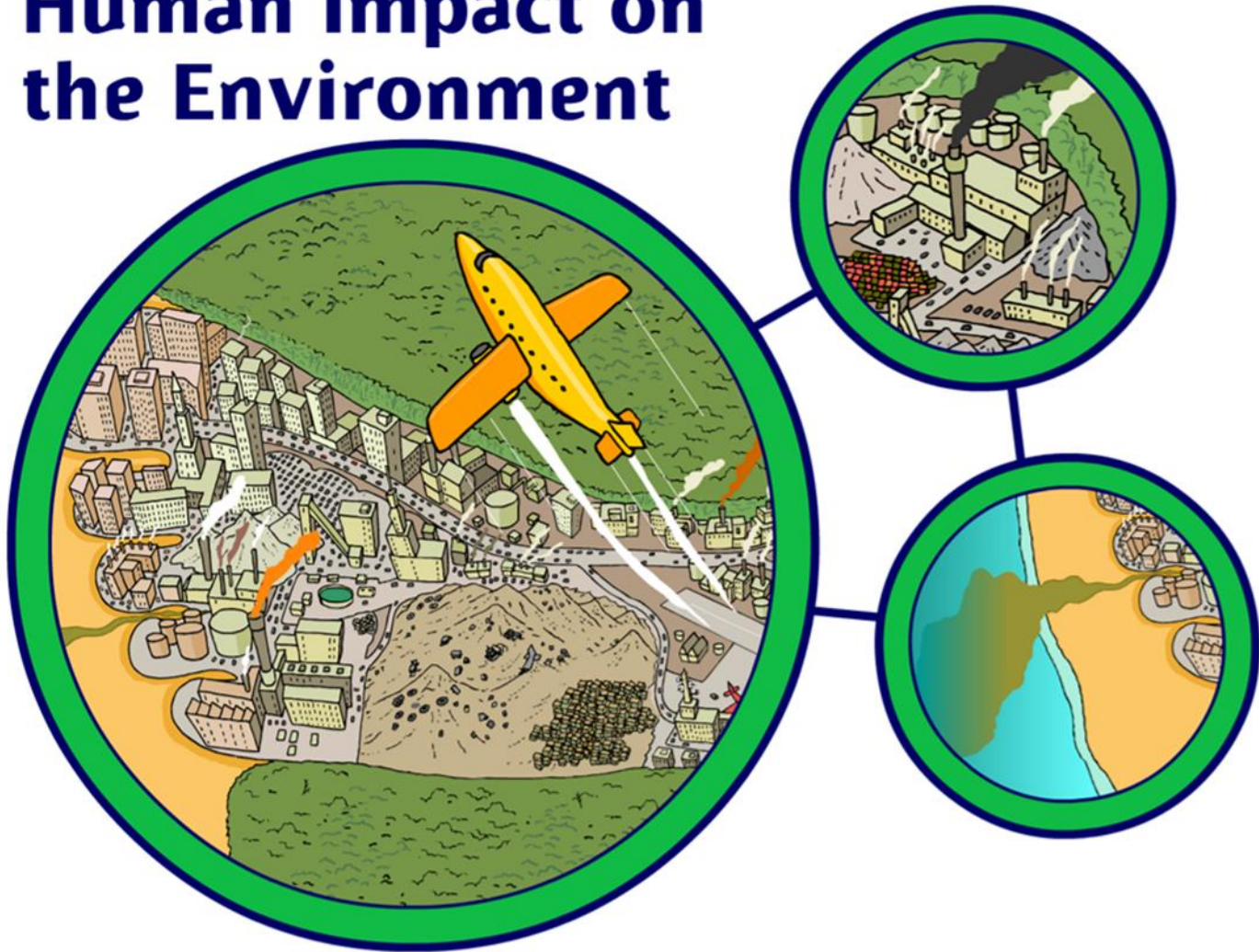


Human Impact on the Environment



What impact do humans have on the environment?

The industrial landscape



What might have been here before?

Before!



What has been lost?



Environmental changes

Effects of environmental change

Animals are adapted to suit their environment, helping them survive and reproduce. However if the environment changes they may no longer have this advantage.

A change in environment can cause **extinction**. Extinction is when the last individual of a species dies.



When a species is at risk of extinction, it is **endangered**. Over 1,100 animal species and over 700 plant species are classed as endangered or threatened.



