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**Exploring a Climate Ready Place**

Primary School Workshop Plan

Version 2.0, updated October 2017

This lesson plan and accompanying resources have been developed in partnership with PAS www.pas.org.uk

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| **List of supporting resources for this workshop****Resource 1**: Background information for teachers**Resource 2**: Different environments**Resource 3**: Weather introduction**Resource 4**: Climate landscape scenarios and info sheets |

**Notes**

The aim of this workshop is for the students to:

* Think about and evaluate the quality of their place and other environments
* Gain an introduction to climate change
* Understand how a changing climate might impact their place
* Look through [Resource 1] to familiarise yourself with the concept of climate adaptation.

**Activity 1: Understanding different environments**

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| Suggested time: 30 minutesMaterials required: printed images of your local place or printed images in Resource 2 |

* For this activity, you can either use images of local places in your town if you have some, or you can print and use the images in [Resource 2].
* Have students work in groups of four to six. Each group receives a bundle of printed images, either your own or from Resource 2. Students spreads these out on their table, or on ground around them if there is space.
* Ask each student to select two images that interest them. These may be images that are visually interesting, images that tell a story about how people use the land and space around them; or even images that they don’t understand but would like to know more about – any image that resonates with them.
* Ask the students to discuss in their groups why they selected those particular images. What do these images tell them about the place and the environment?
* Ask each group to share one or two images and why they picked those images.
* Facilitate discussion about the environments the students have selected – do students think these are ‘good’ or ‘bad’ environments to live in, do they prompt any comments about society and how people live, what might students do to improve or change these environments?

**Activity 2: Introducing changes in the weather**

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| Suggested time: 20 minutesMaterials required: images of different types of weather in Resource 3 |

* Explain to students that they have been thinking about their place/town and the kind of changes they would like to see in the future. Just as places and towns change over time, our weather also changes over time.
* Ask students: Does anyone know how many days ahead the weather forecaster on the news tells us about? [Typically 3-5 days]. Indeed, we know that the weather changes every day and from living in Scotland, we know that it can change every hour!
* Use [Resource 3] to introduce types of weather, if needed. Explain that if we look at this daily information all together, we can understand what weather is normal in Scotland – this is called our climate.
* Ask students: What would we say our climate/ normal weather is in Scotland over the year?
* Explain that scientists also look at the weather over longer lengths of time. They compare the weather today with the weather last year, 10 years ago, 100 years ago, and 1000 years ago.
* From looking at the past, scientists can tell how our climate has changed and work out what kind of climate we will have in the future. These weather records show that there have been big changes in Scotland’s climate over the last 100 years.
* The changes that we have experienced over the past 100 years are being caused by greenhouse gas emissions which trap heat inside the earth’s atmosphere and are causing the planet to warm. Even though we are working to cut greenhouse gas emissions our climate will continue to change for many years.
* Ask students: the climate is already changing – can anyone tell me about any big weather events that have happened recently? [e.g. the storms over winter]

**Activity 3: A changing climate and our environment**

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| Suggested time: 20 minutesMaterials required: Printed images of ‘unadapted’ landscape (of your choice) in Resource 4 |

* Use [Resource 4] to select the most relevant landscape for your local environment. Ignore the information sheets and the ‘adapted’ landscape image for the time being. Give each table a large colour printed copy of the ‘unadapted’ landscape.
* Have students study the landscape in their groups then ask them: what types of weather does this environment have? What changes do you think are already happening to this landscape?
* Have a class discussion. Issues that arise could include flooding; damage to buildings and infrastructure; changes in animal habitats, pests and diseases due to rising temperatures and increased rainfall.

**Activity 4: How good is our place?**

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| Suggested time: 30 - 40 minutesMaterials required: maps of your local area; large paper for students to write on |

1. For this activity, it would helpful to start by giving each table a map of their local area e.g. printed from Google maps. Ask each table to add their home, school, local landmarks and places they visit to the map.
2. Provide pupils with a large sheet of paper and ask them to mark out the following questions.

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| **What is good about your place?** | **What is less good?** |
| **What should stay the same?** | **What should change?** |

1. Ask pupils to work in groups to complete the sheet, starting with the top left hand box (good), then moving to the top right hand box (less good), then the bottom left (same) and bottom right (change) boxes.
2. Have a class discussion about their ideas. How might their ideas be impacted by a changing climate? Ask if they had ideas for change about the places they marked on their maps.

**Activity 5: Adapting our places to a changing climate**

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| Suggested time: 20 minutesMaterials required: Printed images of ‘adapting landscape’ in Resource 4 |

1. Use [Resource 4]. This time give each table a large colour printed copy of the ‘adapting’ landscape that goes with the ‘unadapted’ landscape you used in activity 3.
2. Ask each table to spot the differences between the two images, circling them with pencils.
3. Discuss the differences as a class. You might wish to use the Info sheet (also in Resource 5) to help check off all the differences.
4. Conclude the workshop by relating this activity back to your local environment. Ask students: if all these changes happen, how do you think it will affect where you live? Ask about specific locations in their town where they might have seen flooding, damage to roads and buildings etc.

**Further activities**

To explore a changing climate further:

* You may like to repeat activities 3 and 5 with the landscapes that you did not consider, in order to explore the concept of climate change on our environments further.
* You may like to think about climate adaptation at your school or in the local area. Are there projects you could take forward (e.g. greening areas that are heavily built up)? The biodiversity officer in the local authority may be able to assist with this type of project.

To explore the ideas students have for their place:

* You may like to encourage pupils to revisit their suggestions for change in activity 4. Ask them to decide upon one idea from their list of ideas and to design a poster showing how that idea could work.