



# Lesson 3: What are the Effects of Climate Change?

## Aim

- To be able to name the effects that climate change is having on the world.

## Lesson Objectives

- To be able to name at least three effects of climate change.
- To be aware that the effects of becoming increasingly visible each year.

## Assumed Prior Knowledge

- To know what climate change, global warming and the greenhouse effect are.
- To know what is causing climate change.
- To be aware of the term 'sea-level rise'.

## Resources

- Air pollution science experiment.
- National Geographic video about the causes and effects of climate change:  
[https://www.youtube.com/watch?v=G4H1N\\_yXBIA](https://www.youtube.com/watch?v=G4H1N_yXBIA)

## Assessment

- Air pollution science experiment.
- Task to write a poem.
- Homework tasks
  - Create a poster showing one of the effects of climate change.
  - Write a newspaper article about the effects of climate change.

## Lesson Outcomes

- To be able to name at least three effects of climate change and what impacts they may have.

## Curriculum Links

- Science
- English
- Art

## Differentiation

- Class discussion
- Individual work
- Group work

## Skills For Life

- Following instructions
- Working as part of a team



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The experiment for this lesson can be found as a separate download within the 'Lesson 3' page of the The Flood Hub KS2 Climate Change Learning section.



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**Notes for each slide – The teacher is to decide what is copied down in their workbooks.**

## **Slide 1 – Introductory slide - What are the effects of Climate Change?**

- Teacher to run through the lesson aims and objectives and ask the pupils to write these down in their workbooks.

## **Slide 2 and 3 - Recap**

- These slides are just a lesson recap in which the teacher is to talk through with the whole class.

## **Slide 4 - The effects of Climate Change**

- This slide aims to generate thoughts and discussions amongst the class around what effects climate change will have on Earth.
- As a teacher, you could ask the pupils to do this individually or discuss in pairs and write down their thoughts in their workbooks.
- Then, have a class discussion where pupils tell the rest of the class what they think the effects of climate change are.

## **Slide 5 - 12 - The effects of Climate Change**

- Teacher to talk through these slides with the pupils and ask them to copy the information down in their workbooks.
- Slide 8 contains information about erosion. For more information, Lesson 6 in the KS2 Flooding Lessons package can be used to supplement slide 8 which discusses coastal erosion and flooding in greater depth.

## **Slide 13 - The effects of Climate Change**

- This slide contains the instructions for a science experiment about air pollution, which is carried out over two days.
- The aim on this experiment is to see whether there is a difference in air pollution levels in a green, open space and in an area where there are cars nearby.
- The pupils will need:
  - Two paper plates
  - Vaseline
  - Paint brush
  - String
  - Scissors
  - Marker pen
  - Pencil
- The prediction can be done individually or as a class, which should be that **there is less air pollution in green, open spaces, compared to those with cars etc nearby.**



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- Method:
  - Firstly, pick up two paper plates and write your name on the back using a marker pen.
  - Next, using a pencil, pierce two holes in the top of the plates.
  - Pick up your two pieces of string, thread them through the two holes in the top of the plates and tie in a knot.
  - Then, using a paintbrush, paint Vaseline over the centre of both plates so that they are equally and well covered (leave the edge of the plate clear and dry).
  - With your teacher, hang the plates in the selected green open space and again in the other area chosen by the teacher.
- The results of the experiment should be written at least one day later.
- Based on the results, the conclusion can be written and it can be decided whether the results of the experiment matched the prediction.
- The results should show that there is more air pollution/dirt on the plate that is in the area where cars are, compared to in a green open space.
- The green open space should be on the school playing field or in the playground. The area where cars are could be in the school railings or in the school car park. **A full risk assessment by the school should be undertaken before this experiment.**

## Slide 14 – The effects of Climate Change

- This slide discusses the impacts climate change can have on human health. Pupils to copy information down into their workbooks.

## Slide 15 – The effects of Climate Change

- Teacher to play the video to the class. The teacher can decide whether the pupils take notes or not.

## Slide 16 – Activity

- Teacher to ask pupils to write a poem all about climate change, what is causing it and the effects on our planet.

## Slide 17 – Global Warming and the Greenhouse Effect (GHE)

- Pupils should complete one of the two homework tasks:
  - Create a poster showing the effects of climate change.
  - Write a newspaper article or speech about climate change and the effect it is having on Earth.

## Sources used for Lesson 3

- BBC Bitesize
- CBBC Newsround
- Ducksters
- Gavi
- Met Office
- NOAA Climate.gov
- Twinkl
- YouTube