

# Why are trees important for our atmosphere?

Explore the role of trees in the global carbon cycle and produce a poster or presentation to show how trees help fight climate change.

Use this activity to support the **Cut your school's CO**<sub>2</sub> emissions challenge.

www.woodlandtrust.org.uk/support-us/act/ your-school/green-tree-schools-award/ reduce-co2-emissions/



Worth one point on the award.

# **Curriculum requirements KS3**

## Earth and atmosphere

- the carbon cycle
- the composition of the atmosphere
- the production of carbon dioxide by human activity and the impact on climate

# Learning outcomes

After completing this activity, students will:

- be able to explain how trees use carbon dioxide and contribute to oxygen in the atmosphere
- understand the important role that British woods and forests around the world have in reducing global warming and climate change.

# **Preparation and resources**

The following materials will help you deliver this activity successfully.

## Outdoors – in a local woodland, park or your school grounds

- risk assessments
- health and safety equipment
- outdoor clothing and footwear suitable for all weathers





# Chemistry - KS3



#### In the classroom

- AV equipment to show the film 'The Big Climate Fightback: Young People's Forest at Mead, Derbyshire' www.woodlandtrust.org.uk/ visiting-woods/woods/young-peoples-forest-at-mead/
- access to the Woodland Trust website for pupil-led research www.woodlandtrust.org.uk/trees-woods-and-wildlife/british-trees/ how-trees-fight-climate-change/

## Location

Different parts of this activity can be carried out in different places.



## In your school grounds or a local park

If possible, go into your school grounds or visit a local park before or as part of your lesson. Collect leaves with your students and bring them back into the classroom.



## In the classroom

All parts of this activity can be done in class.

# Starter activity (10 minutes)

Watch our video: The Big Climate Fightback – Young People's Forest at Mead, Derbyshire

Class discussion: ask students to name the main sources of carbon dioxide in the world and use the film to kick-start a conversation about why planting trees is an effective way to fight climate change.

# Main activity (40 minutes)

Ask students to research the composition of the earth's atmosphere.

Explain the global carbon cycle and discuss the role of trees.

Ask students to produce a poster or a PowerPoint presentation to show why trees are so important to our atmosphere and for reducing carbon dioxide and carbon. They can use the Woodland Trust website to gather information for their work.







# Plenary/evaluation (10 minutes)

To end the lesson, ask students to share their posters and PowerPoint presentations with the class.

Discuss what we can do in our own lives to protect woods and increase the number of trees.

## Extension

Students can research how many trees we need to reduce the amount of carbon dioxide in the atmosphere.

Do you have space in your school grounds or local area to plant trees? The Woodland Trust offers free tree packs to schools. Find out how to apply and calculate how many trees you need using our school planting planner at **treetoolsforschools.org.uk** 