Why is important to conserve species?

Biodiversity is the number and variety of organisms found in an area.

Conserving biodiversity is important as every living thing plays a vital role in an ecosystem. If one species becomes extinct this can have a huge impact on the rest of the community.



Introducing biodiversity

What is biodiversity?



Introducing biodiversity

What is biodiversity?



Introducing biodiversity



What is biodiversity?



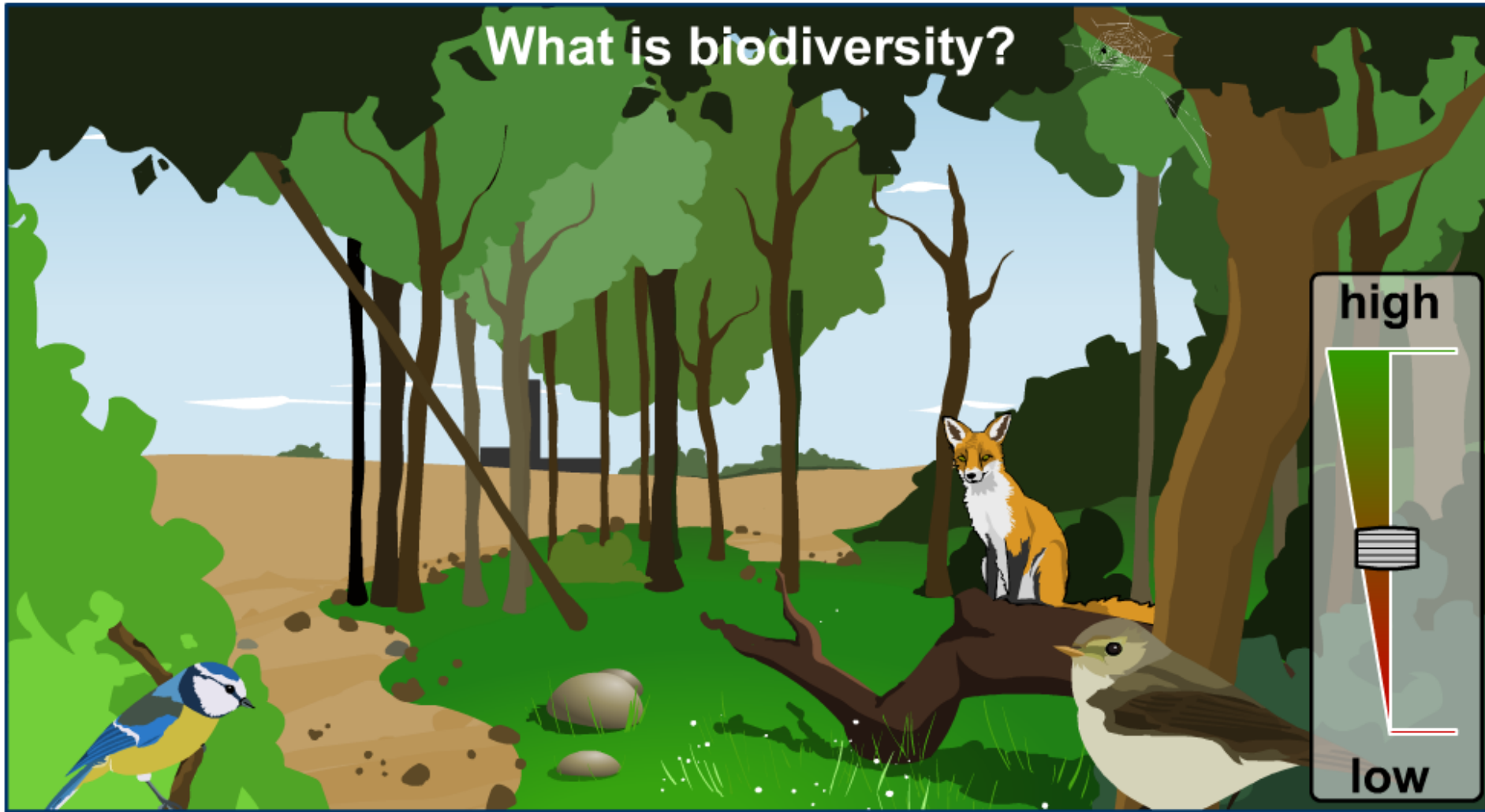
Introducing biodiversity

What is biodiversity?





