KNOWLEDGE ORGANISER
Year 5

Curriculum Intent Statement -

At St. Augustine's Catholic Primary School, we are passionate about children's learning. The Cognitive Load research theory and Rosenshine's Principles of Instruction highlights that children learn through remembering and recalling and this theory is embedded this within our curriculum.

'Learning is Remembering and Recalling...'

Our curriculum is planned and sequenced around the specific vision of the National Curriculum, our Curriculum Drivers, the Laudato Si and the Gospel Values. This is based upon our School Catholic Mission that we have a moral purpose for our pupils to flourish in a safe, happy and stimulating environment, and leave us with the knowledge and skills, personal qualities and aspirations, to make the world a better place, inspired by the Gospel. We believe that this core belief underpins everything we do here at St. Augustine's.

St. Augustine's curriculum will provide inspiring and relevant learning opportunities for our children to develop the knowledge and skills that can be fluently applied across all subject areas. It will ensure that all children's individual needs and experiences are developed through local, national and global contexts.

In order for children to relate to their learning, topic areas will be carefully planned and supported through external visitors talking about their experiences, or class trips to supplement the children's learning.

National Curriculum

Gospel Values, Catholic Virtues, Laudato Si & British Values

Using our Secrets to Success...

Roshenshine's Principles of Instruction & Jonathan Lear

English
Reading
Writing
Phonics
SPaG

Maths
Arithmetic
Fluency
Reasoning
Problem Solving

RE
Knowledge & Understanding
Engagement & Response
Analysis & Evaluation

Curriculum Drivers and Teams

History
Music
French (MFL)
Computing

Geography
Art
DT

Science
RHE/PSHE
PE

Parents in Partnership & Pupil Voice

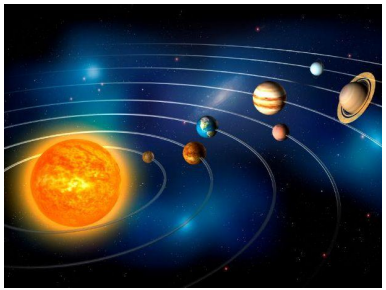
Being the 'Best we can be'

School Mission Statement

Lead us Lord,
To act justly,
To love tenderly,
And to walk humbly.

Amen

Earth and Space



This half term, Year 5 have a Science driven topic focused on Earth and Space.
We have lots of things planned, including:

- Identify, naming and locating the planets in the solar system,
- Learning about how the planets orbit the sun and some planets have moons that orbit them.
- Identifying Looking at how we know about space, how it has developed over time and what we can look forward to in the future.

How can I help my child with this topic:
Find out facts about space.
Support with topic homework.
Keep an eye on the news and any stories of interest related to our topic.
Help them keep a moon diary to see the different phases of the moon.

The next few slides will show you some of the things that we will be covering within specific subjects. Each subject will look at a specific set of skills that will allow children to meet the National Curriculum objectives within Year 5.

English - KEY VOCABULARY

Grammar Key Vocabulary – Sentence Level

Hyphens to avoid ambiguity -Hyphenate two or more words when they: come before a noun they modify. act as a single idea. **Hyphens** can be used to avoid ambiguity (eg 'man eating shark' versus 'man-eating shark', or 'recover' versus 're-cover').

Complex sentences – a sentence with a main and a subordinate clause. The subordinate clause adds extra information to the sentence and doesn't make sense on its own.

Grammar Key Vocabulary – Word Level

Subordinating conjunction – a word that connects an independent clause to a dependent clause (because, although, however).

Co-ordinating conjunction – a word that joins two elements of equal importance (FANBOYS – for, and, nor, but, or, yet, so).

Imperative verbs – instruction verbs e.g. mix, stick, watch. Often used in instruction writing.

Punctuation Key Vocabulary

Inverted commas "…" – use to contain dialogue in narrative.

Commas – used to embed clauses within a sentence, to separate items within a list or to clarify meaning.

Semi colon within a list - Semicolons **can be used to link items in a list**, such as objects, locations, names and descriptions.

