



How dogs have changed *over time*

For 7-11 year olds

Science | PSHE | Citizenship

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Teacher's notes



About this activity

This activity can be used as part of a Science topic about selective breeding within 'animals' and 'evolution'. It could also be linked to a PSHE/Citizenship activity exploring rights and responsibilities. It explores the differences between four dog breeds in the past and the same breeds as we know them today and encourages pupils to consider whether selective breeding is always a good thing.

Age range: 7-11 years

Subjects: Science, PSHE and Citizenship



You will need:

-  'How have dogs changed over time?' worksheet for each pupil to record comparisons of dogs from the past and present
-  Optional PowerPoint slides and explanatory notes for whole class discussion

Optional extension activities:

-  'Impact of selective breeding' worksheet for each pupil

How to use this activity:

-  Individually - ask pupils to complete the worksheet, then as a class, explore and discuss the answers in more detail.
-  As a whole class – use the PowerPoint slides to compare images of different dog breeds; one from the past and one from the present and identify differences in the dog's appearance.





Teacher's notes

Activity 1: How have dogs changed over time?

As a whole class or individually using the 'How have dogs changed over time?' worksheet, pupils will compare two images of a dog breed; one from the past and one from the present and identify differences in the dog's appearance.

The changes in these pictures are a result of selective breeding. Selective breeding is when we choose the parents (mother and father) to breed together in the hope that they will have offspring (puppies) with the features that you want. Over thousands of years, we have created dogs to suit our human needs and preferences, by selectively choosing the parents. Dogs continue to evolve all the time. We are likely to see more changes in the appearance, size and health of dogs for as long as humans keep breeding them selectively.

Look at the pictures below of dog. The first picture is the breed of dog in the past, and the second is how that breed looks today. List the differences you see in each of the dogs' appearance.

-  The Basset Hound today has a droopier face with more wrinkles and folds of skin. Their bellies are much lower to the ground, and their rear legs are shorter. They have excessive skin and large floppy ears.
-  The English Bull Terrier has a dome-shaped head and triangle eyes. They are also heavier and more thick body.
-  The Pug has a much shorter, flatter face. They also have more wrinkles, skin folds and a double curved tail.
-  The Sharpei today has more wrinkles and skin folds, especially around the face. The ears are smaller, and the dog is heavier and thicker.

Teacher's notes

After identifying the differences in these dogs' appearances, it is important to discuss how these are in fact negative changes which have had a significant impact on the health and happiness of dogs. For example, shorter/flatter faces make it more difficult for a dog to breathe and excessive skin can cause skin problems/infections. This has happened due to humans breeding dogs in a rapid and sometimes irresponsible way.

The appearance of these dogs is often considered cute, but it is important to how remember that breeding them to look this way is irresponsible and it does not consider how overall health and wellbeing will be affected.

Activity 2: Impact of selective breeding

This optional worksheet includes questions about the impact of selective breeding on these dogs and encourages pupils to consider the negative implications.

For this task, children's answers may vary. For example, both the Basset Hound and the Pug could have problems walking. Therefore it is recommended that pupils share and discuss their answers as a whole class.



How have dogs changed over time?

Look at the pictures below of each dog. The first picture is the breed of dog in the past, and the second is how that breed looks today. List the differences you see in each of the dogs' appearance.

Basset Hound



Past



Present

English Bull Terrier



Past



Present

Pug



Sharpei



Impact of selective breeding

Looking at the pictures of the dogs today and your discussions about the differences, answer these questions:

1. Which of the dogs do you think is more likely to have problems with their health? Why?

2. Which of the dogs may struggle more when they are walking? Why?

3. Which of these dogs may have problems with their skin and eyesight? Why?

4. Humans breed dogs to look a certain way for lots of reasons. Why do you think some dogs are bred to have:

More wrinkles?

Shorter legs?

Bigger ears?