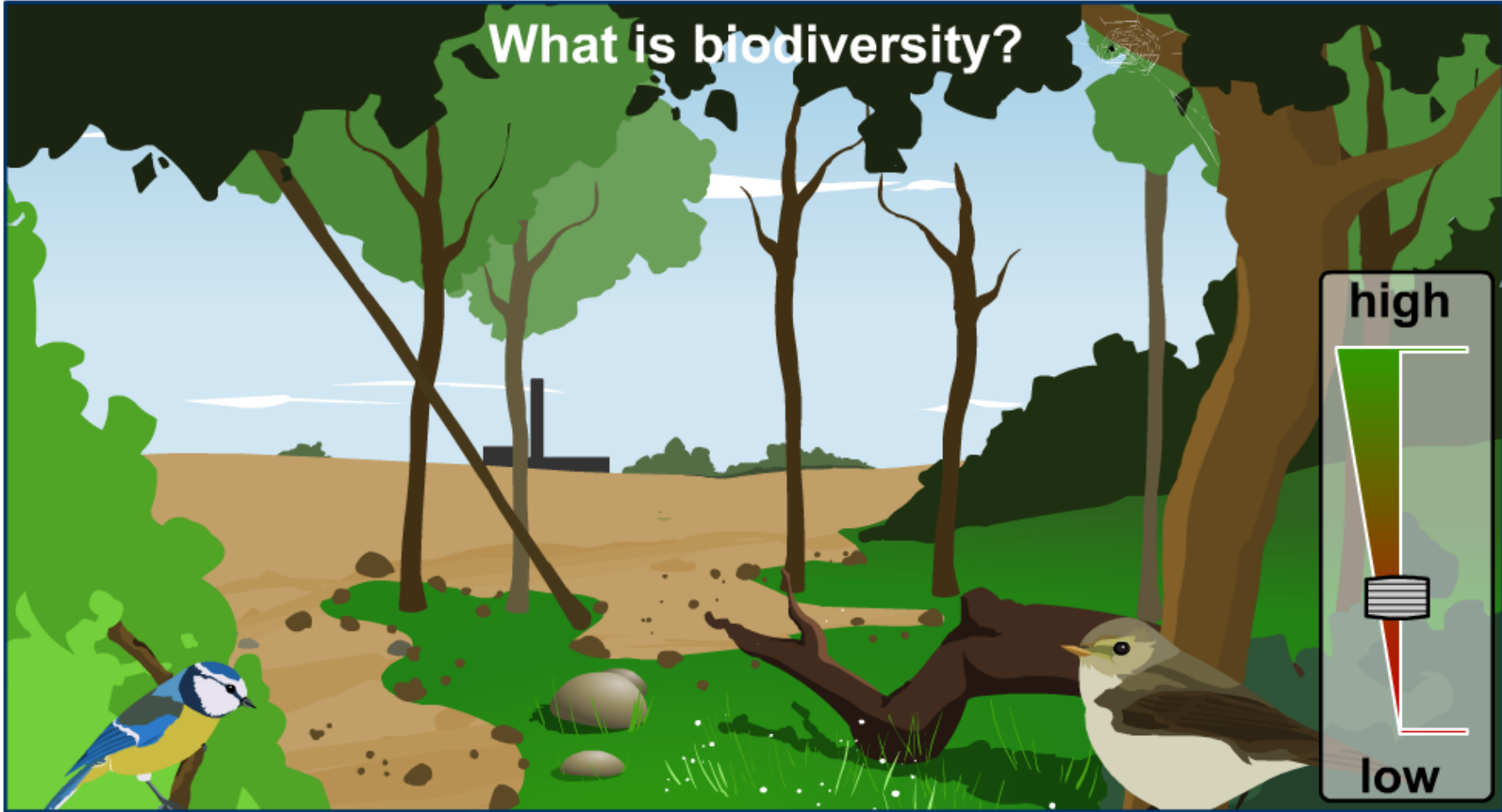
What is biodiversity?



