Key Vocabulary:

**Biome** - are very large ecological areas on the earth's surface, with fauna and flora (animals and plants) adapting to their environment.

**Canyon** - a deep, narrow valley with steep sides.

**Climate** - long term weather patterns in an area.

**Delta -** a landform that forms at the mouth of a river, where the river flows into an ocean, sea, estuary, lake, or reservoir.

**Drought** - less rainfall than is expected over an extended period of time, usually several months or longer. Or, more formally, it is a deficiency of rainfall over a period of time, resulting in a water shortage for some activity, group, or environmental sector.

**Erosion** the act in which rock/soil is worn away, often by water, wind or ice.

**Flood plain -** an area of low-lying ground adjacent to a river, formed mainly of river sediments and subject to flooding.

**Geology** - the study of the origin, history, and structure of the earth.

**Gorge -** a deep, narrow valley with steep sides, usually smaller than a canyon.

**Grand Canyon -** the large canyon made by the Colorado River in the USA State of Arizona.

**Lake -** a body of water surrounded by land.

**Latitude -** a measure of the distance you are located from the equator.

**Levee** - an embankment built to prevent the overflow of a river.

**Longitude -** the distance of a place east or west of the Greenwich meridian.
**Mountain -** a large landform that stretches above the surrounding land in a limited area, usually in the form of a peak.

**Mountain range -** a series or chain of mountains that are close together

**Plateau** - a large region that is higher than the surrounding area and relatively flat.

**Population Density -** Measurement of the number of people in an area. This can be calculated by dividing the number of people by the area in question.

**Population Distribution** The pattern of where people live. Places which are sparsely population contain few people. Places which are densely population contain many people.
**Prairie -** a large grassland.

**River -** a large stream of flowing fresh water.

**Topography** - the study of the shape of the surface features of an area.
**Weather** the condition of the earth's atmosphere over a brief period of time e.g. a day.

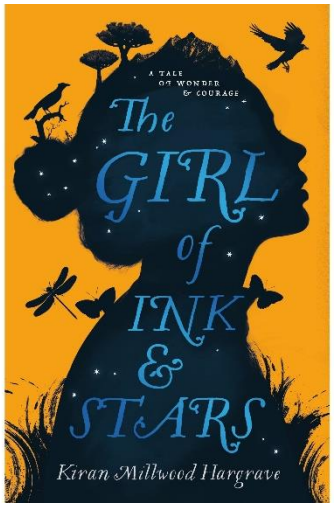
# Topic Name: Land of the Free

## Summary:

We will begin this topic in Spring 1 and continue until Easter. As geographers we will:
• Study the continent of North America
• Compare and contrast North America with the United Kingdom
We will start by looking at maps of North America so we can see where it is and name some of its countries. We will then focus our studies on the United States of America (USA.

Class text that we will be reading:

The Girl of Ink and Stars by Kiran Millwood





Location: We will locate the countries and capital cities of North America.

I will know that Canada , United States of America and Mexico are countries of North America but there are 23 countries in total in North America including Greenland and Jamaica.

The capital city of USA is Washington DC, Canada is Ottawa and Mexico is Mexico City.

I will also know that the countries of Brazil, Argentina, Chile, Peru are amongst 12 countries in South America.

Activities: In Maths we will develop a chronological awareness of events throughout History. We will also use our knowledge of coordinates to locate areas and geographical landmarks on maps.

In English, we will be writing a fact file, highlighting the differences between the UK and the USA. We will write a biography about the Native American Chief – Sitting Bull. Story writing will be based on Native American myths and legends.

We will explore the writing of dialogue as we write a narrative.

We will be journalists and write about The Statue of Liberty.

Poetry also features this term where we will learn and recite some classic US poems and use these as models for our own poetry writing.

We will write a persuasive piece about subjects that we are passionate about.

We also plan to write to The Queen on the occasion of her Platinum Jubilee.

In Geography, we will learn:

Physical features:

We will focus on the North American continent but will briefly locate the countries of South America.

• Some of the amazing landscapes, wildlife and plant life of the National Parks

• The vast mountain ranges of the Rockies, Appalachians and Sierra-Nevada

• The San Andreas fault – the USA's earthquake zone

• The Great Lakes that border the USA and Canada -They are **Lakes** Superior, Michigan, Huron, Erie, and Ontario and are in general on or near the Canada–**United States** border, and Niagara Falls 

• We will discover some of the incredible weather features such as the violent tornadoes in 'Tornado Alley', the summer wild fires of California and the dramatic drops in temperature that some states experience during winter

• Some of the great rivers, such as the Colorado and the Mississippi .

We will compare and contrast some of these features with those in the United Kingdom. 

Human features:

.The states and cities, focusing on the skyscrapers and monuments of New York, the home of Hollywood – Los Angeles, the home of the Golden Gate Bridge – San Francisco, the Windy City – Chicago, and the home of government – Washington DC

• The Hoover dam in Arizona

• Land use and economic activity in some of the areas we study

We will study some of the diverse cultures across the USA, including a study of some Native American people.

