



CHANGING CLIMATES

EXPLORING THE NATURAL WORLD

KS1 | Years 1&2 | Ages 5-7 years

AT A GLANCE | Changing Climates | Lesson 1 – Our Changing Climate

20
minutes

VOLE'S BIG FLOOD: Read a story entitled 'Vole's Big Flood' and explore ideas about weather, climate and the impact they have on different animals and habitats.

10
minutes

A CLOSER LOOK AT VOLE'S BIG FLOOD: Working in small groups, examine some of the characters and themes in the story, to understand more deeply some of the messages the story is exploring.

25
minutes

WEATHER OR CLIMATE? Define and distinguish between 'weather' and 'climate' and explore how these are different in different parts of the world.

5
minutes

WHAT IS CLIMATE CHANGE? Define 'climate change' in preparation for further discussion in Lesson 2.



*Only got 50 minutes?
Make this lesson a little shorter by setting the drawing activity in 'Weather and Climate' as an optional piece of homework.*

*Only got 30 minutes?
We recommend exploring the first two sections of this lesson to read the story and engage with some of the themes and ideas. You could also do this part of the lesson in a group reading session before completing the other tasks.*

AT A GLANCE | CHANGING CLIMATES | Lesson 2 – Cause and Effect

20

minutes

WHAT IS CLIMATE CHANGE? Learn about greenhouse gases and consider how climate is changing in different climate zones. Empathise with the animals who live in these places by thinking about how these changes affect them.

30

minutes

THE GREENHOUSE EFFECT: Learn what the greenhouse effect is and consider human activities which produce a lot of greenhouse gases. In small groups, think in more detail about responsible resource use.

10

minutes

FOSSIL FUELS & RENEWABLE ENERGY: Compare and contrast fossil fuels and renewable energy sources, focusing on the need to reduce our consumption of finite resources.



Only got 45 minutes?
Instead of splitting into small groups and creating information posters, discuss each resource type as a class.

AT A GLANCE | CHANGING CLIMATES | Lesson 3 – The Ripple Effects

20
minutes

VOLE'S BIG FLOOD – THE IMPACT: Revisit 'Vole's Big Flood' to gain a deeper understanding of some of the impacts of changing climates. Complete an activity exploring how these changes make us feel, think and do.

20
minutes

FINDING SOLUTIONS: Use question cards to explore how the characters in the story responded to the flood, learning the power of working together to tackle big problems.

20
minutes

AMAZING INVENTIONS: In small groups, discover innovative inventions from around the world which seek to lessen the impact of climate change.



*Only got 45 minutes?
Instead of the question card activity (though this is really fun!), ask for volunteers to “hot seat” the different characters in the story and explore their responses as a class.*

*Only got 30 minutes?
We recommend delivering second and third sections of this lesson. The first section would make a great guided reading activity.*

AT A GLANCE | CHANGING CLIMATES | Lesson 4 – Be the Change

15

minutes

SUPPORTING EACH OTHER: Explore the thoughts, feelings and emotions we may experience in relation to changing climates. Learn how we can support ourselves and others when we feel this way.

45

minutes

WASTE-BUSTERS: Working together as a class or in small groups, take on the 'Waste Busters Challenge' and think of a creative campaign to tackle wasteful habits in your school!



*Only got 45 minutes?
Use this time to create your
'Waste-busters' campaign.*

*By instigating and witnessing
positive change, this activity
will empower your students
and school community.*

KS2 | Years 3&4 | Ages 7-9 years

AT A GLANCE | CHANGING CLIMATES | Lesson 1 – Our Changing Climate

25
minutes

WHAT'S THE WEATHER LIKE?: Create an illustration of the weather in your local area, considering seasonal differences and how humans, plants and animals are affected by weather conditions.

10
minutes

WEATHER OR CLIMATE?: Watch a short video to learn about the difference between weather and climate.

