Hands on Activity 1 Teachers' Notes Adaptation

Main Objective:

1. To realise that all living things in a habitat are perfectly adapted to live, through the study of living things in their environment.

Introduction:

Share the Learning Objective and key question card 3 with the children. This activity is best done in pairs or small groups with a plenary to gather ideas. Give out the pupil activity sheet.

Together as a class, look at picture 1. It is a photo of a king penguin. Ask the following questions to the class as an example of how they should complete the activity:

- Q. Can this bird fly?
- Q. Where does it hunt for its food?
- Q. How has its body adapted so that it can hunt in water?
- Q. Look at its beak. How is its shape useful for catching fish?
- Q. How have its wings changed? Why?
- Q. Look at its body shape. How does this help it in the water?
- Q. Would this bird survive well in a jungle?

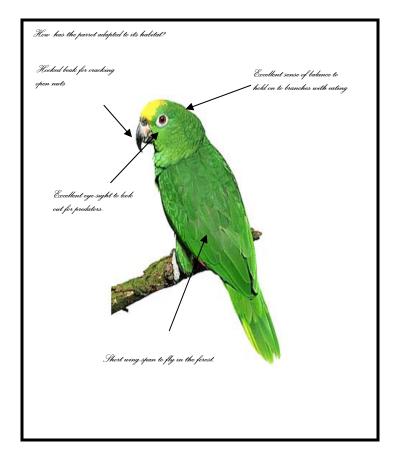
Development

This activity focuses on birds. Using the photo prompt, the children should be encouraged to ask question, like in the introduction, about how each bird's body is perfectly adapted to live where it does. The children should be encouraged to make notes or annotations about each bird, focusing on its beak shape, feet and legs, body shape and discuss what type of habitat each bird would live in, what type of food does each bird eat and where can it find it?

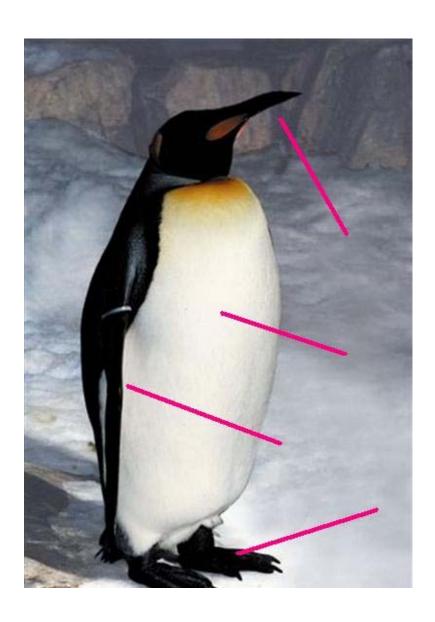
Plenary

Gather the children's ideas about each bird. As a homework activity, the children could choose one bird and create a poster detailing how their chosen bird is adapted to its habitat.

E.g.

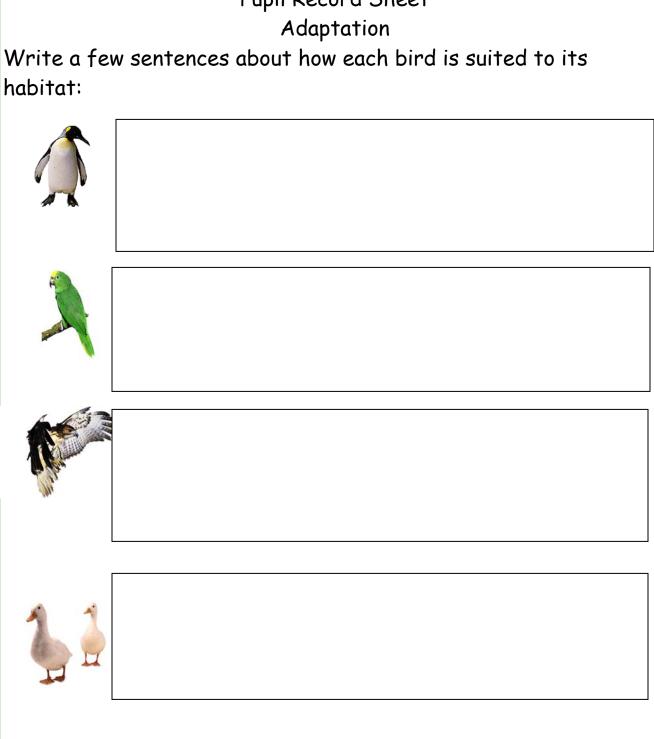


How has the King Penguin adapted to its environment?



King Penguin

Hands on Activity 1 Pupil Record Sheet



Hand's on Activity 2 Teachers' Notes Using Branched Keys

Main Objective:

1. To use branched keys to identify living things in a habitat.

Introduction:

Display the learning objective and the key question on the board and share with the children.

Project the brached key on the board. Use the small organism cards and picking one randomly, walk the children through the branched key asking and answer each question with the children. The children should decide which question to ask next until the organism has identified.

Development:

In pairs or small groups the children should use their own branched key and cards to identify each organism, writing its name on their record sheet.

Plenary:

Gather the answers from each group until all the organisms have been correctly identified.

Hands on Activity 3 Interdependence Food Chains and Food Webs Teachers' Notes

Main Objectives:

To show an understanding of the relationships between living things in a habitat;

To construct food chains and food webs to represent the feeding relationships in a local habitat.

Introduction:

As the children what they remember from previous work about the feeding of animals and plants and ask them to suggest other reasons why animals need plants and why plants might need animals e.g. for food, for shelter, shade, provide fertilizer, help disperse seeds.

Inform the children that we are going to look at the feeding relationships between living things. Use the living things fact sheet to help the children construct a food chain (emphasise that the arrow means "eaten by"). Demonstrate how to use the fact sheet to do this. Children now construct their own food chain using the jungle habitat fact sheet. Label each producer, consumer, predator and prey.

Development

Begin by gathering some of the answers the children have found and writing them on the board. Explain that in a habitat, animals tend to eat more than one type of food. Using the original food chain, elicit from the children what other living things each organism eats. Begin to build up the food web.

These websites have some great ideas for environmental games and are useful for getting the point across that we as humans are stewards of our planet, its habitats and its species:

www.environment-agency.gov.uk/fun/

www.kew.org/education/wildlifezone/4_env_games.pdf

Plenary

Recap what the children have learned by presenting them with a food web from a jungle habitat. Can they identify any food chains? What would happen if the number of beetles decreased? What would happen if the number of forest eagles increased? It is important that the children see the delicate relationship that exists in all habitats.