In History, we will learn:

We will find out about some of the national festivals, such as Thanksgiving and the 4th of July. We will explore the origins of the national flag: the Stars and Stripes. We will also look at some past historical figures such as Sitting Bull.

We will compare and contrast some of these features, events and people with those in the United Kingdom.

Maths

Here are the National Curriculum objectives that we will cover this term:

I can associate a fraction with division to calculate decimal fractions equivalents for a simple fraction.

I can identify the value of each digit to 3 decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to 3 decimal places.

I can multiply 1-digit numbers with up to 2 decimal places by whole numbers.

I can use written division methods in cases where the answer has up to 2 decimal places.

I can solve problems which require answers to be rounded to specified degrees of accuracy.

I can recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.

I can use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation of up to 3 decimal places.

I can express missing number problems algebraically.

I can use simple formulae.

I can generate and describe linear number sequences.

I can find pairs of numbers that satisfy an equation with two unknowns.

I can enumerate possibilities of combinations of two variables.

I can solve problems involving the relative sizes of two quantities, where missing values can be found using integer multiplication and division facts.

I can solve problems involving the calculation of percentages and the use of percentage comparisons.

I can solve problems involving similar shapes where the scale factor is known or can be found.

I can solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

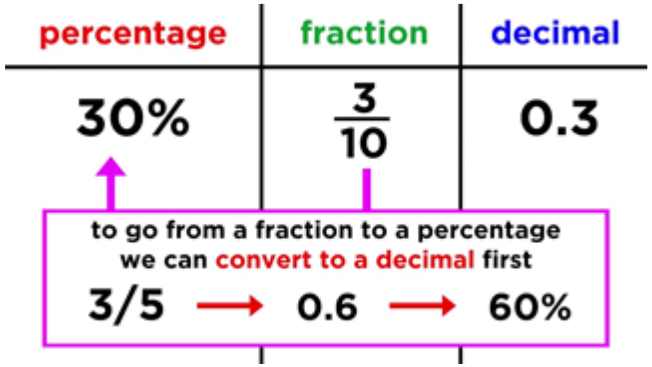
I recognise that shapes with the same areas can have different perimeters and vice versa.

I can interpret and construct pie charts and line graphs and use these to solve problems

I can calculate and interpret the mean as an average.

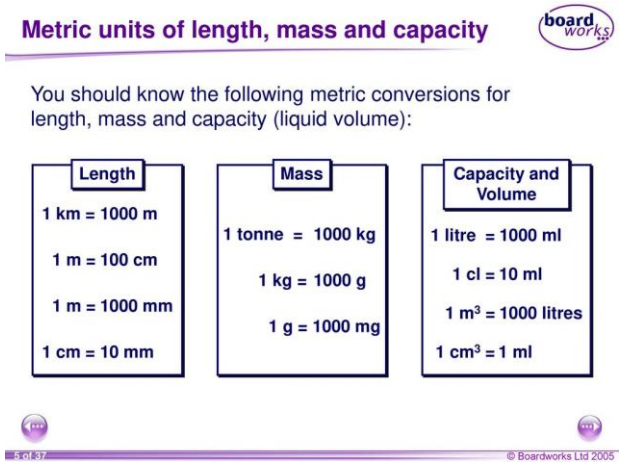
At the end of the half-term I will know:

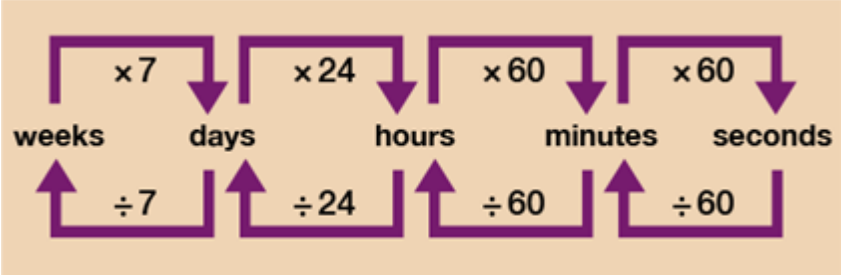
Equivalent fractions, decimals and percentages.




Numbers to 3 decimal places.


How to convert between standard units of length, volume, mass and time.






How to calculate ratio and proportion.

Science:

In Science we will be continuing our learning about Electricity and will then move on to Light and subsequently Evolution.

We will be learning to:

explain how the number and voltage of cells in a circuit links to the brightness of a lamp or the volume of a buzzer.

compare and give reasons for why components work and do not work in a circuit.

draw circuit diagrams using the correct symbols.

explain how light travels.

explain and demonstrate how we see objects.

explain why shadows have the same shape as the object that casts them.

explain how simple optical instruments work, e.g. periscope, telescope, binoculars, mirror, magnifying glass etc.

I can describe how the earth and living things have changed over time.

I can explain how fossils can be used to find out about the past.

I can explain about reproduction and offspring (recognising that offspring normally vary and are not identical to their parents).