15
minutes

CLIMATE ZONES: Watch a short video and then explore the vocabulary used to describe different climate zones around the world. Take a look at an interactive map to find out more about climate in different parts of the world!

10
minutes

WHAT IS CLIMATE CHANGE?: Define 'climate change' in preparation for further discussion in Lesson 2.



*Only got 45 minutes?
Make this lesson a little shorter
by setting the drawing activity
in 'What's the weather like?'
as an optional piece of
homework.*

AT A GLANCE | CHANGING CLIMATES | Lesson 2 – Cause and Effect

20
minutes

CLIMATE CHANGE AND HUMANS: Building on your knowledge of greenhouse gases, travel back in time to find out about the Industrial Revolution and use of fossil fuels.

40
minutes

HUMAN INFLUENCE: Consider human activities which produce a lot of greenhouse gases. In small groups, think in more detail about the impact of certain activities and generate suggestions of more responsible resource use.



*Only got 45 minutes?
Save the question/answer card activity for a recap activity later on in term. Students can also finish their resources use diagrams as a homework task.*

AT A GLANCE | CHANGING CLIMATES | Lesson 3 – The Ripple Effects

40

minutes

IMPACTS OF CLIMATE CHANGE: In small groups carefully consider the impact of climate change on particular animals in different climate zones as you create a radio news report.

20

minutes

GLOBAL SOLUTIONS: In small groups, discover innovative inventions from around the world which seek to lessen the impact of climate change.



*Only got 40 minutes?
Explore the first section and
perhaps choose a question
from the second section to
reflect on together as a class.*

AT A GLANCE | CHANGING CLIMATES | Lesson 4 – Be the Change



5
minutes

CHANGING HABITS: Discuss how individuals, communities, businesses and governments can take action to tackle climate change.

40
minutes

CONVERSATIONS & CAMPAIGNS: Working together as a class or in small groups, think of a creative campaign to change wasteful habits in your school!

15
minutes

OUR PLEDGES: Make a personal pledge to change a habit or action which will result in being kinder to the environment.

*Only got 45 minutes?
Use this time to create your campaign. By instigating and witnessing positive change, this activity will empower your students and school community.*

KS2 | Years 5&6 | Ages 9-11years

AT A GLANCE | CHANGING CLIMATES | Lesson 1 – Our Changing Climate



10

minutes

WHAT IS CLIMATE CHANGE?: Watch a short video about how our climate is changing and distinguish between natural climate change and human-caused climate change.

25

minutes

WEATHER OR CLIMATE?: Learn the difference between weather and climate. Explore the vocabulary used to describe different climate zones around the world. Use an interactive map to take a closer look at different climate zones!

25

minutes

TRAVELLING THROUGH DEEP TIME: Consider climate change within the context of Deep Time.

*Only got 30 minutes?
Use this time to complete as much of the first two sections as you can. The final section could be used as a cross-curricular session in Maths or Geography.*

AT A GLANCE | CHANGING CLIMATES | Lesson 2 – Cause and Effect

25

minutes

CLIMATE CHANGE & HUMANS: Learn about fossil fuels and how they impact climate change. Create an information sheet about fossil fuels and how humans use them.

30

minutes

HUMAN INFLUENCE: Travel back in time to find out about the Industrial Revolution. In small groups, think in more detail about the impact of certain activities and generate suggestions of more responsible resource use.

5

minutes

RENEWABLE ENERGY: Compare and contrast fossil fuels and renewable energy sources, focusing on the need to reduce our consumption of finite resources.



*Only got 45 minutes?
Instead of splitting into small groups and creating information posters, discuss each resource type as a class.*

*Only got 30 minutes?
Set the spider diagram task as a homework activity.*

AT A GLANCE | CHANGING CLIMATES | Lesson 3 – The Ripple Effects

35

minutes

IMPACTS OF CLIMATE CHANGE: Write a short newspaper article about the impact of rapid climate change on humans, plants and animals.

