



Seeds and Fruits

Adaptation



Curriculum links

Science

Unit 2B Plants and animals in the local environment

Unit 3B Helping plants grow well

Unit 5B Life cycles

Unit 6A Interdependence and adaptation

Geography

Unit 8 Improving the environment

Mathematics

Block C: Handling data and measures

Art and Design

Unit 2B Mother Nature, designer

Citizenship

Unit 1 Taking part – developing skills of communication and participation

Learning objective

To begin to understand how adaptation is important to the survival of species.

Introduction

The pack is suitable for use with around 30 participants divided into up to 5 groups. In the pack there are:

Instructions showing how to use the activities.

Materials and equipment for 5 groups and their leaders.

A risk assessment for the site and the activities in the pack.

A checklist of contents.

Activities for Key Stage 1:

- Squirrel hunt
- Berry squishing

Activities for Key Stage 2:

- Squirrel hunt
- Berry squishing
- Best beak

Using the site

Please begin your visit with a talk about using the site.

Wildlife sites are home to many animals, plants and insects and you'll meet some of them on your visit, please treat them with respect. Human visitors who come to enjoy the wildlife too, so please keep the site looking good. When you have completed an activity, please try to put everything back as you found it, e.g. turn any dead wood you have looked underneath back over or scatter the leaves you picked discretely.

If there site has a pond and wet areas, make sure you know where these areas are and if you are using any of them, that participants are supervised.

Checklist

Please ensure that everything is there before you return the pack and report any losses.

Folder A - Berry Squishing

Plastic bags

Clipboards

Spoons

Tweezers

Clothes pegs

Small flat stones

Chopsticks

Pipe cleaners

Rice

Raisins

Playdough

Bird seed

Pencils

Folder B - Best beak worksheets

Folder C - Matching worksheets

Key



Where



Resources



Equipment



Instructions

Squirrel Hunt



Any wooded area



Plants have different strategies for spreading their seeds to grow more plants in new places. Some plants use animals and birds to help them.

Some animals hide seeds to eat later and then forget where they have hidden some of them, the seeds then grow in a new place. What kinds of animals do this? What kind of seeds do they hide?

Find 5 nuts (acorns or hazel nuts). Pretend you are a squirrel stocking up for winter and hide the nuts. When you are finished with the other activities, return to the area and see if you can remember where you hid the nuts and how many you can find.

Berry Squishing



Any wooded area



Fruit and seeds sheets are in Folder A, together with recording sheets.



Plastic freezer bags



If you would like to use the data from this activity later to work out averages and produce histograms, start by dividing into teams of 4 or 5. Go on a berry hunt. Collect berries you find in separate plastic bags. Use the fruit and seed sheet to identify the berries and, if appropriate, write the name on the bag. Squish berries in the plastic bag to see what's inside, seeds? (Some berries might be tough, you may need to use a stone to squash them, watch your fingers!) How many seeds are inside the berry? What do they look like? Anything else inside? If you plan to use the data later each group can use the recording sheets to record what is inside each type of berry.

Best Beak



Any space, doesn't have to be outdoors.



Best Beak worksheets in Folder B, matching worksheets in Folder C



Bird 'food': pipe cleaners, rice, raisins, playdough, bird seed

Bird 'beaks': chopsticks, spoons, tweezers, clothes pegs, small flat stones
pencils, clipboards



Different kinds of birds eat different kinds of foods, because they are specialised. Their beaks have adapted to be the best shape for picking up the food they like best and is most available to them. In this experiment we predict which 'beak' will be best for each 'food' type.

Start by laying out the bird 'food' in 5 locations, then divide the class into 5 groups. Each group will have a set of 'beaks'. At each location, the group predicts which 'beak' they think will work best for that food, then tests the 'beaks' to see if their prediction is correct, recording on the worksheet as they go. The groups rotate around the locations until they have completed the experiment with all the 'food' types.

Based on the results of the experiment, you can finish by matching the beak to the food on the final worksheet in Folder C.