Bullet point lists - **Think of a bullet point as a mini headline.** It needs to be concise and attention-grabbing in a way that intrigues readers and compels them to read more.

Colons to introduce lists - Use a colon **before** a series or list only if the words that introduce the list make up a complete sentence: To make a cake you need a few basic ingredients: butter, sugar, eggs, milk, flour, leavener, and salt.

Semi colons, colons and dashes to join clauses - Use a semicolon to separate two related independent clauses (clauses that can stand as sentences on their own) that are not linked by a comma and coordinating conjunction (and, but, for, nor, or, yet, and so). We use **semi-colons** and **colons** to **join** independent **clauses** and make them part of one sentence.

Sentence Level Grammar Vocabulary

Decoding - Breaking down a word into different phonemes to help read it.

Prediction - Saying what will happen next or as a result of something.

Inference - Making assumptions about what is happening in a text.

Retrieval - Finding information from a text.

Comprehension - Understanding what has been read.

Deduction - Using evidence in a text to support an idea.

Don't forget the Reading Challenge!

English

WRITING – formal letter writing

Formal greetings - Try to avoid the temptation to begin your professional letter with informal salutations like "Hello," "Greetings," "Hi There," or "Good Morning" if you don't know the name of your contact person.

Formal openings to letters - Most formal letters will start with 'Dear' before the name of the person that you are writing to. You can choose to use first name and surname, or title and surname. However, if you don't know the name of the person you are writing to, you must use 'Dear Sir or Madam,'.

Formal sign offs – Sincerely (or sincerely yours) is often the go-to sign off for formal letters, and with good reason. This ending restates the sincerity of your letter's intent; it is a safe choice if you are not overly familiar with the letter's recipient, as it's preferable to use a sign-off that is both common and formal in such a situation.

Formal layout of a letter – where to write your address and date. Where to write the address of the recipient.

HOW TO HELP – Writing

- Read lots!
- Discuss the structure of stories you read together at home.
- Spot the different figurative language an author uses and discuss why they have use it.

SPELLING -

- Words containing the letter string ‘ough’
- Words containing the letter string ‘ough’
- Adverbials of time’
- Adverbials of place’
- Words spelt with an /ear/sounds spelt ‘ere’
- Statutory spelling change words

HOW TO HELP - Grammar

- Speak in grammatically accurate sentences.
- Spot grammar being taught at school when reading.
- Work together on your child’s IXL homework.

HOW TO HELP - Reading

- Read with your child (lots)
- Discuss vocabulary and develop understanding of new words
- Visit local libraries
- Read comics/magazines/newspapers
- Let your child see you read
- Make reading enjoyable- not a battle
- Let children read what interests them

Formal Letters

Formal Greetings

'Dear Sir/Madam,' if you don't know the recipient

'Dear Mr/Mrs/Miss (surname),' if you do know the recipient

'To whom it may concern,'

Formal Signoffs

'Yours faithfully,' if you don't know the recipient

'Yours sincerely,' if you do know the recipient

Do your formal letters include...	
the sender's address?	
the address of the recipient?	
the date?	
a greeting?	
formal introduction sentence starters?	
an introduction to explain why you're writing?	
more detail organised into paragraphs?	
a conclusion saying what needs to happen next?	
a formal signoff?	
your name at the end?	
formal vocabulary and sentence structure?	
words from the year 5/year 6 spelling list?	
linking words and phrases, including adverbials?	
prepositional phrases and relative clauses to add clarity?	

Prepositional Phrases

...thick smoke coming **from** the...
...a strange noise **under** the ...
...the toy is now sitting **in**...
...I would like to discuss this **with** you...
...this will bring more traffic **into**...
...a stain **on** the material...
...has spread all **over** the garden...
...**across** the theatre...
...**throughout** the entire contents...

Adverbials

consequently...
regardless...
however...
furthermore...
additionally...
elsewhere...
eagerly...
repeatedly...
previously...

