



CURRICULUM LINKS

SOC 2-12A: By comparing my local area with a contrasting area out with Britain, I can investigate the main features of weather and climate, discussing the impact on living things.

SOC 3-12A: I can investigate the relationship between climate and weather to be able to understand the causes of weather patterns within a selected climate zone.

SEE ALSO SOC 2-19A AND SOC 3-12A

TIME

Ideal: 2 x 45 mins.
Minimum: 1 hour

QUICK LINKS

Refer to sheet

RESOURCES

Quiz (online or paper copy)
Photo cards 1-8
Student Investigation 1
Post-it notes

KEY WORDS:

Weather
Climate
Climate change

OBJECTIVES

Most pupils will:

- Have an increased understanding of what climate change is and how it is affecting them and the environment;
- Recognise how people around the world are affected by climate change in different ways and that the poorest people are affected the worst.

PRE-UNIT KNOWLEDGE

Complete the Quiz before starting the unit to help assess prior learning.

Ensure pupils understand the difference between weather and climate, using the definitions from the glossary: read statements aloud and ask pupils to 'vote' whether it refers to climate or weather, e.g. Britain has mild summers and wet winters; it rained at school yesterday; deserts are usually hot and dry. Watch the weather and climate video from The Met Office up to 2:04 at [Quick link 1.1](#).

STIMULUS

Show pupils the two videos of children's experiences of flooding in Chad and the UK at [Quick link 1.2](#) and [1.3](#). Use the key questions below to discuss and compare the videos, then use hot-seating with pupils as Dimanche and Lucy from the videos. Reinforce discussion of how everyone around the world is affected by extreme weather in different ways, with the poor being the most vulnerable. Refer to Photocard 1 to help.

What major event happened in these two video clips? *Flooding.*

Where did the events take place? *Chad and the UK.*

How did the two communities cope with the floods? *Dimanche moved away and has been unable to return but the UK families were either able to stay in their homes or only spend a few nights away from home. Who do they think covers the costs of the damages?*

What are the similarities? *Homes damaged; livelihoods affected; schools closed or taken over, long-lasting damages.*

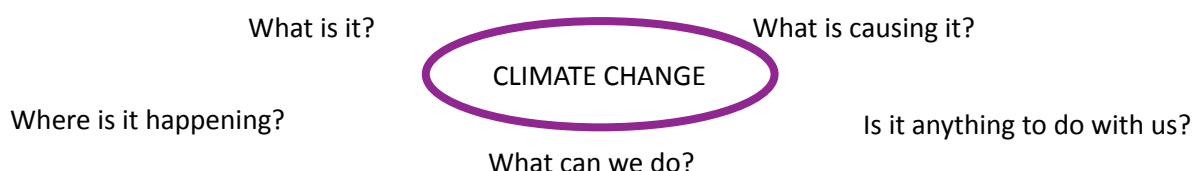
What are the differences? *Strength of buildings and their capacity to stand up against the flood waters; the ability to cope during floods e.g. emergency services, transport, hospitals; the climate during the floods and the health implications of this; the time-scale of recovery after floods; the capacity to protect themselves from it happening again.*



“ This role-play was very successful with the pupils, giving them an insight into how it would look and feel in the different countries. Many of the pupils were shocked to discover how difficult it was for Dimanche. ”

Activity 1: What is climate change?

Many countries have been suffering from the effects of more and more extreme weather. Watch this video of flooding in Mauritius - [Quick link 1.4](#). This video talks about climate change. Draw out the words/phrases the pupils associate with climate change to create a mind map (suggestions below). Keep this to refer back to at the end of the programme to help evaluate and assess learning.



Ask the pupils in pairs to come up with three questions they would like to find out about climate change; record these in pupil learning logs or around the mind map to explore throughout the units.

Activity 2: What are the causes and effects of climate change?

Use Photocards 3 - 15. **What do these images show us?** Identify and discuss, then ask pupils to sort into causes and effects of climate change. As an extension, pupils could use atlases to place the cards where they think they are likely to occur in the world.

