CLIMATE CHAMPIONS

AGES 5-7

Curriculum resource pack

WWT is one of the UK's leading providers of outdoor learning. We welcome over 50,000 learners per year to our Wetland Centres where we provide unique opportunities for learners of all ages and abilities to interact with wetland wildlife from the UK and across the world.

We are open all year round with sessions for every season. Whether you're looking for curriculum-linked learning or simply a fun day out, there really is something for everyone. To find out more about our school visits programme please visit **learningzone.wwt.org.uk.**

Why wetlands?

WWT works across the UK to save, restore and build wetlands for wildlife and people. Wetlands are one of the most important habitats on earth – storing huge amounts of CO_2, providing a natural way of stopping flooding and serving as a home for huge numbers of different creatures. Spending time in wetlands is also proven to improve mental health and wellbeing!

Using this resource pack

This resource pack contains classroom activities designed to cover key curriculum content as well as outdoor activities designed to promote nature connection and a love of the natural world. This is accompanied by supporting resources that can be printed or used on screen with your pupils. At the end of the pack you will find a short quiz that can be used to reinforce and assess pupils' learning.

CURRICULUM LINKS

England

KS1: Science

- Whilst not formally covered in the National Curriculum we believe that pupils should be introduced to the idea of climate change as early as possible.

Northern Ireland

KS1: Around the world

- The effect of people on the natural environment over time
- Positive change and how we have a responsibility to make an active contribution

Wales

Foundation Phase: Science and Technology

- I can recognise that what I do, and the things I use, can have an impact on my environment and on living things

Foundation Phase: Humanities

- I can describe how people and the natural world may impact on each other

Scotland

First: Sciences

- I have contributed to discussions of current scientific news items to help develop my awareness of science

Second: Social Issues

- By exploring climate zones around the world, I can compare and describe how climate affects living things
- I can consider ways of looking after my school or community and can encourage others to care for their environment

INDOOR ACTIVITIES

YOU WILL NEED:

Causes of climate change visual (one per group)

Effects of climate change visual (one set per group)

(For all accompanying resources see the end of this pack)

3 bedsheets or blankets

Newspaper

Heavy books

Other relevant resources

Activities:

- Make a t-shirt shopping bag (see our 'make it' activities)

NOTE: **Where you see a Q this indicates a question to ask your pupils.**

INDOOR ACTIVITIES

Activity 1: What is climate change?

- Climate change can be a difficult thing to explain to children (and adults!). This activity will demonstrate the greenhouse effect in a simple way.
- Show the class the pictures on the 'causes of climate change' visual.

Q **What do you think is coming out into the air in each case?**

- Explain that some of the gases they can see coming from the car, power station, chimney and cow are called 'greenhouse gases'.
- Explain that these gases go up into the sky and collect around the earth in what is called the atmosphere.

Activity 1 continued...

- Choose one pupil to come up to the front (one you know won't be embarrassed by this).
- Explain to the rest of the class that this child represents the earth.
- Tell the class that the earth has always had a blanket of gases surrounding it and that without this blanket, the earth would be so cold that there would be no life on earth.
- Place the first blanket around the child.
- Ask the class to imagine they are going back in time 300 years.

Q **What do you think it was like on the earth 300 years ago?**

- Explain that 300 years ago, the blanket of greenhouse gases around the earth wasn't too thick and it wasn't too thin so the temperature on the earth was just right.
- We then started to build lots of houses, power stations and cars which started to give out extra greenhouse gases.

Q **What do you think happened to the blanket of gases around the earth?**

- Explain that the blanket got thicker and add another sheet or blanket around them.

Q **Are you feeling warmer? (hopefully they'll say yes!)**

- Explain that this is what has been happening to the earth. We have been producing more and more greenhouse gases and the blanket of gases around the earth has been getting thicker. This has made the earth get warmer as heat gets trapped inside the atmosphere, warming up the earth.
- Explain that we could have used less energy so we would have needed less power stations. We could have walked and cycled more so we didn't need to travel so much by car. If we had done these things the blanket would have got thinner again.

Q **Do you think this is what we did?**

- No - we actually used even more energy and travelled even more in cars and the blanket has got even thicker - Add the final sheet or blanket.
- The blankets can then be removed.
- Explain that the earth getting warmer in this way is called the 'greenhouse effect'.

