



KNOWLEDGE ORGANISER

Year 6



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 within the knowledge of 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.

Curriculum Development - Intent

LauDato Si, National Curriculum and Gospel Values



Using our Secrets to Success...



Rosenshine's Principles of Instruction

Parents in Partnership and Knowledge Organisers

English
Reading
Writing
Phonics
Spelling
Punctuation
Grammar

Maths
Arithmetic
Fluency
Reasoning
Problem Solving

RE
Knowledge &
Understanding
Engagement &
Response
Analysis & Evaluation

The Culture Team
History
Geography
French (MFL)

**The Arts and
Technology
Team**
Design
Technology Art
Music
Computing

**The Healthy
Hearts and
Minds Team**
PE
Science
PSHE / RSHE

Being the 'Best we can be'

Our Laudato Si key question this half term...

Are we owners or guardians of
our world?



Our Focus Gospel Value this half term is...



How do you show courage in what you
do?

School Mission Statement

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



Amen



Shackleton's Journey



This half term, Year 6 are learning about Shackleton's expedition to Antarctica. We have lots of exciting things planned, including:

- Story writing about ice worlds
- Learning about Shackleton's adventures, trials and challenges
- Learning about navigation techniques and the world we live in
- Creating ice landscape artwork
- Coming to you live from St Augustine's school online... a KS2 Christmas Performance!!!!

How can I help my child with this topic:

Research the life of Ernest Shackleton and his adventures to the Antarctic.

Look at a world map together and discuss the Equator, Tropics and Poles as well as latitude and longitude measures.

Take part in some of the topic grid tasks – this can be found on Google Classrooms.

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 6.

English Knowledge - KEY VOCABULARY

Grammar Key Vocabulary – Sentence Level

Progressive tenses – showing a continuous action e.g. is clapping, was jumping (formed by adding –ing to the verb).

Present perfect tense – used for actions that started in the past and continue into the present e.g. I have lived in Weymouth for 10 years (formed using has/have + past tense verb).

Adverbial phrases – describe how, when, where or why the verb happens e.g. in the garden, before school, at the park (adverbials at the start of a sentence must be followed by a comma).

Subject – the noun that is doing the verb e.g. *The dog chased the ball.*

Object – the noun that is having the verb done to it e.g. *The dog chased the ball.*

Active voice – the subject comes before the verb in a sentence e.g. *The dog chased the ball.*

Passive voice – the object comes before the verb in a sentence e.g. *The ball was chased by the dog.*

Grammar Key Vocabulary – Word Level

Preposition – describes when or where something is in relation to something else (after, before, under, inside).

Determiner – introduces a noun:

- Articles (a, an, the)
- Demonstratives (this, that, these, those)
- Quantifiers (one, two, some, many, multiple)
- Possessive (his, her, their)

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).

Synonyms – a word that means the same as another e.g. old and ancient.

Antonyms - a word that means the opposition – e.g. old and young.

Punctuation Key Vocabulary

Ellipsis ... omission of a word or phrase used to create tension or suspense.

Parenthesis () , , - additional information or an aside within a sentence. Punctuated with brackets (for short or formal information), dashes – for informal chatty – and commas for clauses.

Semi colon ; used to join independent clauses (clauses that make sense on their own) in the place of a conjunction.

Colon : used to introduce a list or to join two independent clauses when the second clause relates to the first.

Hyphens to avoid ambiguity used to avoid confusion between words which would otherwise have the same spelling but a different meaning.

English Knowledge & Skills

WRITING - Short stories & Recount Diaries

AMPS descriptive techniques to describe setting, atmosphere and characters:

Alliteration – Most of the **initial letter sounds** of the words in each line are the same.

Metaphor – Saying an object **is** something.

Personification – A **human** quality is given to an object.

Simile - Comparison is used by using ‘**as a**’ or ‘**like a**’.

Plot – developing problems and solutions within a story.

Dialogue – using the speech of characters to advance action in a story.

READING Key vocabulary

Word meaning - Explaining the meaning of words in context and explaining how word choice enhances meaning.

Retrieval - Finding details and information from a text.

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

Comprehension – understanding the text and how content is related to the meaning as a whole.

Inference - reaching a conclusion which you can explain and justify with evidence from the text.

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

Summary – summarising main ideas from across paragraphs.

Don't forget the Vocabulary Challenge!

SPELLING

- Words ending **ough**
- Words ending **ant, ance, ancy**
- Words ending **ent, ence, ency**
- ‘**ie**’ sound
- ‘**ei**’ after c
- **Homophones** – words that sound the same but mean different

HOW TO HELP – Writing

- Discuss descriptive techniques when reading.
- Discuss how authors develop the plot in their stories.
- Look at dialogue and how it moves a story on.
- Encourage your child to write as much as possible for as many different purposes as you can.