Introducing biodiversity

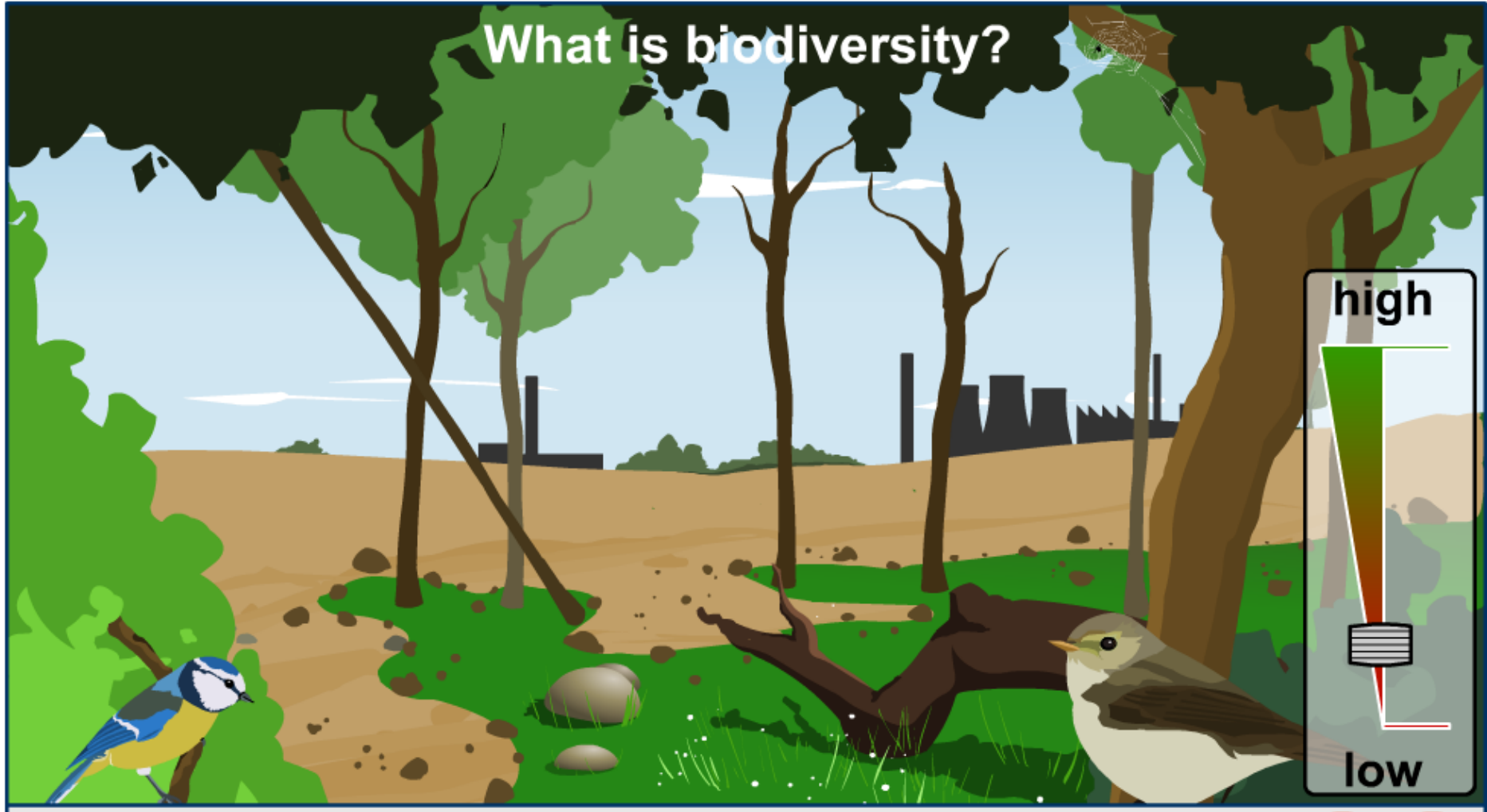


What is biodiversity?



