

Peatland Basics: Carbon & fossil fuels

Pupils will learn about carbon and its relation to all living things, and to fossil fuels. Pupils will link peat to the carbon cycle in this way, and therefore also climate change.

This lesson has outdoor learning sections. See Notes on an indoor version.

Timings	Activity	Notes	Resources
20 mins	Introduce the lesson, play the prerecorded presentation, and discuss the video afterwards.		Peatland Basics: Carbon, Climate Change, and Peat prerecorded presentation
15 mins	<p>Go outdoors. Create a carbon self portrait (must be out of natural materials that were once living or still alive. Fallen leaves, twigs, moss, NOT rocks).</p> <p>Discuss how carbon relates to fossil fuels – repeating points from the video</p>	Indoors only? Ask pupils to draw their face as if out of leaves, branches, and moss. They should only use the colours these things would be!	Paper and pencils if indoors
15 mins	<p>Tag game – when the carbon (in fossil fuels) is burnt, carbon joins with two oxygens to create carbon dioxide. Get a third of the class to be carbons who chase and catch two oxygens.</p> <p>Remind pupils that when we burn fossil fuels, carbon dioxide is released into the atmosphere. This</p>	<p>Indoors only?</p> <p>Use the drawing worksheet instead.</p> <p>You may wish to refer to the ‘fire triangle’ – fire needs oxygen, a spark, and fuel in order to burn. Therefore burning carbon joins it with oxygen.</p>	<p>You may wish to use bands or bibs to show who is a Carbon.</p> <p>Drawing worksheet if indoors</p>

	is like putting extra blankets on the earth – it heats up (this is climate change).	You may wish to talk more about why we are trying to stop using fossil fuels – so that the planet is healthy for the future – and link this to the UNCRC goals.	
10 mins	Return indoors and play the short peatland introduction video. Display the peatland healthy vs unhealthy picture while doing the worksheet. Use the description worksheet and ask pupils to fill out words that describe the peat.		Peatland Summary 2 min video (found in the PMM folder, not any subject folder). Healthy vs Unhealthy peat Description worksheet
10 mins	<p>Plenary – refer to the success criteria.</p> <ul style="list-style-type: none"> • What are all living things on earth made out of? Carbon • What are some fossil fuels? Coal, oil, gas, peat • What does burning fossil fuels make? Carbon dioxide • What happens to the climate when we burn fossil fuels? It changes* • What other ways does carbon dioxide increase in the atmosphere? By damaging peat** 	<p>*Pupils may say it gets warmer, which is true globally, but some areas may end up getting colder! Weather and climate are complex, and when the systems change or break down, freak snowstorms such as those in Texas can happen.</p> <p>**Other answers include intensive farming, damaging soil, changing land use (e.g. from rainforest to farm land), deforestation, etc.</p>	