

SCIENCE

Year 5 Knowledge Map Advent 1 2024

Geography

In our exciting science topic this half term we will be

- Investigating how objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object ☐
- identify the effects of air resistance, water resistance and friction, that act between moving surfaces

We will be looking at the location of the seas and oceans and try to understand their importance to human development. We will also be focusing of the Great Barrier Reef and looking at the effect of pollution in the seas around us

SCIENCE - FORCES & MAGNETS

Subject Specific Vocabulary	
friction	Friction is a force between two surfaces that are sliding, or trying to slide, across each other.
gravity	Gravity is a force which tries to pull two objects towards each other.
air resistance	Air resistance is a type of friction between air and another material. For example, when an aeroplane flies through the air.
water resistance	If you go swimming, there is friction between your skin and the water particles.
levers	A lever can be described as a long rigid body with a fulcrum along its length.
pulleys	Pulley is a simple machine and comprises of a wheel on a fixed axle, with a groove along the edges to guide a rope or cable.
gears	Gears are wheels with teeth that slot together. When one gear is turned the other one turns as well.
parachute	A parachute is a device used to slow down an object that is falling towards the ground. As the parachute opens, the air resistance increases.
Galileo	Galileo developed the telescope to enable close observation of the night sky.
Newton	During his lifetime, Newton developed the theory of gravity and made breakthroughs in the area of optics, such as the reflecting telescope.

Can you find the key word in the word search below. Why not research each force for further information?

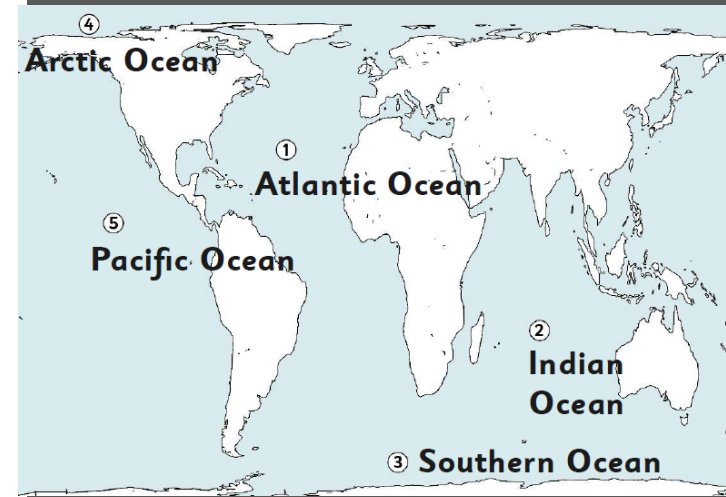
Forces

E	C	R	O	F	Y	P	S	E	P
L	D	A	H	P	C	U	U	C	M
I	E	D	N	R	N	L	L	N	A
Y	C	V	N	E	A	L	U	A	T
T	A	P	E	E	Y	E	M	T	E
I	F	E	D	R	O	E	G	S	R
V	R	S	N	H	U	Z	T	I	I
A	U	R	S	D	B	A	E	S	A
R	S	P	U	L	L	E	Y	E	L
G	O	N	O	I	T	C	I	R	F

GRAVITY
FORCE
PULLEY
RESISTANCE
GEAR

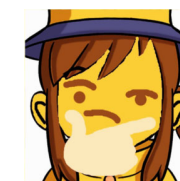
BUOYANCY
FRICTION
LEVER
SURFACE
MATERIAL

GEOGRAPHY - OCEANS ALL AROUND THE WORLD



Can you learn all the seas and oceans around the world (above) and the seas that surround the UK?

See if you can find the difference between a sea and an ocean?



PLASTIC POLLUTION

One of the biggest problems facing our oceans and the creatures that live there is the amount of plastic pollution. Here are some statistics to learn before we deepen our learning later this term.

Computing

This half term we will be working to develop our understanding of computer systems and how information is transferred between systems and devices

Key Vocabulary

Can you find the meaning of these terms?



- Algorithm
- Connection
- Digital
- Index
- Input
- Output
- Process
- Ranking



RE

Ourselves

Develop a deeper awareness of who we are. We will look at what makes us special and remind ourselves that all our gifts and talents have been given to us by God who created us.