Formal Introduction Starters

I am writing to inform you...
I am writing to complain about...
I would like to express...
I am writing to explain...
I am writing to compliment you on...
I am writing to tell you...

Relative Clauses

..who is a teacher himself...
...whose opinion I respect...
..which refuses to open...
...where I feel you can improve...
..when I purchased this product...

Formal Letters

the sender's address

the address of the recipient

the date

the greeting

formal introduction starter

Introduction

conclusion

a formal signoff

prepositional phrases

year 5/year 6 words

adverbials

relative clauses

Spelling Y5 & 6 Curriculum words

accommodate	conscience	existence	muscle	rhythm
accompany	conscious	explanation	necessary	sacrifice
according	controversy	familiar	neighbour	secretary
achieve	convenience	foreign	nuisance	shoulder
aggressive	correspond	forty	occupy	signature
amateur	criticise	frequently	occur	sincere
ancient	curiosity	government	opportunity	sincerely
apparent	definite	guarantee	parliament	soldier
appreciate	desperate	harass	persuade	stomach
attached	determined	hindrance	physical	sufficient
available	develop	identity	prejudice	suggest
average	dictionary	immediate	privilege	symbol
awkward	disastrous	immediately	profession	system
bargain	embarrass	individual	programme	temperature
bruise	environment	interfere	pronunciation	thorough
category	equip	interrupt	queue	twelfth
cemetery	equipped	language	recognise	variety
committee	equipment	leisure	recommend	vegetable
communicate	especially	lightning	relevant	vehicle
community	exaggerate	marvellous	restaurant	yacht
competition	excellent	mischievous	rhyme	

Help your child to practice spelling and using these words.

Look for them in books.

Can they write them in their homework?

Maths – KEY VOCABULARY

Decimals

Tenths - one of 10 approximately equal parts of something.
Hundredths - One **hundredth** is one part of a whole or a group that is broken up into 100 equal parts.
Decimal - a way of writing a number that is not whole. Decimal numbers are 'in between' numbers. For example, 10.4 is in between the numbers 10 and 11. It is more than 10, but less than 11.
Decimal equivalents - are **decimal numbers that have the same value**. For example, 0.5 and 0.50 are equivalent decimals. You can see in the models below that five tenths and fifty hundredths take up the same amount of space. When you place zeros to the right of a decimal, its value stays the same.
Decimal point - A decimal number is a number that consists of a whole number and a fractional part. The **decimal point** separates the whole number from the fractional part.
Place value - Indicates the position of a numeral (e.g. the place value of the 3 in 738 is 30)

Geometry

Angle - the amount of turning between two rays called arms meeting at a common point called the vertex, an angle is measured in degrees.
right angle - an angle measuring 90 degrees.
Acute - an angle measuring less than 90 degrees.
Obtuse - an angle measuring more than 90 degrees.
Reflex - an angle measuring more than 180 degrees.
Protractor – maths equipment to measure angles
Horizontal - parallel to the horizon.
Vertical - at right angles to the horizon.
Parallel - equidistant, that is, the same distance apart, never touching.
Perpendicular - at right angles to the horizon or another object.
Polygon - a plane shape having three or more straight sides, polygons may be regular with all sides and angles equal, or irregular with varying side and angle sizes.
Regular - regular polygons have all sides equal and all angles equal.
Irregular - a shape or mathematical object which is not regular, a regular shape has sides, faces and angles of equal size, but an irregular shape has sides, faces or angles of differing sizes.

HOW TO HELP

Mental arithmetic games – e.g. Countdown.

Regularly revisit times tables facts up to 12 x 12.

Use maths in daily life – cooking, measures, shopping etc.

Be positive about maths at home!

Embrace struggle! Teach your child that it's good to get stuck! This is how we learn best. Allow time for resilience building.

