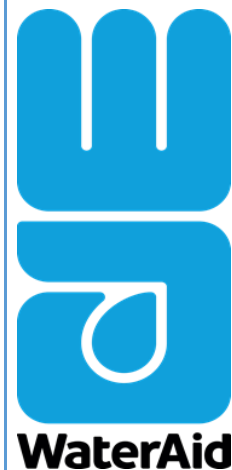


Secondary School Lesson Plan — Key Stage 3 — (11-14 Years)

Lesson 2: Climate changes and its impacts

Background:

WaterAid is an international not-for-profit organisation, determined to make clean water, decent toilets and good hygiene normal for everyone, everywhere within a generation. As our climate changes we feel the effects more and more through extreme weather, rising temperatures and ice melting leading to issues around too much or too little water. This makes the climate crisis a water crisis, as hundreds of millions of people across the world struggle to get clean water, pushing them further into disease and poverty.



Context:

This is the second lesson in a series of four that explain the causes, impacts and ways of managing climate change. This lesson introduces the impacts of climate change and what it will mean for our planet and how these might change over time.

Notes for teachers / educators

The activity timings should act as a guide only. Teachers should adjust timings and adapt activities according to the lesson time available and the ability of the learners.

Learning Question:

- What impacts will climate change have on the world?

Learning Objectives:

- I can appraise and organise the different impacts of climate change.
- I can construct a chain of impacts of climate change.

Key words:

- Impact • Consequence • Habitats • Flooding • Drought

Curriculum link: The curriculum links are not exhaustive but offer a guide

- **Science:** Genetics and evolution; earth and the atmosphere
- **Citizenship:** the roles played by public institutions & voluntary groups in society, & the ways in which citizens work together to improve their communities, including opportunities to participate in school-based activities.
- **Geography:** human and physical geography

Resources:

- YouTube Video: Impacts of climate change — https://youtu.be/ZDzTnt1Y_sE
- Resource 1 – Lesson slides
- Resource 2 - Information sheets
- Resource 3 - Teacher activity guide
- Paper and tape / glue for paper chains

Key Question	Activity	Resource	Timing
Recap	<ul style="list-style-type: none"> • Display slide 1 and explain to students that you will be following on from the previous lesson on climate change. This lesson is going to help them understand how climate change will change the world and how it might affect our lives. • Ask students if they know of ways that climate change might change the world. What events might it cause? Have they seen or heard anything in the media about what might happen due to climate change. Gather some responses to gauge prior understanding and to encourage a small discussion between yourself and the class. This should introduce any misconceptions that need to be tackled throughout the lesson. • Display slide 2 — Using the 5 lists of words on the slide, ask students to look at the four words in each row and find the odd word out. They should explain their choices. • As an optional activity, students could develop their own odd-one-outs based on climate change and swap these amongst themselves to complete. 	Resource 1 - Lesson slides	10 mins
What are the impacts of climate change?	<ul style="list-style-type: none"> • Display slide 3 - Introduce the film “impacts of climate change” embedded on slide 2 (or follow the link in the notes section). This film outlines the impacts of climate change and what it will mean for both the UK and the world. • Students should note down the impacts of climate change as they are watching the film. 	Film - https://youtu.be/ZDzTnt1Y_sE	10 mins
How will climate change affect our planet?	<ul style="list-style-type: none"> • Display slide 4 - With the students review the impacts of climate change that they noted from the film. From each impact they give, ask what effect this could have on the planet. • Split the students into pairs and provide each pair with the five information sheets. They are available for higher and lower ability. • By reading through the impacts on the information sheets and using their own prior knowledge and what they've learned from the film, ask students to develop a spider diagram of the main impacts of climate change. Encourage students to record statistics and facts in their diagram. • To challenge students further, ask them to link together any connected impacts and colour code these according to if they are impacts by social, environmental or economic. 	Resource 2 - Information sheets (higher and lower ability)	10 mins

Key Question	Activity	Resource	Timing
How are the impacts linked?	<ul style="list-style-type: none"> ● Display slide 5 and split the class into groups of 4. When choosing groupings, please note that. This task is best done in larger groups in lower ability classes, or in smaller groups with higher ability classes. ● Explain to the students that they will be making a paper chain consisting of linked consequences. Check that everyone understands what is meant by the term 'linked consequences' before you explain how the activity works. Their paper chains will show how the consequences of climate change are interlinked and show how big the problem is. ● Tell the class that they should begin with one loop of a paper chain. This link should be a different colour from the rest as it will stand as your centre point. You could make it from a piece of A3 paper as it will make the loop longer than others. The first loop should be labelled "climate change". ● From this central loop link a loop with a larger impact written on it that occurs due to climate change. For example, "temperature increase". This is the start of the paper chain. ● Link another labelled loop to this with an impact caused by temperature increase, for example "increased rainfall". ● Continue this process of linking loops together with connecting consequences of climate change until no more ideas can be generated. ● Some impacts may have multiple impacts linked off from them. If you discover an impact with multiple consequences then it is encouraged to have multiple links span from it, as many as can fit. ● No impact is too small to be added to the chain, the longer the chain the more visual the impacts will be. ● If needed display slide 6 with its question prompts to help students develop new ideas. ● For an added challenge categorise impact links by colour, with a designated colour for each impact type; environmental, social, economic. ● If possible, display the paper chains in the classroom to remind everyone of the wide-reaching impacts of climate change. 	<p>Resource 3 - Teacher activity guide</p> <p>Paper for the paper chains</p> <p>Tape / glue for the paper chains</p>	20 mins

Key Question	Activity	Resource	Timing
Plenary	<ul style="list-style-type: none"> ● Display slide 7 - Ask students to answer the question “Which impact of climate change will have the greatest effect and why?” <p>Students should use their knowledge from the lesson and statistics to support their answers.</p> <ul style="list-style-type: none"> ● Ask students to consider the following questions: <ul style="list-style-type: none"> - Who will be impacted by climate change? - How many people, animals or places will be impacted? - What are the long-term consequences of these impacts? ● For added challenge ask students to explain how climate change may impact their own lives. ● Finish by surveying the students to see which impacts they think are the most significant. 		10 mins

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Inspire, engage and educate your learners about WaterAid’s work with a trained speaker. WaterAid Speakers visit schools and groups across the UK to deliver educational talks and workshops on topics such as climate change, the water cycle, periods and more. We also offer online talks and workshops, including for international audiences.