

Science: Evolution, Adaptation and Inheritance

Lesson 2a – Inheritance and Variation: Animals and Plants

Read the following pages from *On the Origin of Species*. Complete the activities for each page. Some questions will require some research. **Make sure you give detailed answers!**

Glossary

Keep updating your glossary of new words and their definitions.

Page 4

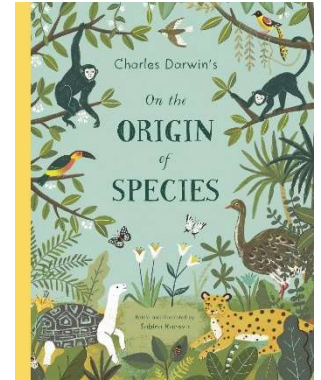
1. Which **species** is being shown here?
2. Are all animals belonging to the same species *exactly* the same?
3. What sorts of **differences** or **variations** are listed here?

Page 5

1. Dogs are “man’s best friend” – our most popular pet. Why don’t people keep wolves as pets?
2. Dogs are bred for “different sizes, shapes, colours and even talents.” Think of one kind of dog (e.g. bulldog, springer spaniel, chihuahua) or a particular dog that you know. What useful or desirable features and skills does it have?

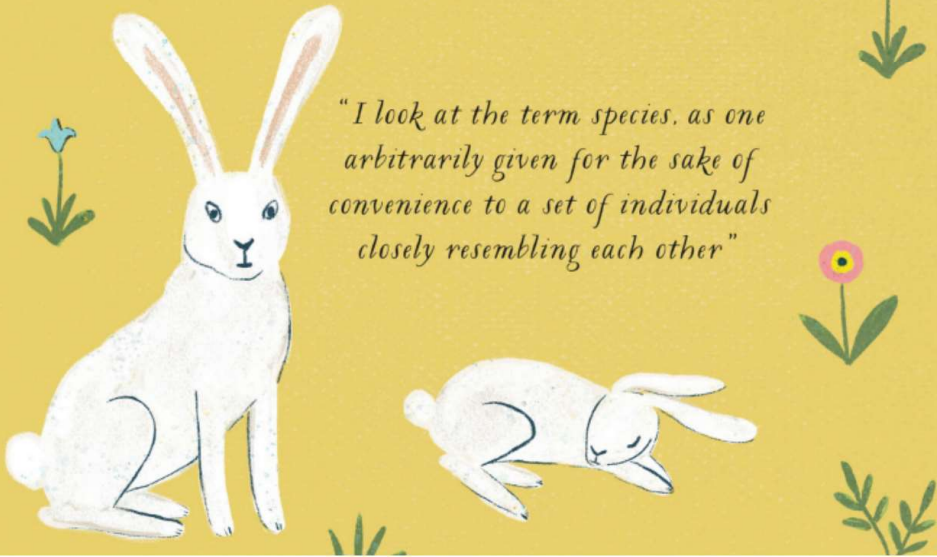
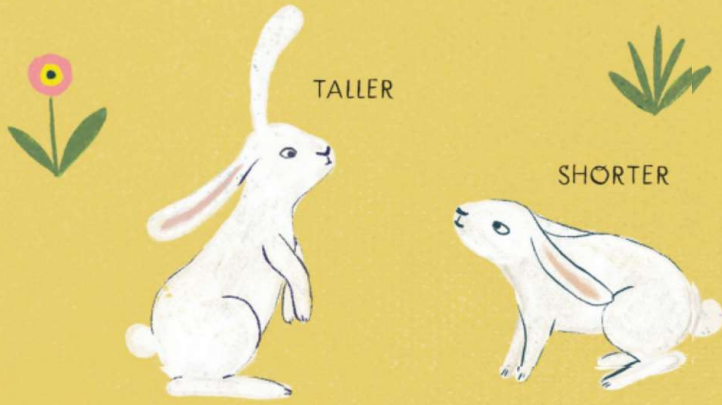
Page 6

1. Look at your garden. What plants have been encouraged to grow? Why?
2. Horses have been **domesticated**. This means that humans have tamed them and bred them to be pets/workers. Zebras are very similar to horses but have *not* been domesticated. Why not?
3. Find out about another animals which people have not been able to domesticate.



In his book, Darwin explains that **species** are groups of living things that look alike and can have babies together. But even if they belong to the same species, no two animals are *exactly* the same.