Fluency, Reasoning and Problem Solving Key Vocabulary -

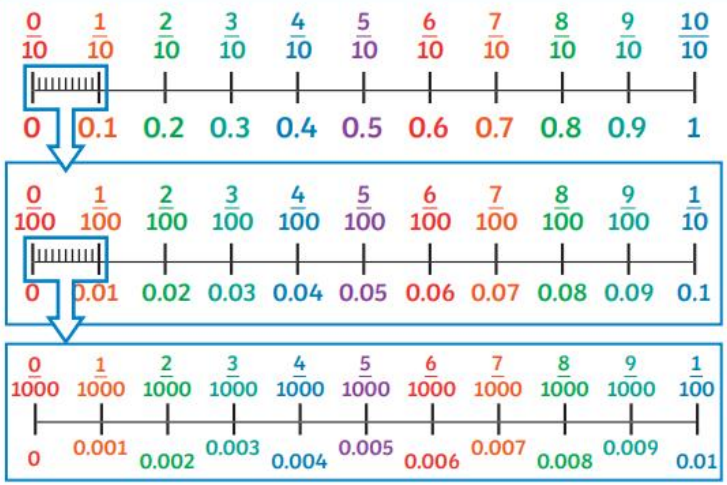
Fluency - Using number and calculation skills accurately and efficiently
Reasoning - Following a line of enquiry, justifying and proving their answers
Problem Solving - Solving real life and logical problems using mathematical understanding

Maths – decimals

This half term we are learning to:

- Divide one and 2 digit numbers by 10 or 100
- Use decimals to 2 decimal points in measures and money
- Convert between units of measure

Tenths, Hundredths and Thousandths



Complete the multiplications.

a)

H	T	O	Tths	Hths
		3	7	

3.7 × 10 = ☐

b)

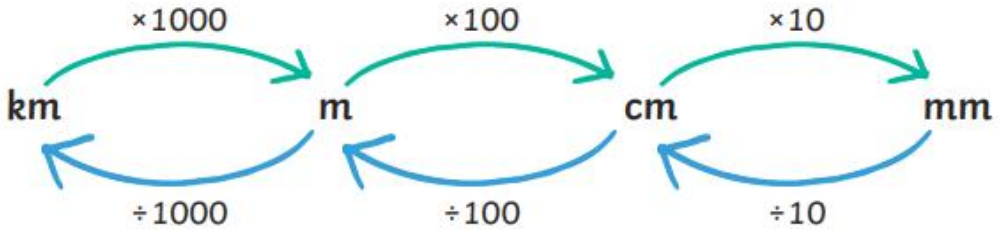
H	T	O	Tths	Hths
		4	1	5

4.15 × 100 = ☐

Miss Rose drives 12.8 km to pick up a friend and then drives 1.37 km to a coffee shop.

How far does Miss Rose drive in total?

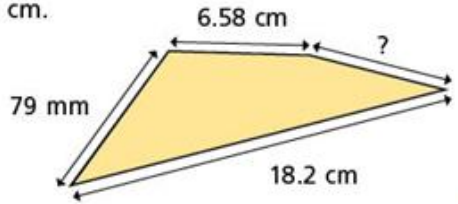
Converting Length



Here is an irregular quadrilateral.

The perimeter of the shape is 39.2 cm.

Find the unknown length.



1000 metres = 1 kilometre

100cm = 1m

10mm = 1cm

$\frac{1}{10}$km = 0.1km = 100m

$\frac{1}{4}$km = 0.25km = 250m

$\frac{1}{2}$km = 0.5km = 500m

$\frac{3}{4}$km = 0.75km = 750m

Maths – Geometry

This half term we are learning to: identify and know the properties of 3d shapes, identify and know the properties of regular and irregular polygons, identify obtuse, acute and reflex angles and draw and measure angles in degrees.

Identifying Angles

Acute Angles

Any angle that measures less than 90° is called an **acute** angle.

Obtuse Angles

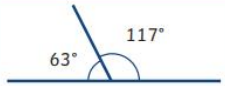
Any angle that measures greater than 90° and less than 180° is called an **obtuse** angle.

Reflex Angles

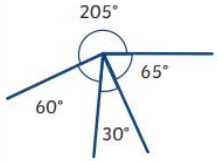
Any angle that measures greater than 180° is called a **reflex** angle.

