



Total time

1 hour
(minimum)

Age range

year 6, 7 and
8 (10-13
years)

Practical ways to reduce London's climate risks



Context

The week of November 14th – 20th 2020 is London Climate Action Week (LCAW) and all schools are invited to take part. It's a great opportunity to link curriculum-based climate change learning with global and social learning for the Sustainable Development Goals and encourage pupils to practise social action for change. We have created four lessons to follow on a weekly basis in the period leading up to LCAW but all are independent so you can use them flexibly to suit. Lesson plans available here: <http://www.londonsustainableschools.org/london-climate-action-week.html>.

Learning objectives

- To understand some current and future impacts of climate change on London
- To explore some of the solutions to these impacts
- To give pupils the confidence and knowledge required to deliver a presentation on London's climate risks to peers

Step 1: Starter Game¹ - Where do you stand

5
mins

- An agreement line is an imaginary line from one side of a learning space to the other which young people are asked to stand along based on how much they agree or disagree with a particular statement.
- Ask learners to imagine a line from one side of the space to the other. Explain that standing at one end of the learning space means strongly agreeing with a statement, and standing at the other side means strongly disagreeing with the statement. Standing in the space in between means having a view somewhere in the middle.
- Explain that there is not necessarily any 'right' or 'wrong' answers.
- You may want to do a practice statement such as 'Football is brilliant' to get the pupils warmed up and used to how an agreement line works.
- Read out each of the statements below and give time for the young people to move into place. Encourage individuals in different positions to say a few words about why they have taken their position. Try to draw out what the young people think about the main principles.

Agreement line statements:

- Climate Change won't really affect us in London.
- London schools are at risk of flooding.
- Everyone will be impacted by climate change in the same way.
- We need to do more about climate change.

Step 2: London's Climate Risks

10
mins

Ask pupils: *What they think are the biggest climate risks to London today?*

If the teacher has not yet covered the Climate Change resource, use Appendix A to prompt pupils with: London is particularly vulnerable to **flooding**, **overheating** and **drought conditions** which can lead to water supply shortfalls.

Project **Appendix A** onto the board to help with ideas and facilitate a discussion – remind pupils to think about what is missing from the photos as well as what is there.

Project **Appendix B** onto the board – ask pupils what impacts would flooding have on London? On infrastructure, transport, tele communications, businesses and public services.

Ask pupils *if anyone can think of actions we can take today to help with any of the Climate Goals.*

E.g. Suggest switching from Google to Ecosia (with Ecosia every time you search for something a tree is planted).
<https://www.ecosia.org/?c=en>

Show this quote from London's Mayor Sadiq Khan aiming to reduce the risk:

"I'm doing everything in my power to reduce London's carbon footprint and going further and faster than national government to make London a zero-carbon city by 2050."

Ask pupils: *What does Sadiq mean? Check for understanding of key terms: carbon footprint, zero carbon*

¹ This game is taken from Oxfam's climate change resources: (<https://www.oxfam.org.uk/education/resources/climate-challenge-7-11>)

Divide pupils into three different research groups. The aim of this research activity is to find possible solutions to help London reduce our carbon footprint and make London a zero-carbon city. In order to do this we have to first understand what needs to happen in order to achieve this and find some solutions to help us get there.

Give each group a different topic. If pupils need assistance with the research task, below each topic there are several useful links:

1. The London Plane Tree (Biodiversity loss & trees)

Resources:

This report shows how much public green space each London borough has. How does your borough compare to others? <http://www.vivideconomics.com/publications/natural-capital-accounts-for-public-green-space-in-london>
This map shows how many street trees there are in London and what kind they are. Look at how much pink there is! <https://www.london.gov.uk/what-we-do/environment/parks-green-spaces-and-biodiversity/trees-and-woodlands/london-tree-map>

Below are useful resources to find out more about the benefits of the London Plane Tree to our environment.