Explain that changes in the earth's climate have been happening for billions of years and the UK climate has changed considerably, including tropical rainforest, desert and ice sheet in different eras. However, these changes happened very slowly. Scientists are worried that the speed that the earth's temperature is changing is too fast, meaning plants and animals (including humans) may not have time to adapt.

Advanced extension: use Photocard 2 to show the earth's temperature change over time. **What does this graph show us?** Use Student Investigation 1 to investigate further.

Activity 3: Opinions about climate change?

Explain that there are a lot of different factors causing the world's climate to change. Scientists are increasingly convinced that climate change caused by human behaviour is altering our world. However, not everyone has the same opinion about climate change. Use Activity Sheet 1 to match the person to their opinion. If time, ideally this activity should be extended and run as a debate.

NOW LET'S TAKE SOME ACTION!

Allow pupils to select an action from below. When it is completed they should colour in one of the continents on their reward map.

Sunny Pledge to pass on your knowledge from the unit to at least 3 others outside the classroom.

Sunnier Write your own raps or poems about climate change; watch this video of a climate change rap at [Quick link 1.5](#) for inspiration.

Sunniest Write a letter or report on the issue for e.g. the school council or your Head teacher. Use Student Investigation 1 as a starting point for your research.



Plenary

Ask students to complete a diary or learning log exploring how they feel about what they have learnt in this unit. Encourage them to use pictures and writing.

This could be extended to 'What does our world look like in 2050?'

Opinions about Climate Change

Cut out the writing and pictures. Match the opinion to the person. Stick down on a new piece of paper.

OIL EXECUTIVE



I've been flying planes for over 20 years and I don't believe that people should be so hard on themselves about climate change. Some figures say that one hour's flying per passenger releases the same amount of CO₂ as a person in Bangladesh in a whole year, but I think that everyone deserves a holiday.

PILOT



Climate change means that we'll have to adapt the way that we live and this could be very expensive for the country. If the government has to spend lots of money on climate change there could be less money for schools and hospitals. It is difficult for me to spend money on climate change when there are other things we need to spend it on.

POLITICIAN



If the climate in Britain gets a little bit warmer then my crops might grow better all year round. However, if the climate gets too hot, I might not be able to grow any of my crops at all and I will have to think about growing something different.

BRITISH FARMER



I know that climate change is going to affect everyone and sooner than you think. At the moment, it is affecting the poorest people but soon sea levels will rise, water will be scarce and we will be powerless to stop it. We must act now!

ENVIRONMENTAL ACTIVIST



Because of climate change, I have already noticed there is less fresh water available where we live because we are near to the desert. I need water not only for my family but also for my crops. If I don't water my crops, they won't grow and I won't make any money.

SCHOOL CHILD



My business is doing great! We're digging lots of fossil fuels and they're selling for a lot of money because people are starting to panic that they will run out soon.

KENYAN FARMER



I do get worried thinking about climate change. Scientists say it is probably going to affect me more than my parents, but sometimes this makes me angry because I wasn't even born when it started happening.

Research question 1: What are the effects of climate change?

Use the websites listed below and the books in your school library to help you answer these questions. Use pictures and writing to explain your answers.

Supporting inquiry 1a: Find out 5 changes that are affecting people around the world

e.g. less rainfall in Africa is stopping people from growing crops and having enough to eat.

<http://tiny.cc/dktmyw>

Supporting inquiry 1b: Find out 5 changes that are affecting the environment and animals

e.g. warming sea temperatures are damaging coral reefs which also endangers the animals living on them.

<http://tiny.cc/i5mfe>

Supporting inquiry 1c: How do scientists know the climate is changing?

<http://tiny.cc/6hsxw>

Research question 2: What might happen in the future?

What might life be like for children in the UK in 2050?

