

Year 4 – Protecting our World – Autumn 2

National Curriculum:

- Understand how people can damage their environments.
- Explain how changes in the Human and Physical environments affect the people living there.
- Express my views on the environment of my local area or the place I'm studying and consider the views of others.
- Use age-appropriate maps, atlases and globes to locate and name places I'm studying.
- Begin to ask and answer questions about a place I've studied.
- Observe, measure and record the Human and Physical features in the local area.
- Present my findings using a range of methods, with support e.g. sketch maps, plans and graphs.

Prior learning	In Year 4...	Future learning
In Year 3, Children will be taught to... -Identify basic human and physical features of Bedworth -Describe and understand key aspects and process of Bedworth and how changes to the environment can affect people living there. -Express views of their local area. -Use maps, atlases and globes to locate Bedworth. -Use basic map skills including N,E,S,W, basic symbols and keys. -Use fieldwork to observe and record the human physical features in the local area through a tally, and present my findings.	In Year 4, Children will be taught to... -Understand what fossil fuels are including coal, oil and gas, give examples of where these fuels come from and how they are used for example coal for fires, oil for cars and gas for cooking. -Identify the key advantages and disadvantages of fossil fuels for humans and their planet, and discuss the impact this may have on the world, linking back to previous learning on the Arctic. Explain that they are cheap and reliable, usually found in large amounts, make lots of different things, can be stored and transported however are non-renewable, damage the environment, contributor to climate change, damage wildlife and are messy. -Explore greener, renewable types of energy including solar, geothermal, wind, biomass and hydropower and discuss the impact this will have on the environment and keeping our planet, animals, environment healthy. -Investigate the best location for a renewable energy source (Wind) in Bedworth through a fieldwork study using an anemometer (an instrument to measure the speed of the wind) to track wind speed in different locations in their local area (the miners welfare park, the shops, the town, the school ground) -Present fieldwork findings in a table and analyse the results they have found to explain the best place for a win turbine is in an open field in our local area. -Ask the community about their opinions of fossil fuels and renewable energy, and reflect on their own opinion. Children will explain whether we should keep using fossil fuel, use only renewable sources or a mixture of both.	In Year 5, Children will be taught to... -Identify that Bedworth is located in Warwickshire and locate the immediate surrounding counties to its locality. -Use OS maps to identify contour lines and describe the journey of water in the river Severn in comparison to its altitude. -Use four figure grid references, symbols and keys to identify local rivers to Bedworth, including human and physical features of the surrounding area. -Explain the causes of flooding and its effect on people and the environment and how it can be managed in a sustainable way. -Explore how people can both improve and damage their environment -Use maps, atlases and globes to describe the location of places studied and their physical features. -Ask geographical questions that are relevant to my topic and suggest ways to investigate them

Key Vocabulary

fossil fuels, renewable energy, non-renewable energy, solar energy, geothermal energy, hydropower energy, wind turbine, anemometer.

Fossil fuels - A natural fuel such as coal, gas and oil.

Renewable energy - Energy that comes from natural sources that which will never run out, such as sun, wind and water.

Non-renewable energy - Energy that comes from sources that will eventually run out, such as fossil fuels.

Solar energy - A type of renewable energy that comes from the sun.

Geothermal energy - A type of renewable energy taken from the Earth's core taken from the heat.

Hydropower energy - A type of renewable energy also known as water power. This is where fastflowing or falling water is used to produce electricity or to power machines.

Wind turbine - A device that turns wind energy into electrical energy.

Anemometer - An instrument that measures wind speed and wind pressure.

