Year 5 Summer 2 Life on the edge of the Blue Planet

Hook (curiosity):

Virtual tour of the Tropical Rainforest Biome

Text (Reading, language, communication):

Kensuke's Kingdom - Michael Morpurgo

End product (engagement:)

A piece of art inspired by Japanese painter Hokusai Katsushik's work 'The Great Wave'.

Vocab (Reading, language, communication):

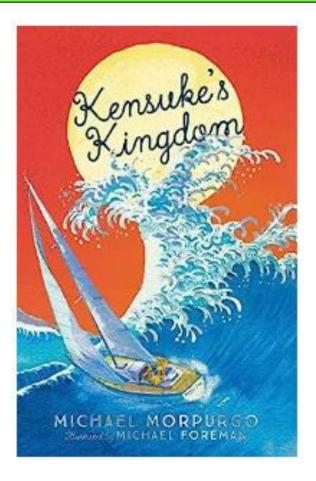
Biofuel, coal, consumption, contour line, crude oil, dam, emissions, hydropower, natural gas, non-renewable, nuclear power, regenerate, renewable, replenish, solar power, urban planner, wind power, six-figure grid reference

Sticky knowledge (Learning that sticks):

- 1. Different types of energy are important and they all have their own advantages and disadvantages.
- 2. Renewable energy does run out when used and non-renewable cannot be replenished and will eventually run out.
- 3. The Prime Meridian is line of longitude that runs from the North Pole to the South Pole and divides the Earth into two halves: the Eastern and Western Hemisphere.
- 4. USA get most of their energy from non-renewable sources, such as crude oil, coal and natural gases. They are one of the largest energy consumers in the world.
- 5. The three main types of renewable energy sources are- solar power, wind power and hydropower
- 6. Humans have had negative and positive impacts on the environment over time.

Driver: Geography

Life on the edge of the Blue Planet



Geography – Where does our energy come from? National Curriculum references:

- use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied
- locate the world's countries, using maps to focus on Europe (including the location of Russia) and North America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities

Progression of skills:

Locating more countries in Europe and North and South America using maps.

Locating major cities of the countries studied. Locating some key physical and human features in countries studied on a map. Explaining why a locality has changed over time, giving examples of both physical and human features.

Identifying the location of the Prime/Greenwich Meridian and time zones, and explaining its significance. Using longitude and latitude when referencing location in an atlas or on a globe. Describing and explaining similarities and differences between two environmental regions studied.

Understanding how climates impact on trade, land use and settlement. Using maps to explore wider global trading routes. Understanding some of the impacts and causes of climate change. Describing and explaining how humans can impact the environment both positively and negatively, using examples. Confidently using and understanding maps at more than one scale.

Using atlases, maps, globes and digital mapping to describe and explain physical and human features in countries studied. Making sketch maps of areas studied including labels and keys where necessary.

Making an independent or collaborative plan of how they wish to collect data to answer an enquiry-based question. Selecting appropriate methods for data collection. Design and conduct interviews/questionnaires to collect qualitative data. Deciding how to present data communicating geographical information. Drawing conclusions about an enquiry using findings from fieldwork to support your reasonings.

PSHE

Health and Wellbeing

- -how to make informed decisions about health -- elements of a balanced, healthy lifestyle
- -choices that support a healthy lifestyle, and recognise what might influence these
- -how to recognise that habits can have both positive and negative effects on a healthy lifestyle
- -what good physical health means; how to recognise early signs of physical illness
- -what constitutes a healthy diet; how to plan healthy meals; benefits to health and wellbeing of eating nutritionally rich foods
- -risks associated with not eating a healthy diet including obesity and tooth decay.
- -how regular (daily/weekly) exercise benefits mental and physical health (e.g. walking or cycling to school, daily active mile); recognise opportunities to be physically active and some of the risks associated with an inactive lifestyle
- -how sleep contributes to a healthy lifestyle; routines that support good quality sleep; the effects of lack of sleep on the body, feelings, behaviour and ability to learn
- -bacteria and viruses can affect health; how everyday hygiene routines can limit the spread of infection; the wider importance of personal hygiene and how to maintain it

History

Design technology

Art and Design Hukasai 'Wave'

National Curriculum reference:

Pupils should be taught:

- to create sketch books to record their observations and use them to review and revisit ideas.
- To improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials.
- About great artists, architects and designers in history

Progression of skills:

- Record their observations and use them review revisit ideas.
- Improve their mastery of art and design techniques, including drawing and painting with pencil, charcoal, paint.
- Learn about great artists, architects and designers in history

Music

(Composition to represent the festival of colour- Kapow)

National Curriculum reference

 Improvise and compose music for a range of purposes using dimensions of music.

Progression of skills

- Representing the features of a piece of music using graphic notation, and colours, justifying their choices with reference to musical vocabulary.
- Representing the features of a piece of music using graphic notation, and colours, justifying their choices with reference to musical vocabulary.
- Comparing, discussing and evaluating music using detailed musical vocabulary.

Physical Education

Fitness

National curriculum link:

- Develop flexibility, strength, technique, control and balance [for example, through athletics and gymnastics]
- Compare their performances with previous ones and demonstrate improvement to achieve their personal best.

Progression of skills:

- I can analyse my fitness scores to identify areas for improvement.
- I can choose the best pace for a running event and maintain speed.
- I can encourage and motivate others to work to their personal best.
- I can identify how different activities can benefit my physical health.
- I understand the different components of fitness and how to test them.
- I understand what my maximum effort looks and feels like and I am determined to achieve it

OAA-

National curriculum link:

- Take part in outdoor and adventurous activity challenges both individually and within a team.

Progression of skills:

- I am inclusive of others and can share job roles.
- I can navigate around a course using a map.
- I can orientate a map confidently.
- I can reflect on when I was successful at solving challenges and alter my methods in order to improve.
- I can use critical thinking to approach a task.
- I can work effectively with a partner and a small group, sharing ideas and agreeing on a team strategy.

Computing

National Curriculum reference:

- design, write and debug programs that accomplish specific goals,
 including controlling or simulating physical systems; solve problems by
 decomposing them into smaller parts
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- select, use and combine a variety of software (including internet services)
 on a range of digital devices to design and create a range of programs,
 systems and content that accomplish given goals, including collecting,
 analysing, evaluating and presenting data and information

Progression of skills:

- To relate that a count-controlled loop contains a condition.
- To compare a count-controlled loop with a condition-controlled loop.
- To explain that when a condition is met a loop will complete a cycle before it stops.
- To explain that selection can be used to branch the flow of a program.
- To explain that a loop can be used to repeatedly check whether a condition has been met or not.
- To explain the importance of instruction order in 'if... then.. else..' statements.

Science

Animals including humans- lifecycles

National Curriculum links:

- describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird
- describe the changes as humans develop to old age

Skills

- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- using test results to make predictions to set up further comparative and fair tests
- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations