

Session title	Climate Change Champions	
Key question	How are wetlands affected by climate change and how do they help lessen the impact?	
Session description	Explore the causes of climate change and the impact this is having on wetlands. Take on the role of a leaf and discover how plants have an important role to play in absorbing carbon dioxide. What role do wetlands play in helping to prevent climate change and what can we do to help improve the situation?	
Key Stage suitability	KS2	
Duration	1 hour	

Curriculum links	KS2 Science: Plants - Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers - Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant Living things and their habitats - Recognise that environments can change and that this can sometimes pose dangers to living things KS2 Geography: - Human and physical geography - Describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle		
Learning outcomes	Most learners will...	More able learners will...	
	- Understand the processes causing climate change - Know some of the impacts of climate change on wetlands - Know that plants absorb carbon dioxide and that this can help prevent climate change - Know that wetlands store carbon dioxide - Know some of the steps they can take to reduce their impact	- Be able to name carbon dioxide as a greenhouse gas. - Understand the processes leading to carbon storage - Understand the process of photosynthesis	
Key vocabulary	Climate Change Emissions Pollution Atmosphere Greenhouse gases	Wetland Carbon Dioxide Oxygen Photosynthesis Stomata	Carbon Sink Drought Evaporation Flooding

Session Outline	Time
Introduction	1 min
Learners are introduced to the key question and what will be covered.	
Activity 1: What is Climate change?	15 mins
Learners investigate and explain what climate change is and what causes it through a simple activity using blankets to model the build-up of greenhouse gasses in the atmosphere.	
Activity 2: Impact of Climate change on wetlands	5 mins
Learners look at the impacts extreme heat and intensive rainfall can have on wetland environments and their wildlife.	
Activity 3: Role of wetlands in reducing effects of climate change	24 mins
Learners are introduced to the concept of photosynthesis. They take on the roles of water, carbon dioxide, oxygen and sugars to model how plants absorb carbon dioxide and give out oxygen. They discover that in wetlands the carbon is also stored in the soil, helping to reduce climate change.	
Plenary - What can we do to help?	15 mins
Learners explore how we can all make small changes to our lives to help reduce the impacts of climate change.	