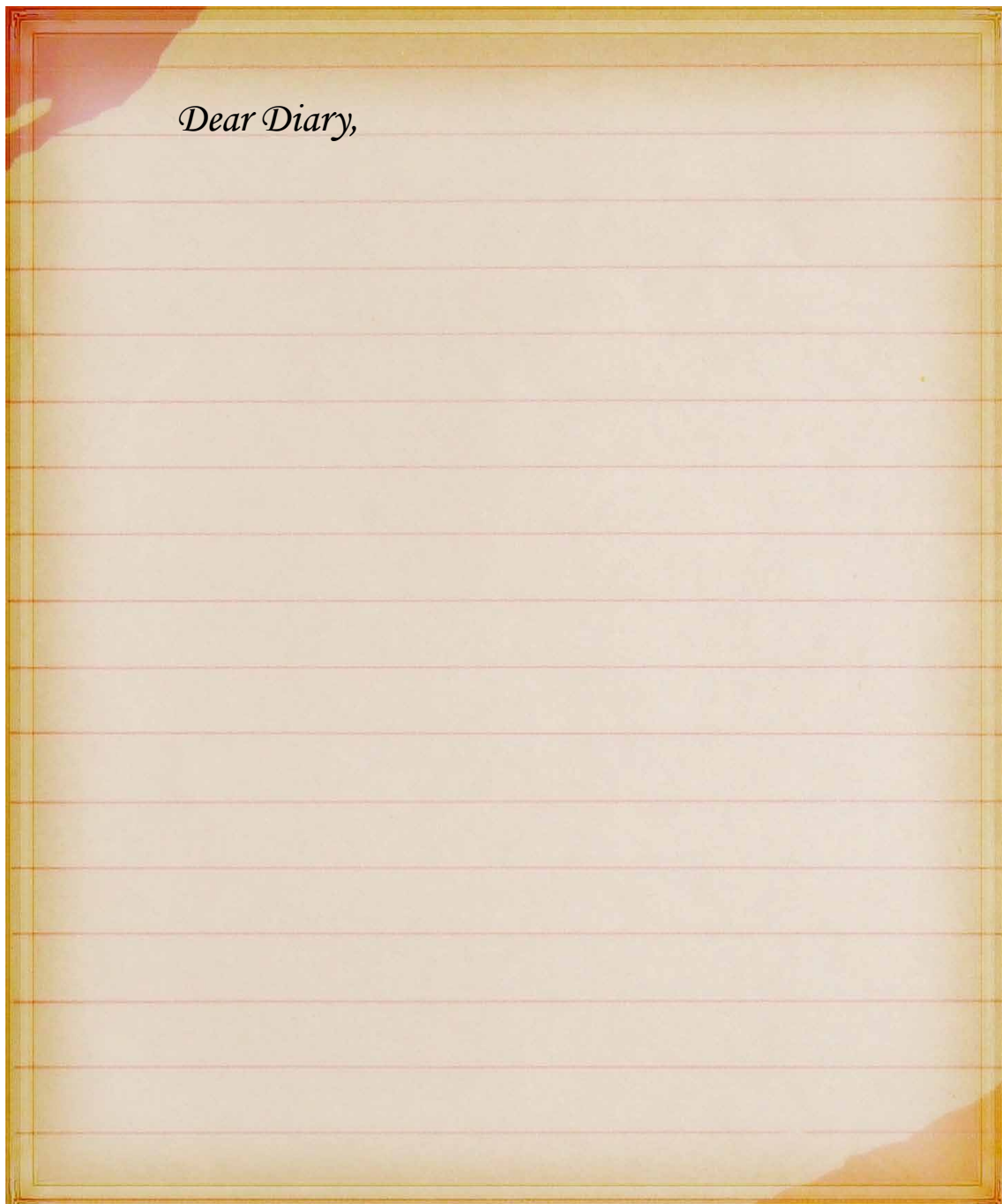
Imagine you are a child living in 2050. First, find out some of the changes that might have happened to the UK's climate using books and these websites to help you.

<http://tiny.cc/8otmyw>

<http://tiny.cc/47e1m>

Now write a diary entry about a day in your life in 2050. Think about some of these questions:

- Where do you live?
- What is your school like?
- What do you eat and drink?
- What is the weather like?
- How do you feel about the changes that have happened to the climate?



Dear Diary,