

Knowledge Organiser Year 3 and 4 : Do We Have The Power To Change The World?

Local History

How has Oxford and Grandpont changed over 1000 years.



DT – Design & Technology

Design and construct a wind turbine using found materials that can power an LED bulb.

Design a more sustainable St Ebbe's school.

UNICEF Conventional Rights of a Child:

Article 6: You have the right to be alive.

Article 12: You have the right to give your opinion and for adults to take it seriously.

Article 29: You have the right to an education which helps you learn to live peacefully, protect the environment and respect other people.



William Kamkwamba is a Malawian inventor, engineer, and author. Aged 14 he built a wind turbine to power multiple electrical appliances in his village, using blue gum trees, bicycle parts, and materials collected in a local scrapyards. He became known as **The Boy Who Harnessed the Wind**.



Dr Seuss wrote 'The Lorax' in 1971, a children's book, which warned of the dangers of environmental destruction.

Amariyanna Copeny - When Copeny was 8 years old, she wrote a letter to President Barack Obama in order to draw attention to the water crisis in her hometown of Flint, Michigan. Her letter prompted a response from the president, who said that "letters from kids like you are what make me so optimistic about the future".

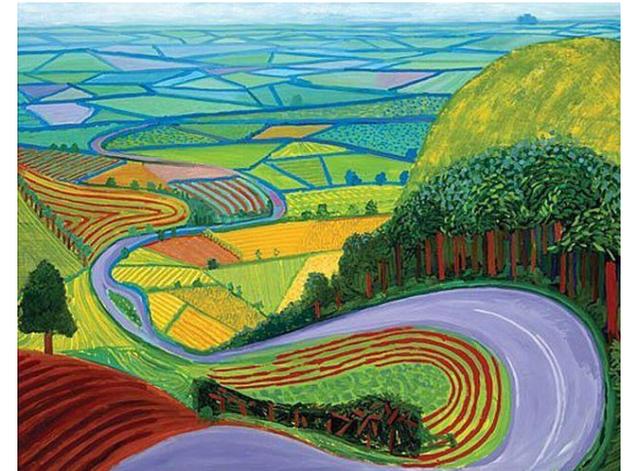


GEOGRAPHY: Sustainability

How sustainable is Oxford compared to other cities around the world. Fieldwork and map skills can be used to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies like Google Earth.

ART:

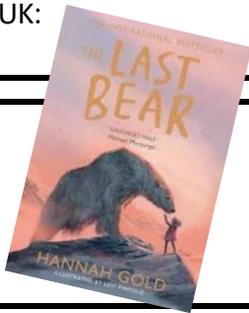
David Hockney's landscapes of Yorkshire use different media styles to depict the countryside of Great Britain.



Key Events

1760	The Industrial Revolution was the transition to new manufacturing processes in Europe and the United States, in the period from about 1760 to sometime between 1820 and 1840.
1887	The first windmill for electricity production is built by Professor James Blyth of Anderson's College, Glasgow
1980	The world's first windfarm consisting of 20 turbines is built in New Hampshire. The windfarm however, is a failure as the turbines break down and the developers overestimate the wind resource
1991	The UK's first onshore windfarm is opened in Delabole, Cornwall. The farm consists of 10 turbines and produces enough energy for 2,700 homes.
2022	Oxford Zero Emission Zone Pilot launched on 28 February 2022
2022	There are now almost 11,500 wind turbines in the UK:

BOOKS: The Last Bear
by Hannah Gold.



Vocabulary

Sustainability	sustainability (noun) Using natural resources in a way that makes sure that there will be enough resources left for future generations.
sustainable	sustainable (adjective) An action that can continue without natural resources running out or damage being caused that will stop it from continuing in the future.
zero emission	zero emission (adjective) Not releasing any greenhouse gases into the atmosphere. An example of a zero-emission vehicle is an electric car.
Renewable energy	renewable energy (noun) Energy created from sources that do not run out or that can replenish themselves, such as water, sun and wind.
Net Zero	net zero (noun) A balance between the amount of greenhouse gases produced and the amount that is removed from the atmosphere. Net zero is the best way to tackle climate change by reducing global warming.
Environment	environment (noun) The surroundings that a plant, an animal or a person lives in.
Carbon footprint	carbon footprint (noun) The total amount of greenhouse gases produced and released into the atmosphere by the activities of one person or organisation.

FEELING CURIOUS? Links to more knowledge

<https://www.bbc.co.uk/bitesize/topics/zshp34j>

RE:

Who inspires us?

People and beliefs can inspire us to live better lives.

What is best for our world?

Our beliefs affect our decision making.

Music:

Listen to and take inspiration from STOMP; create a rhythmic piece focussed on beat & rhythm.

STOMP 'Plungers':

<https://www.youtube.com/watch?v=9mtdEH43r2s>

Science:

What is a circuit: An electrical circuit provides a path that carries an electrical current.

