

This week students will:

1. Learn about designing questions for audiences. What is the most engaging way to present information about a species?
2. Learn about different animals and their habitats.
3. Learn about their local area.
4. Look at what is required for an animal to live in a certain area.

Learning outcomes

Year 3

Science ACSSU044

Digital Technologies ACTDIK007

Year 4

Geography ACHGK022, ACHGK024

Digital Technologies ACTDIK007

Year 5

Geography ACHGK026

Science ACSSU043

Year 6

Geography ACHGS031

Science ACSSU094

The Game

Players in Habitat the Game are rewarded 'in game' for their real world behavior and for visiting nature locations. Players earn points through games in the app and by completing real-life "missions," like recycling or checking in at natural locations such as national parks and other iconic sites around the world.

Players collect unique virtual pins of the animals at each of the sites. These pins can be traded with other players around the world. There are also multiple choice questions about each of the pins.

There are now 150 virtual pins for players to collect in the game in 13 different countries. The players determine the "value" of the pins through anonymous online trades.

Materials required:

1. A tablet or smartphone.
2. Habitat the Game installed on the device.
3. Print Appendix 5 Habitat the Game pins worksheet.
4. If you would like the Habitat the Game team to put a local pin in your area that the kids can collect email us on info@Habitat the Game.com

Activities:

1. Look through the Habitat the Game pins (see worksheet) – ask students to pick three animals, with at least one from Australia, Asia and either Africa, South America, Europe or North America. Research the animal and create three multiple-choice questions for the pin they have chosen. Compare these questions to the ones that are used in the game. Discuss both sets of questions.
2. Collect a pin in your area (teacher needs to contact Habitat the Game team to place pin.) Visit the area. Identify the flora and fauna in the area. Look at the animal that is in your area. Identify what is unique about the area and makes it a good spot for that animal to live.

Week 3 — Animals and their Habitats

Every organism has a unique ecosystem within which it lives. This ecosystem is its natural habitat. This is where the basic needs of the organism to survive are met: food, water, shelter from the weather and place to breed its young. All organisms need to adapt to their habitat to be able to survive.

This means adapting to be able to survive the climatic conditions of the ecosystem, predators, and other species that compete for the same food and space. An adaptation is a modification or change in the organism's body or behavior that helps it to survive.

An animal may adapt to its habitat in different ways. It may be a physical or structural adaptation, just as the limbs of birds have modified into wings or the way the cheetah is shaped for running at a fast speed.

It may be in the way the body works in circulating and respiration, for instance the gills that fish have enable them to breathe in water. Or it may be the way the animal behaves whether it is hunting for food, or running fast to avoid predators or migrating to other places for food or survival. To know more about different types of adaptations visit the link.

An animal's environment consists of many different things. The climate, the kinds of food plants that grow in it, other animals that may be predators or competitors- the animal must learn to adapt to each of these factors in order to survive. With increasing population growth and human activity that disturbs the natural habitat, animals must learn to adapt to these kind of threats as well.

Animals in the wild can only live in places they are adapted to. They must have the right kind of habitat where they can find the food and space they need. Visit the link for a brief overview of how animals adapt to their habitat.

Did you know that animals camouflage themselves so they can adapt to their environment? Adaptation can protect animals from predators or from harsh weather. Many birds can hide in the tall grass and weeds and insects can change their colour to blend into the surroundings. This makes it difficult for predators to seek them out for food.

Some animals, like the apple snail, can survive in different ecosystems- from swamps, ditches and ponds to lakes and rivers. It has a lung/gills combination that reflects its adaptation to habitats with oxygen poor water. This is often the case in swamps and shallow waters. To know more about how the apple snail can survive in different habitats visit the link.

In the harsh cold climate of Alaska, the animals have learnt to adapt to the weather by storing food in their body and protecting themselves from the cold with thick furs. Human inhabitants in Alaska have also learnt to cope with the environment by building shelters that insulate and hold the heat, and yet do not allow the structure to melt. To know more about this go to this website.

Reference: http://wwf.panda.org/about_our_earth/teacher_resources/webfieldtrips/hab_adaptation/