- We will look at the writings of St Paul to understand how God wants us to develop our gifts and talents to help others

Life Choices

We will be learning that we all have a mission in life and research the lives of some people who have chosen to spend their lives living in the footsteps of Jesus We will look at the sacrament of marriage and the different symbols associated with it and we will think about the promises God made to us through the Beatitudes

ART—ANDY WARHOL

In Art, children will create work inspired by Andy Warhol— A key artist in the Pop art movement of the 1950's and 1960's. We will be looking at how he used colour, line and shape and the children will use objects of popular culture to create Pop art



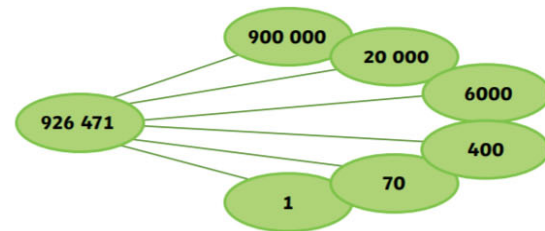
Maths

Numbers to One Million

926 471

Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
9	2	6	4	7	1

nine hundred and twenty-six thousand, four hundred and seventy-one



Multiplying and Dividing by 10, 100 and 1000

Tens	Ones	Tenths	Hundredths	Thousandths
3	8			
+ 10				
	3	8		
× 10				
3	8			

Tens	Ones	Tenths	Hundredths	Thousandths
3	8			
+ 100				
	0	3	8	
× 100				
3	8			

Tens	Ones	Tenths	Hundredths	Thousandths
3	8			
+ 1000				
	0	0	3	8
× 1000				
3	8			

Order and Compare Numbers with Three Decimal Places

Ones	Tenths	Hundredths	Thousandths
	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
0	.	2	1
			3

Ones	Tenths	Hundredths	Thousandths
1	.	$\frac{1}{100}$	$\frac{1}{1000}$
		0	2
			2

Ones	Tenths	Hundredths	Thousandths
1	.	$\frac{1}{10}$	$\frac{1}{1000}$
		1	0
			3

L'histoire

L'éducation physique

La musique

Les sciences

Les maths

L'anglaise

La salle de classe

Le française

MFL

As part of our work in French this half term we will be looking at greetings we can use when we meet friends and talk about people who make up our family

We will also be looking at a typical French school and how it differs from our school

MUSIC

Children will be learning some rock vocals, whilst listening to, appraising and performing Bon Jovi's 80s hit - Livin' on a Prayer. Scan the QR code to rehearse the lyrics



SCAN ME

As part of an exciting term we will also be practising for the Young Voices concert early next year. The children will learning selected songs and harmonies and learning to dance with Urban Stride

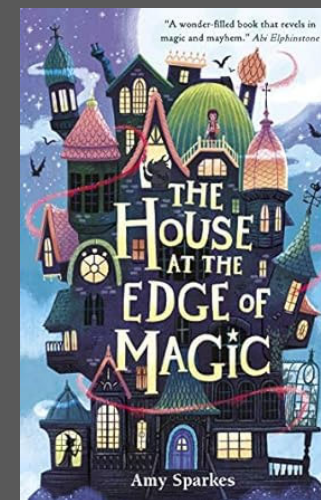
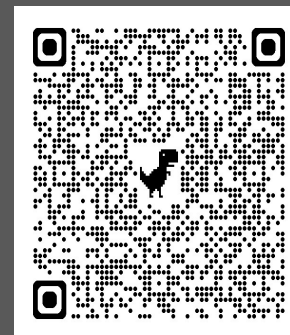
RSE/PSHE

This term we will be looking at how we look after our emotional well-being and how we can protect ourselves from pressures of the media and others around us. We will discuss body image, peer pressure to name a few.

We will be looking at how girls manage their periods as well as how to talk about death in a direct and gentle way.

Reading & Writing

Our class novel this term is 'The House at the Edge of Magic



Poetry Moment



a love of words

Children this half term will be writing chronological reports based on Mythical Beasts and Magical Creatures book. We will also be performing our own poetry to our year group.