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

Spelling Y5 & 6 Curriculum words

accommodate
accompany
according
achieve
aggressive
amateur
ancient
apparent
appreciate
attached
available
average
awkward
bargain
bruise
category
cemetery
committee
communicate
community
competition

conscience
conscious
controversy
convenience
correspond
criticise
curiosity
definite
desperate
determined
develop
dictionary
disastrous
embarrass
environment
equip
equipped
equipment
especially
exaggerate
excellent

existence
explanation
familiar
foreign
forty
frequently
government
guarantee
harass
hindrance
identity
immediate
immediately
individual
interfere
interrupt
language
leisure
lightning
marvellous
mischievous

muscle
necessary
neighbour
nuisance
occupy
occur
opportunity
parliament
persuade
physical
prejudice
privilege
profession
programme
pronunciation
queue
recognise
recommend
relevant
restaurant
rhyme

rhythm
sacrifice
secretary
shoulder
signature
sincere
sincerely
soldier
stomach
sufficient
suggest
symbol
system
temperature
thorough
twelfth
variety
vegetable
vehicle
yacht

Help your
child to
practice
spelling and
using these
words.

Look for
them in
books.

Can they
write them
in their
homework?

Maths Knowledge– KEY VOCABULARY

Number and the 4 Operations

Divisor – the number you are dividing by

Quotient – the answer to a division calculation

Product – the answer to a multiplication question

Factors – numbers that go into a given number (come in pairs) e.g. factors of 12 are:
1 and 12 2 and 6 3 and 4

Multiples – in the times table of - e.g. multiples of 12 are 12, 24, 36 etc.

Lowest Common Multiple – the lowest multiple of 2 or more numbers that are the same.

Highest Common Factor – the largest factor that is a factor of two or more other numbers

Integer – a whole number

Prime numbers – numbers that only have 2 factors, 1 and itself

Decimal – part of a whole where 1 is the whole

Percent – part of a whole where 100% represents the whole

Fractions

Equivalence – fractions that have the same value/are the same size

Numerator – the top number of a fraction (how many parts selected from the whole)

Denominator – the bottom number of a fraction (how many parts the whole is split into)

Simplify – giving a fraction in the simplest form using the smallest possible numerator and denominator (e.g. $50/100 = \frac{1}{2}$)

Common denominator – finding the lowest common multiple of two or more denominators to allow you to add or subtract them

Lowest common denominator – the lowest common multiple of two or more fractions' denominators used to add and subtract fractions

Mixed number – a whole (integer) and a fraction e.g. $1 \frac{1}{2}$

Improper fraction – where the numerator is larger than the denominator e.g. $\frac{3}{2}$. Improper fractions can be converted into mixed numbers e.g. $\frac{3}{2} = 1 \frac{1}{2}$

HOW TO HELP

Mental arithmetic games – e.g. Countdown.

Regularly revisit times tables facts up to 12×12 .

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 – Fractions topic

Adding and Subtracting Fractions

When the denominators are the same, you simply add or subtract the numerators.

$$\frac{2}{5} + \frac{1}{5} = \frac{3}{5}$$

When the denominators are not the same, find the lowest common denominator and rewrite the fractions. Then, add or subtract the numerators.

$$\frac{2}{5} + \frac{1}{10} = \frac{4}{10} + \frac{1}{10} = \frac{5}{10} = \frac{1}{2}$$

Adding and Subtracting Mixed Numbers

With mixed numbers, you could convert the mixed number into an improper fraction and then add or subtract as normal.

$$1\frac{1}{2} + 1\frac{1}{3}$$

$$\frac{3}{2} + \frac{4}{3} = \frac{9}{6} + \frac{8}{6} = \frac{17}{6}$$

Once you have your final answer, change the improper fraction back to a mixed number.

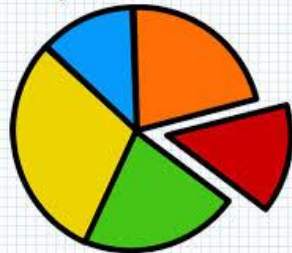
$$\frac{17}{6} = 2\frac{5}{6}$$

This half term we are learning to :

- Add and subtract fractions with different denominators
- Multiply pairs of fractions
- Divide fractions by integers.

TIMES TABLES – the best possible help with fractions is practising times tables.

FRACTIONS



Multiplying Fractions

$$\frac{2}{4} \times \frac{3}{6}$$

$$\frac{2}{4} \times \frac{3}{6} = \frac{6}{24}$$

Multiply the numerators. Multiply the Denominators.

$$\frac{6}{24} = \frac{1}{4}$$

Simplify the fraction by dividing the numerator and denominator by their lowest common factor.

Dividing Fractions by a Whole Number

$$\frac{2}{3} \div 2$$



For $\frac{2}{3}$ we can imagine we have 2 out of 3 slices in a pizza.



Imagine the pizza without the plate.

Take these slices and share them between 2 plates.



We can see that each plate now has $\frac{1}{2}$ of the original pizza.