Properties of 3D Shapes

Name	Surfaces		Edges		Vertices	Picture
	Flat	Curved	Flat	Curved		
cube	6	0	12	0	8	
cuboid	6	0	12	0	8	
square-based pyramid	5	0	8	0	5	
tetrahedron	4	0	6	0	4	
triangular prism	5	0	9	0	6	
pentagonal prism	7	0	15	0	10	
hexagonal prism	8	0	18	0	12	
octagonal prism	10	0	24	0	16	
octahedron	8	0	12	0	6	

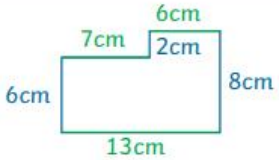


Angles on a straight line always total 180°.



Angles around a point always total 360°.

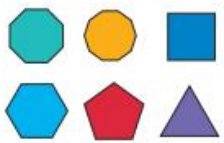
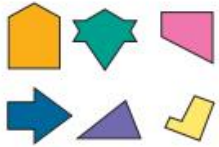
Using Properties of Rectangles



6cm + 2cm = 8cm

7cm + 6cm = 13cm

Regular and Irregular Polygons

Regular	Irregular
	

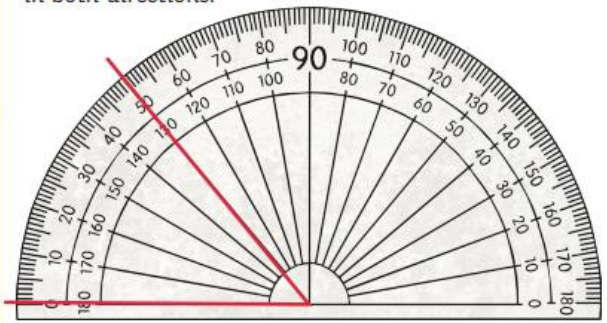
A polygon is any two-dimensional shape formed with straight lines.

In a regular polygon, all the sides and angles are equal.

In an irregular polygon, the sides and angles are not equal.

Measuring and Drawing Angles

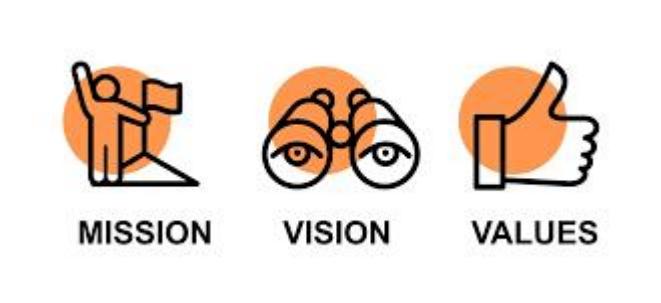
To measure angles, we use a protractor. Look carefully at how the numbers on the scale count from 0° to 180° in both directions.



Religious Education

Pentecost - Serving

Lent, a time of giving in order to celebrate the sacrifice of Jesus



Transformation

During this topic we will be:

- Transforming energy – Explore
- Pentecost; the celebration of the Spirit's transforming power – Reveal
- Remembering, celebrating and responding to transforming energy and that the Pentecost is the celebration of the Spirit's transforming power.– Respond

