

CREATURE REPORT

Activity overview



Age: 7 - 11 years old

Time: 30 min - 1 h

Topics: Living things and their habitats, evolution and Inheritance, DNA

Learning objectives:

- Living things are adapted to their environments.
- DNA can provide information on all living things.

BACKGROUND

Scientists from the Wellcome Genome Campus are sequencing the genomes of all species living in the British Isles – that’s a lot of life forms! From birds, mammals, fish and even plants, there are a wide range of species being studied.

Every life form has a genome, a set of DNA instructions that make all living things. DNA Sequencing is a method used to decode DNA, taking it from a gloopy substance in a tube and translating it into a sequence of DNA letters. Studying the DNA of different plants, animals and fungi can help us understand how they are adapted to the environments in which they live and how they have evolved over time. It can also provide us with information to help protect species and their habitats, finding better ways to conserve them in the wild.

This activity encourages participants to carry out research on one of the UK species that has been sequenced and to create an information poster.

Find out more

What is DNA:

www.yourgenome.org/facts/what-is-dna

What is a genome:

www.yourgenome.org/facts/what-is-a-genome

The Darwin Tree of Life project:

www.darwintreeoflife.org

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ACTIVITY PREPARATION

Materials

- PowerPoint slides
- Creature information document
- Worksheet

Set up

1. Prepare the PowerPoint and / or provide copies of the creature information document for the group to read.

ACTIVITY GUIDANCE

Warm up

1. Use the PowerPoint slides provided to introduce the species that have had their DNA sequenced at the Wellcome Genome Campus.
2. Ask everyone if they have heard of any of the plants or animals on the screen. Do they know anything about them?
3. Explain that scientists are studying the animals and plants DNA. Do they know what DNA is? Use the PowerPoint slides to explain if needed.

Run the activity

1. Explain to everyone that their challenge is to produce an information poster on one of the species they have just seen. The task sheet provides details on all the information that they should include.
2. Hand out the task sheet so everyone knows what information they need to find. Set a deadline for when you would like the posters completed.

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Reflect on it

When everyone has created a poster, run a 'show-and-tell' session or create a poster display.

Having carried out research, was there anything that the group discovered about their species that was interesting or unexpected? Did they think of any interesting questions that studying a species DNA could help them answer?

Take it further

If you would like to explore the topic of DNA further, try extracting DNA from fruit with our DNA extraction activity.

Extracting DNA from fruit: www.yourgenome.org/activities/extracting-dna-from-fruit

You can also explore how DNA code varies between different species with our sequence bracelets activity.

Sequence bracelets: www.yourgenome.org/activities/sequence-bracelets