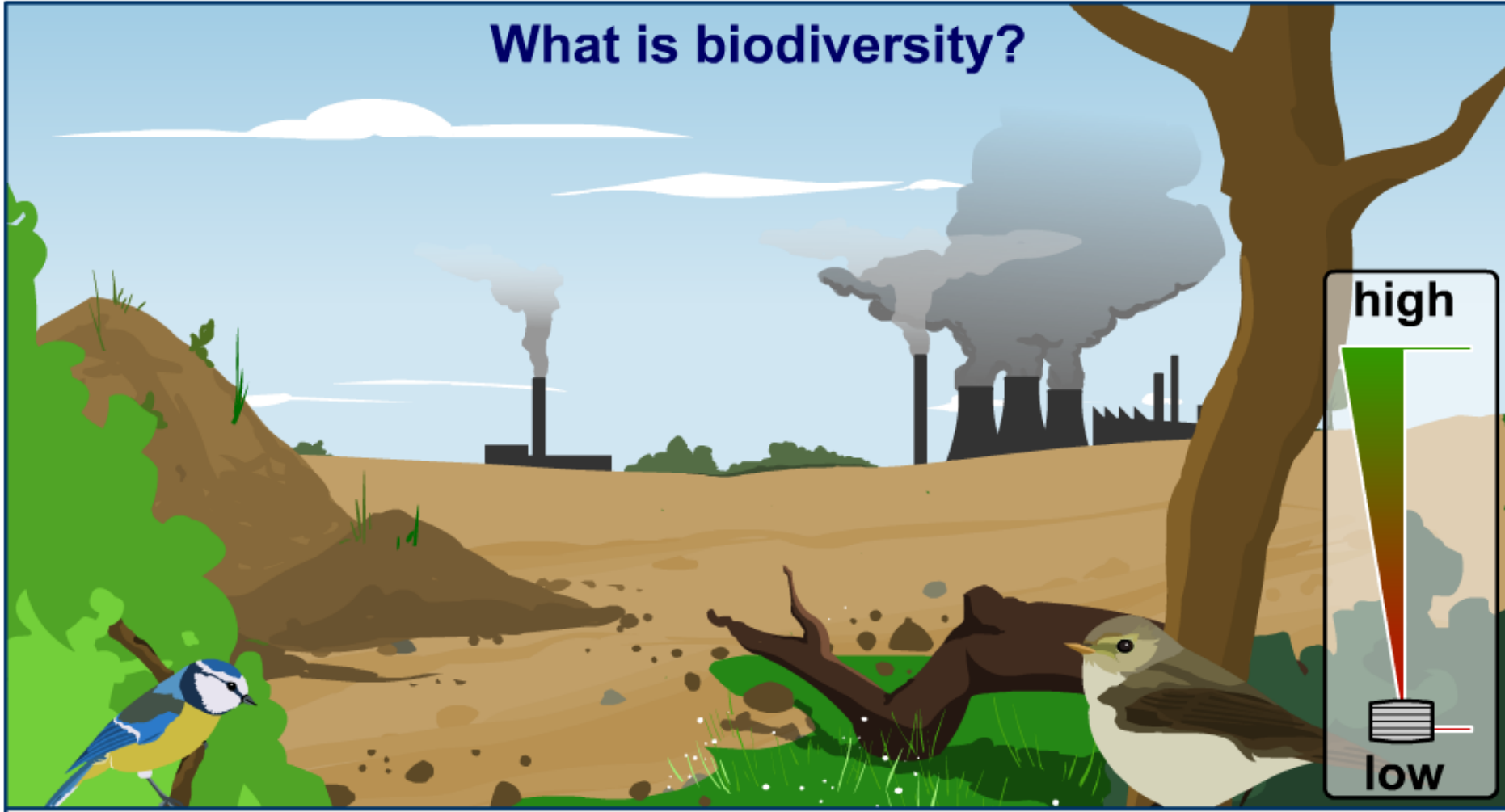
Introducing biodiversity

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