Science: Earth and Space

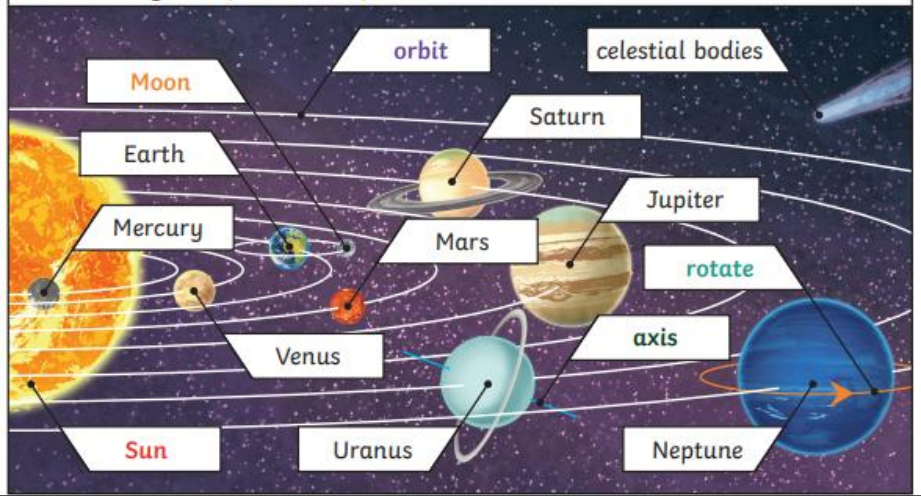
Key Vocabulary	
Sun	A huge star that Earth and the other planets in our solar system orbit around.
star	A giant ball of gas held together by its own gravity.
moon	A natural satellite which orbits Earth or other planets.
planet	A large object, round or nearly round, that orbits a star.
sphere	A round 3D shape in the shape of a ball.
spherical bodies	Astronomical objects shapes like spheres.
satellite	Any object or body in space that orbits something else, for example: the Moon is a satellite of Earth.
orbit	To move in a regular, repeating curved path around another object.
rotate	To spin. E.g. Earth rotates on its own **axis**.
axis	An imaginary line that a body rotates around. E.g. Earth's **axis** (imaginary line) runs from the North Pole to the South Pole.
geocentric model	A belief people used to have that other planets and the Sun orbited around Earth.
heliocentric model	The structure of the Solar System where the planets orbit around the Sun.
astronomer	Someone who studies or is an expert in astronomy (space science).

Key Knowledge

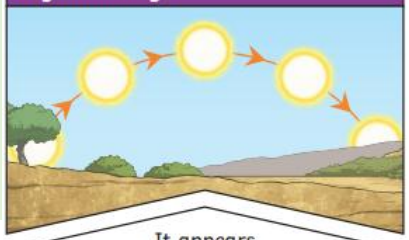
Mercury, Venus, Earth and Mars are rocky planets. They are mostly made up of metal and rock. Jupiter, Saturn, Uranus and Neptune are mostly made up of gases (helium and hydrogen) although they do have cores made up of rock and metal.

The Moon orbits Earth in an oval-shaped path while spinning on its **axis**. At various times in a month, the Moon appears to be different shapes. This is because as the Moon rotates round Earth, the Sun lights up different parts of it.

Our Solar System (not to scale)



Key Knowledge



It appears to us that the Sun moves across the sky during the day but the Sun does not move at all. It seems to us that the Sun moves because of the movements of Earth.

Earth rotates (spins) on its **axis**. It does a full rotation once in every 24 hours. At the same time that Earth is rotating, it is also orbiting (revolving) around the Sun. It takes a little more than 365 days to orbit the Sun. Daytime occurs when the side of Earth is facing towards the Sun. Night occurs when the side of Earth is facing away from the Sun.

History

The Space Race

What was the Space Race?
Why was it important?

In this unit the children will:

- Find out about the early years of space exploration from 1940 to 1970.
- Learn about different astronauts.
- Think about extra-terrestrial life.

Key Figures

Laika -First Dog in Space.

Ham the Chimp- First Chimpanzee in space.

Yuri Gagarin- First man in space

Valentina Tereshkova- First woman in space.

Neil Armstrong – The first man on the moon

Historical Skills and Concepts:

Chronology – key events in world history.
Questioning – develop their historical questioning skills.
Sources – use a range of sources to explore our knowledge of the past.

Timeline of Key Events:

4 October 1957 - The world's first artificial satellite.
28 May 1959 - First creatures to return alive from space.
12 April 1961 - The first man in space.
16 June 1963 - The first woman in space.
18 March 1965 - First-ever spacewalk.
20 July 1969 - First man on the Moon.

Geography.

