

FUTURE EARTH

Can you find out?

1. What happens to waste that is not recycled?
2. What is renewable energy?
3. How many years does it take a single aluminium can to decompose?
4. How many UN sustainable development goals are there?
5. How is hydroelectricity produced?

Did you know?

The UK produces 100 million tonnes of waste every year!

What are the UK's natural resources?



Look to the future!

What will homes of the future look like using sustainable building materials and running on sustainable energy? Are you an architect for our future earth?

Key Vocabulary

Sustainability – humans must interact with the environment in a way that ensures there will be enough resources left for future generations

Renewable energy – a natural source of energy that will never run out. E.g. Wind, the Sun and water are renewable energy sources that can be used to create electricity

Fossil fuels – natural resources are formed from the remains of plants and animals that died, e.g. oil, coal and gas.

Natural resources – materials or substances that are produced by the environment

Recycle – waste that can be made into something new.

Preservation – People who care about conservation try to preserve natural resources so they will still be around in the future.

Reusable – capable of being used again or repeatedly

Bioenergy – refers to electricity and gas that is generated from organic matter, known as biomass. This can be anything from plants and timber to agricultural and food waste – and even sewage.

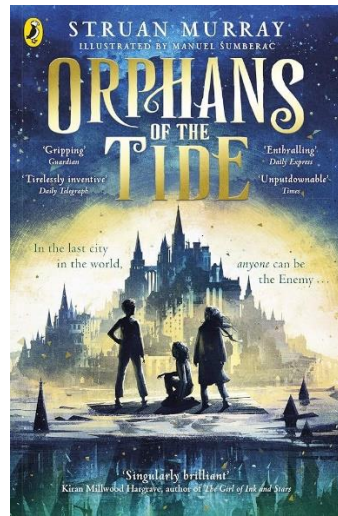
Biodegradable – can be broken down naturally and return to nature without having a harmful impact on the environment

Carbon Capture – removal of carbon dioxide from waste gases from power stations and then storing it in old oil and gas fields or coal mines underground.

Carbon Footprint – the amount of carbon dioxide released into the Earth's atmosphere as a result of human activities, rather than any natural emissions

English

We will be reading a dystopian novel about the future of our Earth and rising sea levels named *Orphans of the Tide*. An ancient myth looms over a new friendship. The City on the last mountain on Earth is the only home that Ellie has ever known. She's always been told that there is nothing to see beyond the shores of her small, salty island. That is, until a mysterious boy washes in with the tide, trapped inside the belly of a whale...



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Science

Life finds a way! Our planet has been changing for millions of years and a vast array of animals and plants have called it home. We will be finding out how inherited traits lead to adaptations over time to ensure survival. The inability to adapt or adapt fast enough can lead to extinction! How will animals, including humans, and plants need to adapt to survive in the future! How will we continue to evolve?

Music

In Music, we will be looking at Baroque music, identifying key features including Canon, Ground-bass and fugue. We will then use instruments to play and learn Baroque pieces.

Computing

This term, we will be exploring 3D modelling. You will discover how computer-based 3D design is used in architecture to plan buildings and 'explode' 3D models of buildings to see what shapes they comprise of. Finally, you will use your knowledge of sustainability to design a building of the future and create a 3D model of your design.

Geography

In Geography we will be developing our understanding of sustainability and equity. Thinking about the global distribution of resources, we will consider alternative energy sources and building materials in order to design an eco-house that could be used to protect our environment in the future.



DT

Have you ever watched *Come Dine with Me*?

This term in DT, we will be cooking. You will be designing and creating a starter, main course and desert and learning the key skills needed to cut, cook and serve a delicious meal. You will be planning a menu, writing a recipe, adapting and improving our cooking skills and flavour profiles as well as building independence in knife skills and working with heat.

Key Vocabulary:

Balance, complement, cross-contamination, enhance, flavours, ingredients, method, preparation, recipe, umami.

English Key Vocabulary

Conjunction – a word, or words, used to connect two clauses (parts of a sentence) together.

Parenthesis – adding extra information to a sentence using brackets, dashes or commas.

Ellipses – commonly used to indicate the omission of words, lines or paragraphs from a passage. Use an ellipsis when omitting (leaving out) a word, phrase, line, paragraph, or more from a quoted passage.

Cohesion – when a person's writing has **cohesion**, an attempt has been made to link clauses, sentences and paragraphs so that the writing 'hangs together'.

Suspense – creates tension and mystery within your writing.

Expanded noun phrases – a descriptive clause normally made up of a noun as well as one or more adjectives

Figurative language – uses figures of speech to give a text more richness and depth, often comparing things to other things to create an image in the reader's mind, e.g. similes, metaphors, personification.

Maths Key Vocabulary

Area - Area is the term used to define the amount of space taken up by a 2D shape or surface. We measure area in square units e.g. cm^2 or m^2 . Area is calculated by multiplying the length of a shape by its width.

Volume - Volume is the amount of 3D space an object occupies or takes up. You can work out the volume of a shape by multiplying height \times width \times depth.

This term, we will continue to revise the methods for calculating with whole numbers and fractions and explore multi-step problems involving these.