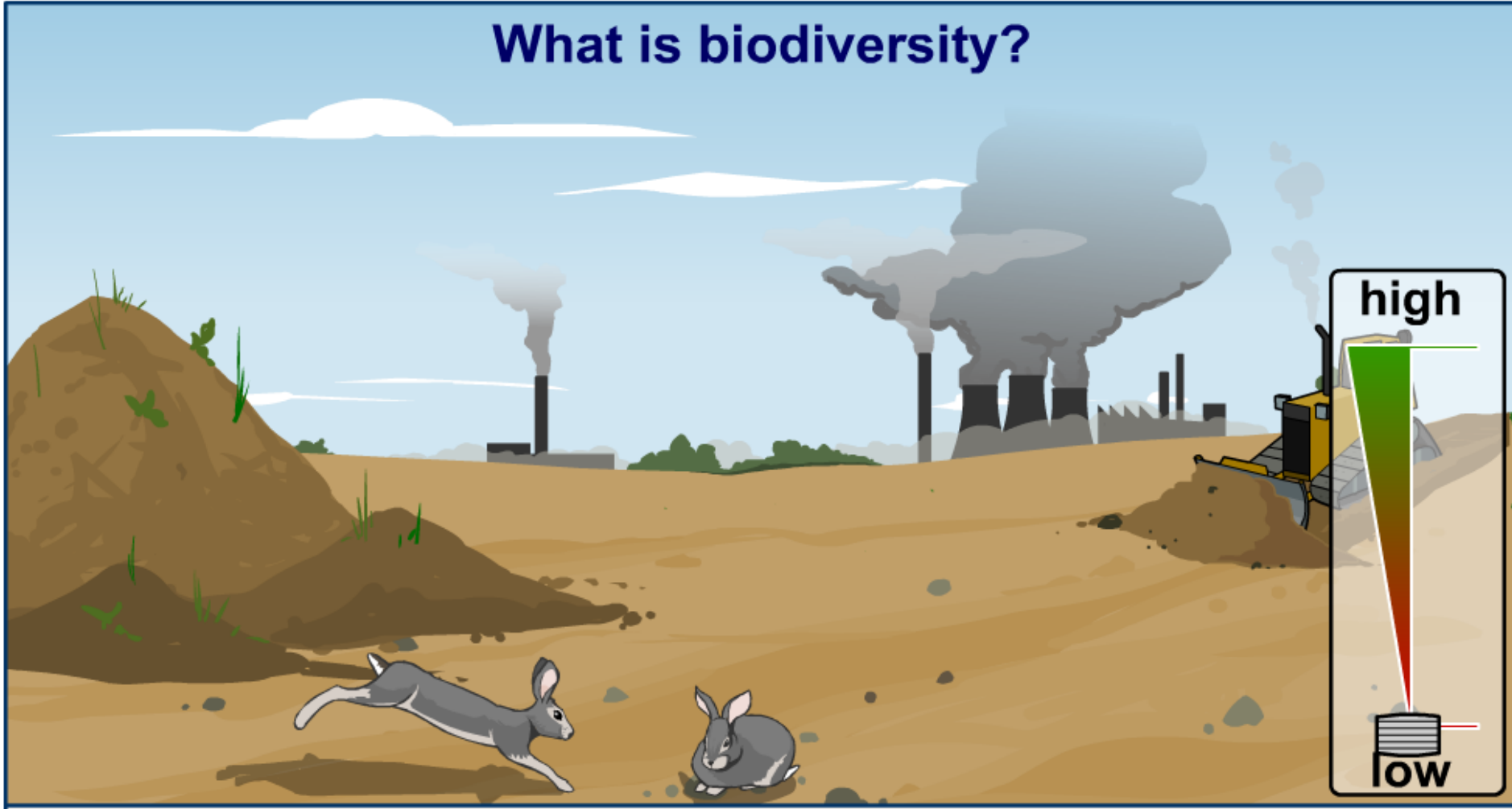
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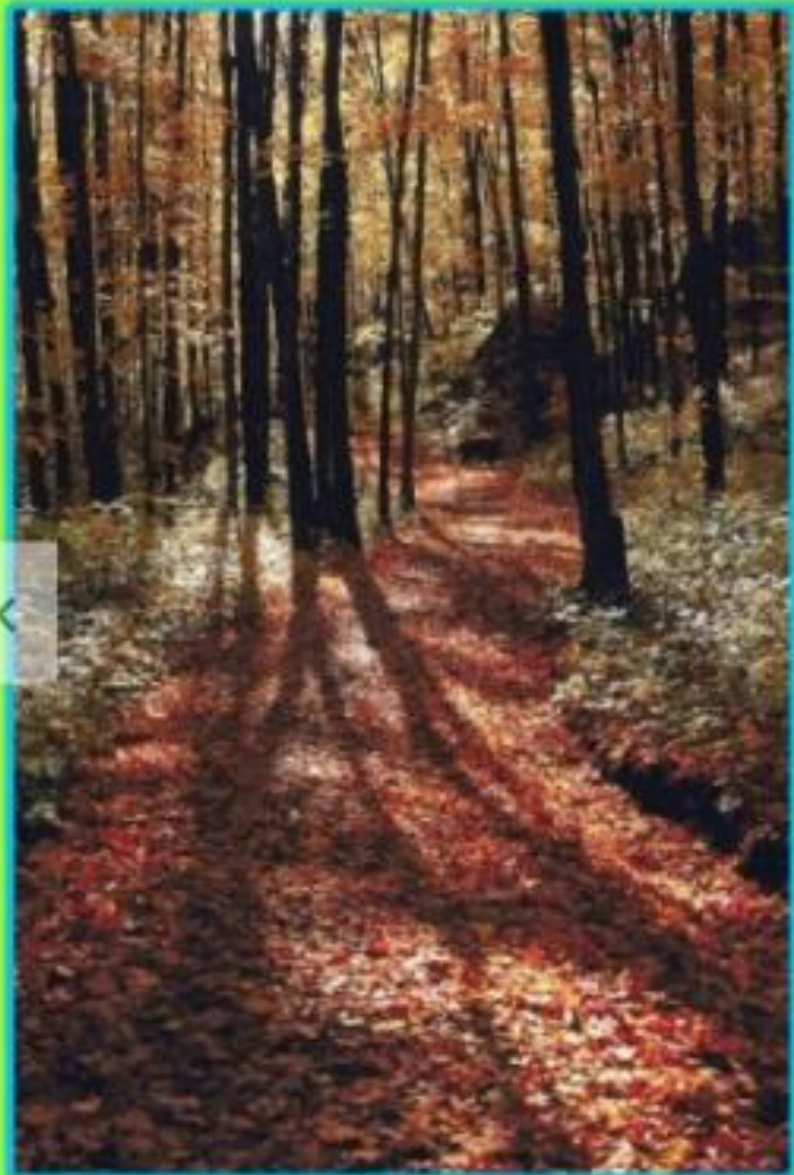