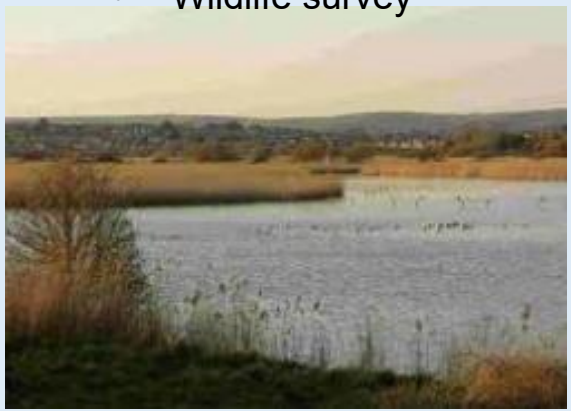
In this topic, we will be about the land use surrounding the school and how it may have changed over time.
We will also be considering how the conditions within Weymouth encourage wildlife and, by conducting a survey, we will find out what species of wildlife there is.

<u>In this topic, we will be learning:-</u>

- To identify land use in the locality of the school
- To notice how the land use has changed over time.
- To recognise the conditions needed for wildlife
- To conduct a survey of wildlife
- To analyse data and draw conclusions

<u>Vocabulary:</u>

- Land use
- Residential
- Industrial
- Commercial
- Entertainment
- Public buildings
- Open spaces
- Transport Services
- Change
- Development
- Climate
- Conditions
- Physical features
- Human features
- Wildlife survey



Computing – Web Developing

This topic we are learning to:

- Plan a blog
- Write posts for a blog
- Add media, including images and videos to a blog.
- Comment respectfully
- Review each others content and make suggestions for improvement

Key Vocabulary

Blog
Content
Media
Audience
Download
Upload
Video
Record
Comment

DT

Plan, design and make a rocket which can be launched.

Key Skills

- Plan
- Designing
- Create
- Cut
- Join
- Evaluate
- Modify
- improve

Please save and bring in a clean 2 litre soft drink bottle.

French

Year 5 Skills

- Learning new vocabulary for the clothes we wear.
- Hold a short conversation asking and answering questions related to what we wear.
- Understand how to use the verb'porter'
- Take part in a simple conversation.

Qu'est-ce que tu portes?

Je porte un pantalon, un chemise et des chausseurs.

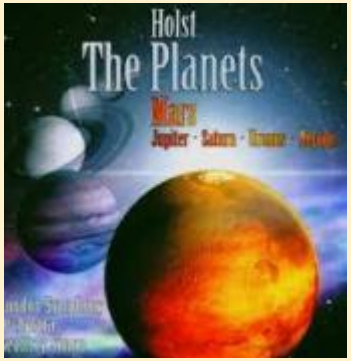
Music

Year 5 Skills

- Embark on a musical journey through the solar system exploring how the universe inspired composers such as Claude Debussy, Gustav Holst and George Crumb.
- Listening to and commenting on different styles
- Developing techniques to improve performances.
- Listen with attention to detail and recall sounds with increasing aural memory

Key Vocabulary

Sequences
Dynamics
Texture
Rap
Rhythm
Ostinati
Notation



RHE/PSHE

Life to the Full

PSHE Key Skills:

- Rights and responsibilities
- My school community
- Cyber-bullying

RHE:
- Self Talk
- Sharing isn't always caring

PE

Cricket

Year 5 Skills

- underarm and overarm throwing
- catching
- over and underarm bowling
- long and short barrier
- batting
- collaboration and communication
- respect
- observing and providing feedback
- selecting and applying strategies

Foundation Subject
IMPACT QUESTIONS

Geography
Explain how the conditions that make Weymouth suitable for wildlife?

PE
What skills are needed for cricket?

History
What happened during the Space Race?

French
What are you wearing?

Science
Describe the difference between the Earth's rotation on its axis and the rotation around the sun.

Music
How do composers create an impression of a place with music?

Computing
How do you ensure that your content is appropriate for your audience?

PSHE/RHE
What would you do if you suspected someone was a victim of cyber-bullying?

DT
What do you need to make your rocket fly the furthest?