

IN THE CLASSROOM

CRAZY CATEGORIES



KSI-2

KS3

Recommended for

KS2–KS3 (Science)

Learning objectives

- Reflect on the biodiversity observed at Osborne.
- Consider the reasons why the biodiversity at Osborne has developed in this way.
- Explore and reflect on your local biodiversity.

Time to complete

Approx. 60 minutes



A photograph showing a red squirrel, a species of animal found on the Isle of Wight, but is rare in other parts of the UK.

SUMMARY

One way scientists make sense of the natural world is to categorise animals, insects and plants in order to see similarities and differences. Ask students, as a class, to discuss the biodiversity they witnessed at Osborne. Students should list all of the animals that they saw, or witnessed evidence of, referring back to their booklets from their visit. Then, in groups of four to six, they can work scientifically to consider the differences and similarities between the creatures they observed at Osborne. They should categorise these creatures in as many different ways as they can and feed back to the class what they have noticed.

CREATING CATEGORIES

Some categories to focus on might be:

- Type of creature: such as mammal, bird or insect.
- Does it have fur, feathers or scales?
- Location creature was spotted in.
- Colour of creature.
- Number of legs.

Encourage the groups to use their imagination to think of other ways to group together the creatures and discuss how these groupings may help us to understand them better.

Ask the students to make a list of each category and which creatures fit into it.

After they have done this, invite the students to share their categories and which animals they have selected. As a class, discuss and describe any unusual categories the groups may have created. Students may have categories that overlap, or notice that some creatures fit into multiple categories. Ask your students to use this information to create a Venn diagram to reflect this.

MORE LEARNING IDEAS

Students can use what they have noticed and recorded in the activity to create a classification grid investigating the different animals that live at Osborne.

CRAZY CATEGORIES

TEACHERS' NOTES

The class should work collectively to list all of the animals, birds and insects they observed at Osborne, referring to pages 12, 13 and 18 to refresh their memories if needed. As a class, they may find it helpful to define terms such as 'common', 'uncommon' and 'rare'. They might discuss if the creatures they saw could be described as common, uncommon or rare based on how many students noticed each one. As a class, discuss these findings, and make the point that a class is a small sample size, which may affect their findings. To get more accurate information, they would need a larger sample size.

Divide the class into smaller groups. Ask them to organise the creatures into different categories.

Some categories to focus on might be:

- Type of creature: such as mammal, bird or insect. Those wanting an extra challenge could break these down further, by investigating the different species they noticed.
- Does it have fur, feathers or scales? Please note: some insects may look like they have hair or fur, but this is different to hair and fur found on mammals.
- Location creature was spotted in: as a way to investigate shared habitats.
- Colour of creature: as a way to investigate ways creatures have adapted to their surroundings – did they have natural camouflage to avoid predators? Please note: there can be differences in colourisation between male and female creatures; male birds, for example, have much brighter plumage than females.
- Number of legs: this can be used to start several discussions. Can squirrels, for example, be described as having two legs or four? What do we understand insects to be? Insects have six legs; arachnids have eight legs; centipedes and millipedes are arthropods, which means they have many legs with joints. Insects and arachnids can also be described as arthropods.