<https://www.treesforcities.org/stories/the-mysterious-story-of-the-london-plane-tree>
<https://www.woodlandtrust.org.uk/visiting-woods/trees-woods-and-wildlife/british-trees/common-non-native-trees/london-plane/> <http://www.urbanforestnursery.com/treeprofiles/profilelondonplane.html>
<https://www.london.gov.uk/what-we-do/environment/parks-green-spaces-and-biodiversity/trees-and-woodlands/london-tree-map> https://www.foodgrowingschools.org/get-involved/qyop?utm_campaign=9364474_FGSL%20e-news%20April%202018&utm_medium=email&utm_source=Garden%20Organic

2. Public transport and emergency services

Resources:

- Page 13 https://www.london.gov.uk/sites/default/files/climate_change_risks_for_london_-_a_review_of_evidence_under_1.5degc_and_different_warming_scenarios.pdf
- <https://www.sustrans.org.uk/bigpedal>
- <https://www.livingstreets.org.uk/walk-to-school>
- <https://www.yas.nhs.uk/news/media-releases/2018/yorkshire-ambulance-service-leads-the-way-with-eco-friendly-vehicles/> – <https://www.greenfleet.net>
- <https://www.theguardian.com/environment/2019/apr/30/london-tubes-schools-and-homes-face-climate-change-chaos>

3. Energy use and buildings

Resources:

- https://www.london.gov.uk/sites/default/files/climate_change_risks_for_london_-_a_review_of_evidence_under_1.5degc_and_different_warming_scenarios.pdf Page 12
- <https://www.ukgbc.org/climate-change/>
- <https://www.sciencedirect.com/science/article/pii/S0378778811006293>
- <https://www.bioregional.com/projects-and-services/case-studies/bedzed-the-uks-first-large-scale-eco-village>
- https://www.london.gov.uk/sites/default/files/london_environment_strategy.pdf

Using Appendix C as a guide, ask students to turn their new knowledge into a presentation and identify specific actions that they can take as a class or school to contribute and help them devise a plan to bring these actions to life.

Extra resources:

There are some great resources available for teachers on Climate Change.

The Mayor's Office, led by Annette Figueiredo, have produced a superb guidance document for schools providing practical advice on how to reduce the risks of drought, heat and flooding. We recommend all London schools read this document and consider the actions they should take for their context.

See: [How Schools and Early Years Settings can Adapt to Climate Change](https://www.london.gov.uk/WHAT-WE-DO/environment/environment-publications/how-schools-and-early-years-settings-can-adapt-climate-change) (<https://www.london.gov.uk/WHAT-WE-DO/environment/environment-publications/how-schools-and-early-years-settings-can-adapt-climate-change>)

Here are just a few other great links:

- London Climate Risks PDF https://www.london.gov.uk/sites/default/files/climate_change_risks_for_london_-_a_review_of_evidence_under_1.5degc_and_different_warming_scenarios.pdf
- London Curriculum - <https://www.london.gov.uk/what-we-do/education-and-youth/london-curriculum>
- Practical Action: Climate change - <https://practicalaction.org/climate-change-resources>
- Learning through landscapes: free resources - <https://www.ltl.org.uk/free-resources/>
- Outdoor Classroom Day: resources - <https://outdoorclassroomday.org.uk/resources/>
- Global Dimension - <https://globaldimension.org.uk/>
- UNICEF: climate change resources and tools - https://www.unicef.org/environment/index_60352.html
- London Climate information: https://www.london.gov.uk/sites/default/files/1.5_action_plan_amended.pdf

Appendix B: London flooded





A collaboration between



Appendix C: Turning Learning into Action

How to present your research – turning knowledge into a presentation and identifying specific actions to take as a class or whole school.

Follow these steps to devise a plan to bring research to life.

3. What are the key messages you are trying to communicate?

1. What is the problem?

2. What is our idea?

4. Who is our audience?

5. How will we communicate our action to an audience?

6. What is the first step we are going to take and when?

Extra tips

- Think creatively to capture your audience and try to bridge the gap between something your audience can relate to and the research.
- Be realistic and use positive language.
- Adapt your research so that everyone in the audience is engaged in the topic.
- Think outside the box in how to communicate your action - this could be in the form of a video. Visual aids like PowerPoint can be useful to support and enhance what you are saying.