Introducing biodiversity



What is biodiversity?





What would happen if all the trees in this forest were cut down? How would it affect the animals that live there?



Changing just one thing in a habitat can have a big impact on all the organisms that live there. If you cut the trees down in a forest, for example, not only would it affect the animals who lived in the trees, but also the insects that depended on the leaf litter to survive, and then the animals who eat those insects. This is because the organisms are all linked through food chains. If you take one organism out of the chain, the whole chain collapses.

Deforestation is a big problem in some parts of the world. Trees are cut down for timber which has a massive impact on the environment.



Humans can have both positive and negative effects on habitats and environments.

<

Can you think of some ways in which humans help sustain environments?



>

Can you think of some ways in which humans destroy environments?



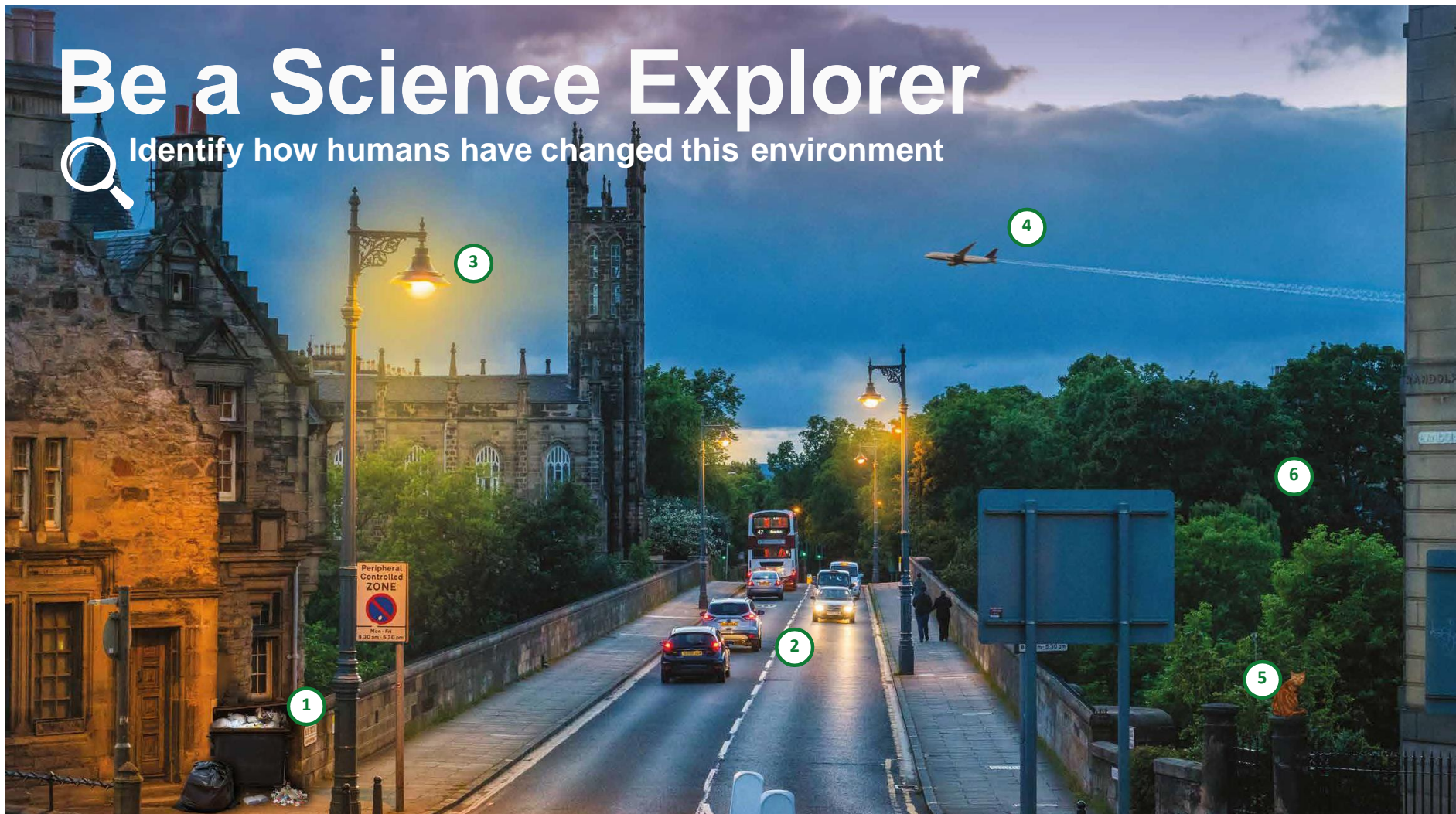
How litter is dangerous to animals



Be a Science Explorer



Identify how humans have changed this environment



How do these changes affect living things?

1

How could rubbish affect hedgehogs?

2

How could traffic affect toads?

3

How could artificial light affect moths?

4

How does energy use affect animals?

5

How do your pets affect wildlife?

6

What do parks do for wildlife?

The country park



What is the human impact here?

Brownfield site



Housing development 3




What can you say about these developments?


Human impact


Here are some of the ways humans affect living things

Rubbish




 The number of hedgehogs in Britain is falling.


 Hedgehogs love to nest in open bin bags but they can get their heads stuck in plastic rings and empty cans.


 It's easy to help – tidying up litter can save a hedgehog's life.

Traffic




 Toads travel to the same pond every year to breed.


 If a road is built in the way, they can get run over.


