the "Print as Worksheet" OR "Save to Workspace" button on the interactive video.
5. If you click "Save to Workspace", you can either click "Share with your students" or access it via your Workspace.
 - If you choose "Share with your students", copy the link and send it to your students.
 - Otherwise go to your Workspace, select the "Interactive videos" folder, and click "Share" to access the link and send to students.

Students can watch and answer the interactive questions either in class or at home. Their results will be collated for you to view from your Workspace.

The following guides are available if you require assistance:

[Creating an interactive video](http://www.clickview.com.au/support/en-us/articles/115005656528-PB202)

www.clickview.com.au/support/en-us/articles/115005656528-PB202

[How do I share an interactive video?](http://www.clickview.com.au/support/en-us/articles/115005496667-PB208)

www.clickview.com.au/support/en-us/articles/115005496667-PB208

[How do I make my interactive video private/public?](http://www.clickview.com.au/support/en-us/articles/115005494867-PB206)

www.clickview.com.au/support/en-us/articles/115005494867-PB206

Smartboard / Digital display or 1:1 device with Internet connection

Interactive video for the ClickView Miniclip – *Habitats*

Assessment