5

minutes

CHANGING THE HABITS: Learn about ‘One Planet Living’ and think about how consumption levels vary in different countries.

20

minutes

GLOBAL SOLUTIONS: In small groups, discover innovative inventions from around the world which seek to lessen the impact of climate change.



*Only got 30 minutes?
Use this time to plan the newspaper articles and complete the third section. Finish the articles in a cross-curricular English lesson or as a homework task.*

AT A GLANCE | CHANGING CLIMATES | Lesson 4 – Be the Change

10
minutes

CHANGING HABITS: Discuss how individuals, communities, businesses and governments can take action to tackle climate change.

10
minutes

OUR PLEDGES: Make a personal pledge to change a habit or action which will result in being kinder to the environment.

40
minutes

CONVERSATIONS & CAMPAIGNS: Working in small groups, think of a creative campaign to change wasteful habits in your school!



*Only got 45 minutes?
Use this time to create your
campaigns.*

*By instigating and witnessing
positive change, this activity
will empower your students
and school community.*



CHANGING CLIMATES

EXPLORING THE NATURAL WORLD

KS3 | Years 7&8 | Ages 11-13 years

AT A GLANCE | CHANGING CLIMATES | Lesson 1 – Our Changing Climate



15

minutes

WEATHER OR CLIMATE?: Discuss and learn about the difference between weather and climate in order to understand natural and human-led climate change.

15

minutes

WHY IS OUR CLIMATE CHANGING?: Explore greenhouse gases in order to understand the reasons for human-led climate change. Teach each other through a knowledge swap.

15

minutes

HOW IS OUR CLIMATE CHANGING?: Working in small groups, explore different impacts of climate change for four different species.

15

minutes

TRAVELLING THROUGH DEEP TIME: Enhance our perspective of human history within the history of the Earth through ‘Deep Time’, so that we can better situate human’s responsibility for human-led climate change.

Only got 45 minutes?

We recommend exploring the first three sections of this lesson – and, if time, finishing with nature connection (the final activity in the lesson plan).

Only got 30 minutes?

We recommend exploring the first two sections of this lesson, and exploring some impacts of climate change from the third section.

AT A GLANCE | CHANGING CLIMATES | Lesson 2 - Cause and Effect

15

minutes

THE HUMAN INFLUENCE: Recognise our responsibility as humans by exploring human actions that cause climate change. Includes a reminder on the importance of self-care.

15

minutes

HUMAN HABITS: Working in small groups, identify habits that are harmful for the planet through images and questions.

20

minutes

THE PROBLEM WITH FOSSIL FUELS: Learn about the Industrial Revolution and fossil fuels, the problems of unrenewable energies and pollution. In small groups, use a fact sheet to explore different human habits.

10

minutes

RENEWABLE ENERGY: Explore some of the dis/advantages of some of our global habits, their connection to fossil fuels and alternatives.



Only got 45 minutes?

We recommend exploring the second, third and last section.

Only got 30 minutes?

We recommend exploring the third and fourth section.

AT A GLANCE | CHANGING CLIMATES | Lesson 3 – The Ripple Effects

30

minutes

THE RIPPLE EFFECTS: Understand the impacts of climate change by empathising with non-human species through a panel debate where each student will take on a role.

20

minutes

THE WIDER IMPACT: Understand the impacts of climate change in different communities around the world and other ripple effects through images and information.

10

minutes

ECO-EMPATHY: Reflecting on ‘eco-anxiety’/‘eco-empathy’ and the power of small/individual actions so as to recognise the emotions that may have arisen in the lesson and to prepare for Lesson 4.



Only got 45 minutes?

We recommend exploring the first section, one image from the second section in terms of impact on humans and non-humans, and the third section.

Only got 30 minutes?

We recommend exploring the second and third sections.

AT A GLANCE | CHANGING CLIMATES | Lesson 4 – Be The Change

15

minutes

BRIGHTER TOMORROWS: Review previous lessons, then imagine how the future could be like with actions to minimise human-caused climate change.