 Humans can put up toad crossing signs to warn vehicles.

Light




 Moths use light from the moon to guide their way.


 Artificial light can confuse moths.


 Help moths trapped inside by turning off the light and guiding them out the window.

Climate change




 Humans are using more energy than they ever have before. This contributes to climate change.


 One impact of this is more flooding, which can destroy or change animals' habitats.


 Meeting the climate challenge requires efforts by all – governments, companies and individual people. You can help by walking or cycling instead of using cars and thinking about how much energy you use.

Pets




 After fish, cats are the most popular pet in the world!


 In the UK cats catch 55 million birds every year.


 Giving your cat a collar with a bell can warn birds – choose one recommended by a vet.

Parks and gardens



 Parks and gardens give humans space to relax, play and socialise.

 They are important to wildlife too!

 You can help by looking after your local park and respecting other living things.
What does this mean?

Humans can help sustain environments in many different ways. Some can be simple things like setting up a bird house or pond in a garden.

Humans also set up eco-friendly parks which encourage wildlife, as well as reserves that help protect endangered species and give animals a safe environment to live in.



However, humans can also damage environments by dropping litter, clearing natural areas to make room for houses and towns, cutting down trees for timber, picking wild flowers, and polluting rivers, streams and lakes.

< What can **YOU** do to make sure you have a positive impact on local environments and that you don't destroy habitats? >





Life Lessons

Human Impact

[Click for video link](#)

Design an information poster or fact-file to show the positive & negative effects of human impact.

Can you include suggestions on how we could counteract the negative impacts?