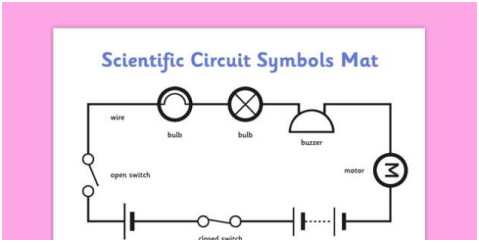
I can explain how animals and plants are adapted to suit their environment.

I can link adaptation over time to evolution.

I can explain evolution.

At the end of the half-term I will know:

How to draw and label the symbols in circuit diagrams



That a complete circuit enables the components to operate correctly whereas any break in the circuit will prevent this from happening.

That light travels in straight lines and how light travels into our eyes allowing to see objects.

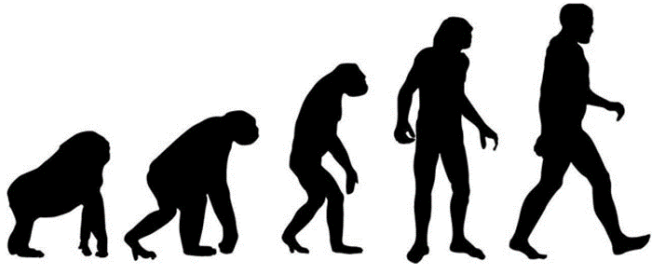
That objects can block light and thus create a shadow.

That a mirror can reflect light.

That Charles Darwin is the Father of Evolution and how humans have evolved and adapted over time.

Fossils have been formed over millions of years and inform the theory of evolution.

That I have inherited characteristics from my relatives.



## Art/DT

In art and DT we will be learning to:

Use the qualities of watercolour and acrylic paints to create visually interesting pieces.

Combine colours, tones and tints to enhance the mood of a piece.

Use brush techniques and the qualities of paint to create texture.

Develop a personal style of painting, drawing upon ideas from other artists.

Mix textures (rough and smooth, plain and patterned).

Combine visual and tactile qualities.

Use a variety of techniques to add interesting effects (e.g. reflections, shadows, direction of sunlight).

Give details (including own sketches) about the style of some notable artists, artisans and designers.

Show how the work of those studied was influential in both society and to other artists.

Create original pieces that show a range of influences and styles.

Understand the importance of correct storage and handling of ingredients (using knowledge of micro-organisms).

Measure accurately and calculate ratios of ingredients to scale up or down from a recipe.

Demonstrate a range of baking and cooking techniques.

Create and refine recipes, including ingredients, methods, cooking times and temperatures.

Write code to control and monitor models or products.

<u>At the end of the topic I will know:</u>

The difference between classic and modern landscape art. Classic landscapes by Samuel Colman and Thomas Moran and more modern interpretations by Cody DeLong.

The art of Cody DeLong and we will be able to produce a piece of art in his style.

How the Americans celebrate Thanksgiving and the types of foods eaten at this celebration, i.e. turkey and pumpkin pie.

How to write the code to make and control a tuk tuk.

## PSHE

In PSHE we will be continuing to learn to take responsibility for our health by learning:

To understand the potential impact of technology on physical and mental health.

To reflect on skills they have developed to identify and respond to difficult situations.

To understand ways that we help prevent ourselves and others becoming ill.

To understand how habits can be good or bad for our health.

To understand what happens when we are ill and begin to understand when to seek support.

At the end of the topic, I will know:

That too much screen time is bad for my health.

I will know that resilience is learning to bounce back.

I will know that vaccinations protect us from disease.

I know that bad habits, like smoking, negatively affect my health, whereas eating a balanced diet helps me to stay healthy.

How and when to seek support including which adults to speak to in school if I am worried about my health.

## RE

In RE we will be studying Christianity. We will be learning:

What the key features of the churches are, and their different purposes/uses.

About the different Christians denominations and how they differ from one another.

Why Christians set Sunday aside as a day for rest and worship.

The key elements of church services.

How 'Quakers and Pentecostals worship and why they worship in these ways.
Why Roman Catholics and Orthodox Christians use devotional statues and icons respectively in their worship.
The meaning and significance of Holy Communion.
About the key events in life of Christians and how they are marked with special services/ceremonies.
What the rites of passage are.

At the end of the topic I will know:

That the word 'church' applies to people (Christian communities) as well as to buildings.
Some of the key features of Anglican churches such as: lynch gate, graveyard, font, alter table and lectern.
There are a range of different churches such as: Roman Catholic, Anglican, Methodist, Orthodox and Baptist.
About the Holy Communion, during which worshippers receive bread and wine and that this is the central act of worship for most Christians.
The rites of passage include: baptism, confirmations, weddings and funerals.

Computing

In computing we will be learning to:

Use the programming language of Python.

Data handling Barcodes, QR codes and RFID

To tinker with Lego.

To understand nested loops

To understand basic Python commands

To use loops when programming

To understand the use of random numbers

At the end of the topic I will know:

That Python is a programming language, which is used in business and industry (e.g. Instragram is built using Python).

That Lego is a simpler text-based language.

That scanning a barcode or QR code takes me a website.

That a loop is a repeat command.

That what I input will change according to the commands in the loop. This will result in the output.