15

minutes

INSPIRATION FOR NOW AND FOR TOMORROW: In small groups or as a class, meet changemakers from around the world and explore how they can inspire us.

25

minutes

ACTION STATIONS: Working in small groups, brainstorm individual, community and national actions for the planet's wellbeing. Make a personal pledge.

5

minutes

BE THE CHANGE: Close off the topic by discussing Mahatma Gandhi's famous quote, 'be the change'.



Only got 40 minutes?

We recommend exploring the first and last section.

Only got 30 minutes?

We recommend doing the imagination activity in section one (if there's time watching 'Imagine a world without fossil fuels') and section two.

KS3&4 | Years 9&10 | Ages 13-15 years

AT A GLANCE | CHANGING CLIMATES | Lesson 1 – Our Changing Climate



15
minutes
WHY IS OUR CLIMATE CHANGING?: Explore greenhouse effect in order to understand the reasons for human-led climate change.

15
minutes
A VISION OF CLIMATE CHANGE: Explore the feelings related to climate change through ours and others' art.

15
minutes
WHAT CHANGES ARE WE SEEING?: Through different images, explore various impacts of climate change to more concretely understand the reasons and consequences.

15
minutes
TRAVELLING THROUGH DEEP TIME: Enhance our perspective of human history within the history of the Earth through 'Deep Time', so that we can better situate human's responsibility for human-led climate change.

*Only got 45 minutes?
We recommend exploring the first three sections of this lesson – and, if time, finishing with nature connection (the final activity in the lesson plan).*

*Only got 30 minutes?
We recommend exploring the first two sections of this lesson, and exploring some impacts of climate change from the third section.*

AT A GLANCE | CHANGING CLIMATES | Lesson 2 - Cause and Effect

10

minutes

ECO-ANXIETY: Watch a short video on the facts of Climate Change to then reflect on 'eco-anxiety' and coping actions.

15

minutes

THE PROBLEM WITH FOSSIL FUELS: Brainstorm examples for over-consumption, over-production and pollution, and learn about and have a knowledge swap about fossil fuels.

25

minutes

HUMANS' HARMFUL HABITS: With the help of images, think about how four small actions have become excessive and harmful for the planet, and in small groups, explore and think of alternatives for fossil fuel activities.

10

minutes

A BRIGHTER TOMORROW: Look at renewable energy sources as a possible alternative for fossil fuels and harmful human habits.



*Only got 45 minutes?
We recommend exploring
the first, third and last
sessions.*

*Only got 30 minutes?
We recommend exploring
first and third sessions.*

AT A GLANCE | CHANGING CLIMATES | Lesson 3 – The Ripple Effects



10
minutes

THE STORIES WE DON'T ALWAYS HEAR: Explore some of the impacts of climate change, the living beings being affected and whose stories are being told.

25
minutes

U.N. SPECIAL SUMMIT: OUR WORLD, OUR FUTURE: Small groups will represent one character and use fact sheets to understand particular impacts of climate change in their community. Each group will deliver a speech and the class will run a summit.

25
minutes

BRIGHTER TOMORROWS: Begin to imagine a brighter future, and working in groups, learn about ten different changemakers for inspiration.

*Only got 45 minutes?
We recommend exploring the first and second sections, and choosing only one or two changemakers to explore as a class.*

*Only got 30 minutes?
We recommend exploring section two, looking at one changemaker, and finishing with 'Turn Ideas Into Action' (last slide).*

AT A GLANCE | CHANGING CLIMATES | Lesson 4 – Be The Change



15
minutes

LIVING ON EARTH: Watch a thought-provoking video on humans' actions on the planet and explore various provocations individually and as a group.

25
minutes

MOTIVATION TO ACT: Explore different kinds of activism, our individual motivations on how to act, and the possible impact of every action.

