Session title	Climate change champions
Key question	How are wetlands affected by climate change & 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 The world around us ▪ Interdependence: - The effect of people on the natural and built environment over time ▪ Place: - Change over time in places - Positive and negative effects of natural and human events upon a place over time ▪ Change over time: - How change is a feature of the human and natural world and may have consequences for our lives and the world around us - Ways in which change occurs over both short and long periods of time in the physical and natural world - The effects of positive and negative changes globally and how we contribute to some of these changes	
Learning outcomes	All learners	More able learners
	▪ Understand the processes causing climate change ▪ Know some of the impacts of climate change on wetlands ▪ Know that wetlands store carbon dioxide ▪ Know that plants absorb carbon dioxide and that this can help mitigate the effects of climate change ▪ Know some of the steps they can take to reduce their impact	▪ Able to name carbon dioxide as a greenhouse gas ▪ Understand the processes behind these impacts ▪ Understand the processes leading to carbon storage ▪ Understand the process of photosynthesis ▪ Understand how these steps reduce the amount of carbon dioxide being emitted into the atmosphere

Key vocabulary	▪ Climate change ▪ Photosynthesis ▪ Stomata ▪ Carbon Dioxide (CO_2)	▪ Greenhouse gases ▪ Emissions ▪ Pollution ▪ Atmosphere	▪ Drought ▪ Evaporation ▪ Biodiversity ▪ Decomposition

Session Outline	Time
Introduction	5 mins
A quick introduction to the session title and what will be covered.	
Activity 1: What is climate change?	10 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: The impact of climate change on wetlands	5 mins
Learners look at the impacts extreme heat (drought) and intensive rainfall can have on wetland environments and their wildlife.	
Activity 3: The role of wetlands in mitigating the effects of climate change	25 mins
Leaners take on the role of water, carbon dioxide, oxygen and sugars to model how plants absorb carbon dioxide and give out oxygen (through the process of photosynthesis) helping to reduce the impacts of climate change.	
Activity 4: What can we as individuals do to help?	10 mins
Learners explore how we can all make small changes to our lives to help reduce the impacts of climate change.	
Plenary	5 mins
We refer back to the title question, reviewing what we have learnt. There will also be time for learners to ask any remaining questions they may have.	