Activity 2: What effects is climate change having?

- This activity explores some of the impacts that climate change is having on humans and other animals around the world.
- Look at the 'effects of climate change' visual with your class. This shows just a few of the effects climate change is having around the world.

Q **What do you think each picture shows?**

- Give out an 'effects of climate change' visual to each group.
- Get each group to draw lines to match the correct description to each picture.
- Talk through the correct answer and describe what each picture shows using the information on the next page.

Dried up lake

- As the world heats up, many lakes and ponds around the world are drying up.
- This is a problem for humans as lots of people around these lakes used to rely on fishing to make money. They also had lots of tourists visiting to be near these beautiful lakes.
- It is a problem for other animals because they are losing their habitats (the places where they live).

Q **Imagine you are an animal that lived on the lake as it started to dry up. How would you feel? What would you do?**

Forest fire

- As the world heats up, we are getting more forest fires and they are spreading much further and much more quickly.
- This is a problem for humans because houses are destroyed.
- This is a problem for other animals because they are losing their habitat (the place where they live).

Q **Imagine you are a forest animal (you can choose). How would you feel as the fire approaches? What would you do?**

Activity 2 continued...

Polar bear

- As the world heats up, the ice caps are melting.
- This is a problem for humans because as the ice melts, the sea gets higher and this is flooding the homes of people who live near the sea.
- It is a problem for polar bears because when they hunt, they walk on ice covering the ocean and find a hole in the ice. They wait for animals such as seals to come up for air and then catch and eat them.
- If there is no ice covering the ocean, they can't hunt in this way and they have to go inland to hunt. There is less food here.

Q **Imagine you are a polar bear living in an area where you can no longer get onto the sea ice to hunt. How do you feel? What would you do?**

- The above could be used as a stimulus for creative writing from an animal's perspective.

Activity 3: What can we do to help prevent climate change?

- Remind your class what was causing climate change; the greenhouse gasses going into the atmosphere from the power station, car and houses.
- Ask them to think about the car. If the gases coming from the back of the car are a problem, perhaps we could use our cars less.

Q **How else do you think we might get around?**

- We could walk or cycle (or even use a scooter).
- Get them to think about common journeys they make.

Q **Which journeys would be short enough to go by foot, bike or scooter?**

- Produce a class list of journeys that could be walked or cycled.
- Look at the picture of the power station. Explain that this is where the electricity is made that makes our lights, TVs, games consoles etc work.
- If we used less electricity, less smoke and gas would come out.

Q **What could we do to use less electricity?**

- If they find this difficult you could provide some examples:
  - > Turn lights off when it's sunny outside
  - > Turn lights off when there's no-one in the room
  - > Turn the TV off if no-one is watching it
  - > Watch less TV / play less console games and spend more time out in nature!

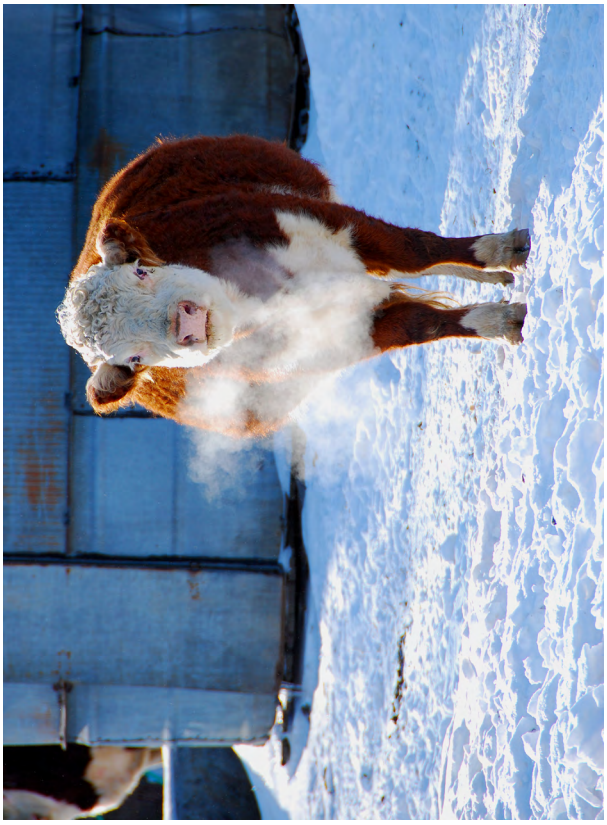
- Produce a class list of ways of saving energy.
- You might want to set a homework where pupils are asked to discuss ways of helping prevent climate change with their families and pledge one thing they and their family will do to help.