20
minutes

EMPOWERING OUR ACTIONS: Understand how 'Motivation + Action = Empowerment' and the importance of self care. Explore individual, community and national actions and make an individual pledge.

Only got 45 minutes?

We recommend exploring the last two sections.

Only got 30 minutes?

We recommend exploring the second section and the beginning of the third section. Finish with the last three questions as an overview of the topic.

KS4&5 | Years 11-13 | Ages 15-18 years

AT A GLANCE | CHANGING CLIMATES | Lesson 1 – Our Changing Climate



20
minutes

A VISION OF CLIMATE CHANGE: Explore the feelings related to climate change through ours and others' art.

20
minutes

WHY IS OUR CLIMATE CHANGING?: Explore some of the effects and causes of human-caused climate through videos and information.

20
minutes

TRAVELLING THROUGH DEEP TIME: Perceiving human history within the history of the Earth through Deep Time in order to better situate human's responsibility for human-led climate change. This will give an important perspective to support the topic's explorations.

Only got 40 minutes?

We recommend exploring the first two sections of this lesson – and, if time, finishing with nature connection (the final activity in the lesson plan).

Only got 30 minutes?

We recommend exploring the first section of this lesson, and exploring some impacts of climate change from the second section.

AT A GLANCE | CHANGING CLIMATES | Lesson 2 – Cause and Effect

15

minutes

WHY IS OUR CLIMATE CHANGING?: Understand how humans' separation from the natural world triggered human development as well as the development of human-caused climate change.

15

minutes

INFINITE GROWTH ON A FINITE PLANET: Explore the ways and the reasons why many humans today are over-producing, over-consuming and polluting.

20

minutes

UNDERSTANDING CAUSE AND EFFECT: In small groups, choose from eight consequences of human actions and explore the causes, effects and wider impacts of this, and make connections between them.

10

minutes

HOW DID WE GET HERE? With videos and questions, connect the dots on some of the actions and apathy being seen in governmental responses to climate change.



Only got 45 minutes?

We recommend exploring the first, the third and the fourth sections.

Only got 30 minutes?

We recommend exploring first and third sections, finishing with the last slide ('Turn Ideas Into Action').

AT A GLANCE | CHANGING CLIMATES | Lesson 3 – The Ripple Effects

15
minutes

NATURE CONNECTION: Explore the emotions and how we might feel connected to the natural world and the impacts of nature connection.

15
minutes

EXTREME WEATHER: Explore various impacts of human-caused climate change around the world through a video, images and questions.

10
minutes

SPECIES EXTINCTION: Explore the serious consequences of species extinction from climate change and global initiatives that are working to push for change.

20
minutes

THE POSITIVE RIPPLES: In small groups, meet changemakers from around the world and explore their actions and work.



Only got 45 minutes?

We recommend exploring the first three sections, meet one changemaker from the final section and finish with the last activity: 'Turn Ideas Into Action.'

Only got 30 minutes?

We recommend exploring the first two sections and the last activity: 'Turn Ideas Into Action.'

AT A GLANCE | CHANGING CLIMATES | Lesson 4 – Be The Change

10

minutes

SMALL STEPS: Start thinking about what it means personally to respond to climate change, with a couple changemakers as inspiration.

25

minutes

UNDERSTANDING MOTIVATION: Understand how there are different ways to respond to climate change by watching and exploring videos with different approaches and motivations.

20

minutes

FROM WHAT IF TO WHAT IS: Recognise the reality of climate change today and explore your own motivations through self-reflection.

5

minutes

DEAR TOMORROW: Recognise the importance of imagination and write a collective class letter to the teenagers of 2030.



Only got 45 minutes?

We recommend exploring the second and third sections, and finishing with the three questions at the end of the last section as an overview to the topic.

Only got 30 minutes?

We recommend doing the first and third sections finishing with the three questions at the end of the last section as an overview to the topic.



EXPLORING THE NATURAL WORLD