Look closer and you will see some are:



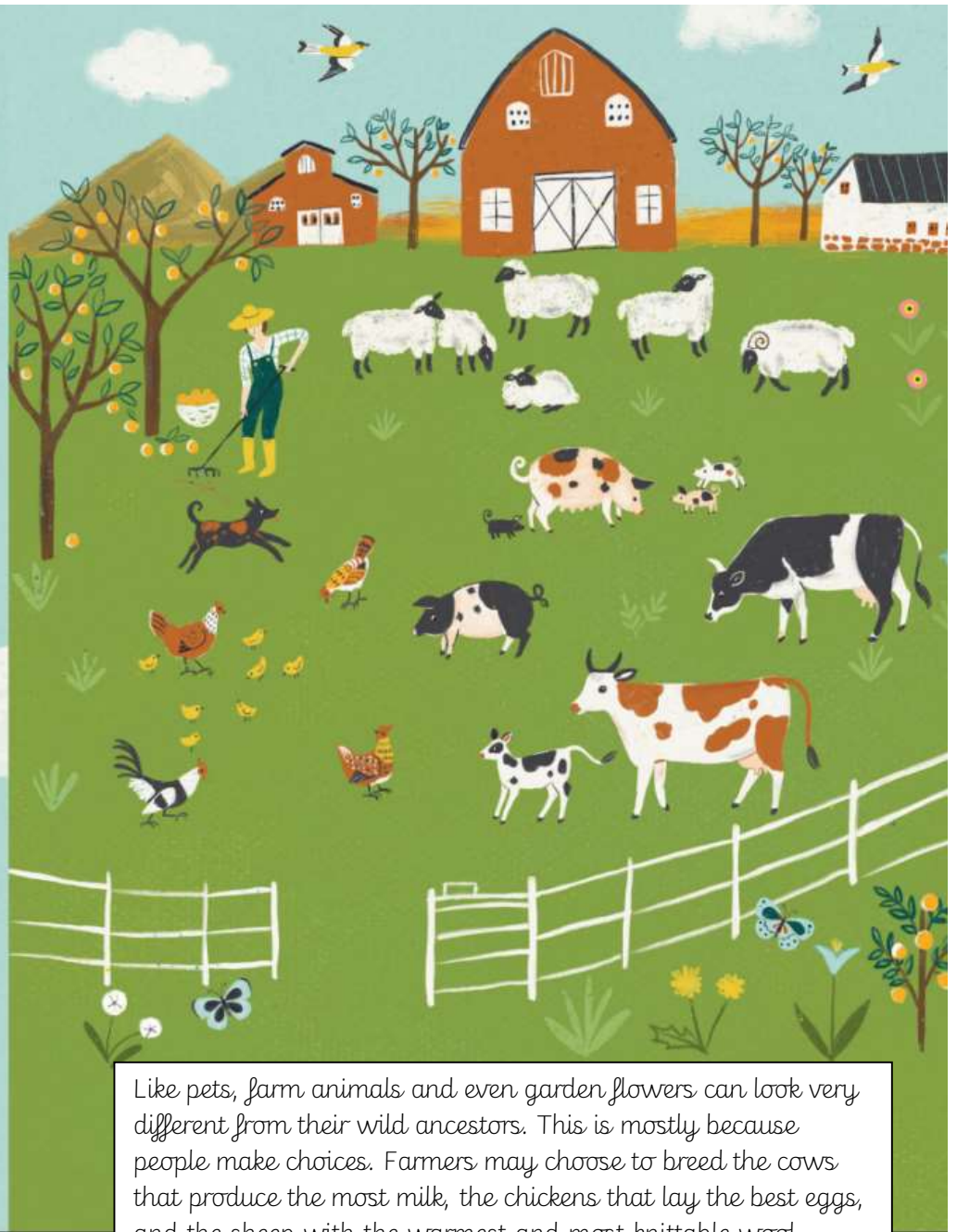
These differences are known as variations.



Animals that people have tamed and domesticated, like pets and farm animals, look very different from their wild ancestors. Take man's best friend for example – we now have over 340 breeds of dog! People have raised them for their different sizes, shapes, colours and even talents. Yet all of these breeds came from one kind of wild wolf, many howling moons ago!



Gardeners may encourage the growth of plants with large and beautiful flowers while they might weed out those that don't quite make the grade.



Like pets, farm animals and even garden flowers can look very different from their wild ancestors. This is mostly because people make choices. Farmers may choose to breed the cows that produce the most milk, the chickens that lay the best eggs, and the sheep with the warmest and most knittable wool.