OUTDOOR ACTIVITY

Activity 4: Wonderful leaves

- Go to an outdoor space that has plants.
- Ask each child to find a leaf that they really like. See if they can find a fallen leaf from the plant. If not, and if the plant has lots of leaves, get them to carefully remove a leaf from the plant, being careful not to damage the rest of the plant.
- Explain that leaves are amazing because they take in some of the greenhouse gases that you talked about earlier (refer back to the blankets) and give out oxygen. Oxygen is what animals, including us need to breathe, so plants are fantastic because they take in the bad stuff that harms us and instead give out the stuff that we need. They are truly amazing!
- Ask them to try to store in their memory exactly what their leaf looks like.
- Now get all of the children to place their leaves on a single pile.
- Get each child to take in turns to see if they can find 'their' leaf.
- You could get pupils to press their leaves so that they can take them home and keep them:
  - Place the leaves wrapped in newspaper inside a heavy book. Place more books, a weight, or rock on top of the book to add more weight.
  - Keep the book in a dry location. Check the pressing after about one week. Make sure the leaves are drying and not rotting. You will probably need to leave the leaves under the book for another one to two weeks before they are completely dry and ready to use.

CAUSES OF CLIMATE CHANGE



EFFECTS OF CLIMATE CHANGE

DROUGHT

Some places will dry up as they become very hot.

FOREST FIRE

There will be more fires and these fires will spread more quickly.

POLAR BEARS

Polar bears will find it difficult to hunt as the ice melts.

QUIZ: CLIMATE CHAMPIONS

Round 1: Picture round

These animals are all affected by climate change.

Q Can you name them?

1 .....

2 .....

3 .....

4 .....

5 .....

Round 2: Effects of climate change

Each of the pictures below shows an effect of climate change.

Q Can you match each **picture** to its **description**? Draw a line to match them.

Melting ice cap **Drought** **Hurricane**

6

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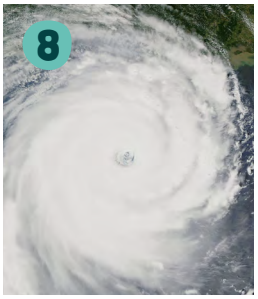

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Flood **Forest fire**

Round 3: Multiple choice round

Q Can you correctly identify the correct answer each time?

11 Which of the following describes the earth getting hotter?

A) Shed effect
B) Greenhouse effect
C) Garage effect
D) Wendy house effect

12 Which method of travelling is best for helping to prevent climate change?

A) Flying
B) Driving
C) Walking
D) Getting the bus

13 What happens to the world as a result of the greenhouse effect

A) Gets colder
B) Gets hotter
C) Stays the same

14 Which of these living things is best at reducing climate change?

A) Oak tree
B) Blue whale
C) Tortoise
D) Chimpanzee

15 Which one of these is NOT an effect of climate change

A) Forest fire
B) Melting ice
C) Dried up lake
D) Earthquake

ANSWERS: CLIMATE CHAMPIONS

Round 1: Picture round

These animals are all affected by climate change.

Q Can you name them?

1 Polar bear

2 Puffin

3 Snow leopard

4 (Green) Turtle

5 (Adelie) Penguin

Round 2: Effects of climate change

Each of the pictures below shows an effect of climate change.

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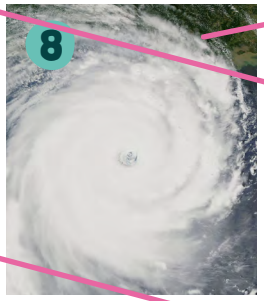
Hurricane



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WWT
For wetlands. For life.

@WWTWorldwide
Have fun and do share your score to our social media accounts
We'd love to find out how you got on!