Maths – Coordinates topic

Key Vocabulary

translate

translation

reflect

reflection

up

down

right

left

coordinates

quadrant

x-axis

y-axis

horizontal

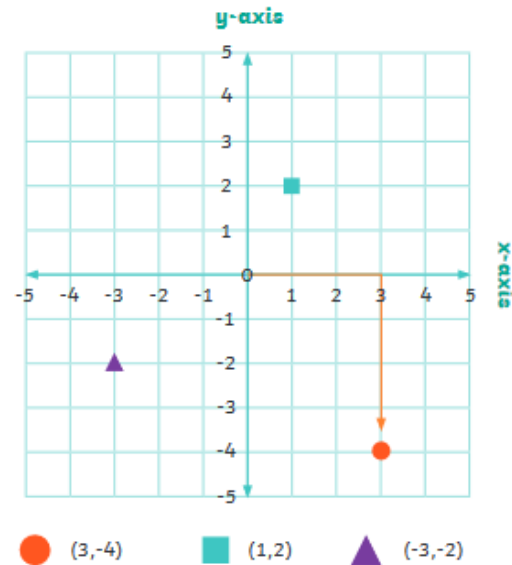
vertical

This half term we are also learning to :

- Describe positions on the full co-ordinate grid (all four quadrants)
- Draw and translate simple shapes on the co-ordinate plane and reflect them in the axis.

Four Quadrants

Coordinates can use positive and negative numbers. Whether positive or negative, the x-axis coordinate is written first, followed by the y-axis coordinate.

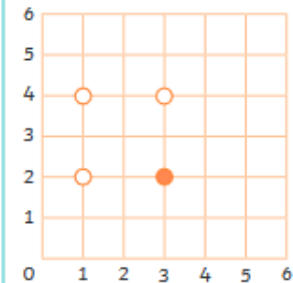


Look at the circle. It is 3 units along the x-axis and 4 down the y-axis. Its coordinates are (3,-4).

Completing Shapes

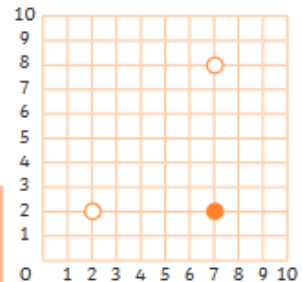
Using the properties of a shape, a polygon can be completed on a grid.

To make a square, think of the square's properties.



All of a square's sides are the same length. If the completed sides are 2 units in length, the missing point must complete two more sides of 2 units.

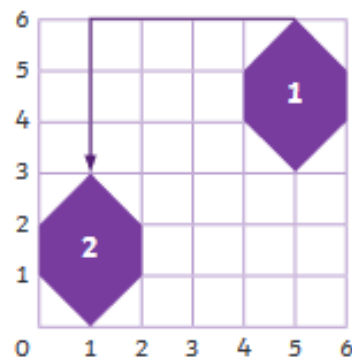
To make a right-angled triangle, think of the triangle's properties.



A right-angled triangle should have three sides with one 90° angle.

Translation

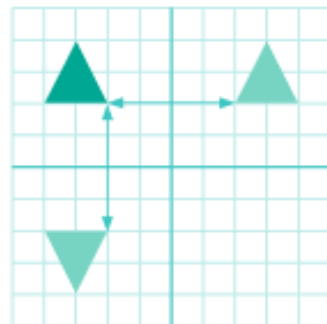
A shape is translated when it is moved without being rotated or resized. Every point of the shape moves the same distance and in the same direction.



Shape 1 has been translated 4 units left and 3 units down.

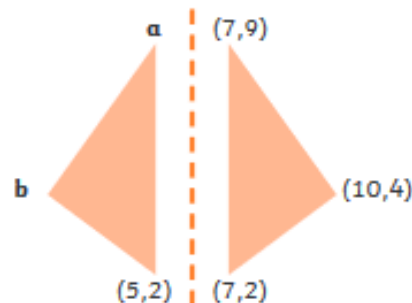
Reflections

A shape is reflected when it is flipped over a line which acts as a mirror. Every point on the original shape is the same distance from the mirror line as the same point on the reflected shape. The original triangle has been reflected in the x-axis and in the y-axis.



Missing Coordinates

Shapes can be shown on unmarked grids.



Point a is in the same position along the x-axis as (5,2) and in the same position on the y-axis as (7,9).

Point a (5,9)

Point b is in the same position on the y-axis as (10,4). Both triangles will have the same width. The width of the right-hand triangle is 3. This means that the width of the left-hand triangle is also 3.

Point b (2,4)

Advent and Christmas

**Expectations – Jesus was born to show
God to the world.**



- What are the expectations upon Christians during Advent?
- How do we prepare during Advent?
- What kind of expectations do you have of others?
- What kind of expectations do people have of you and why?
- Where does patience come into expectation?
- How are others affected by your giving?



Science

Year 6 Skills:

- recognise that light appears to travel in straight lines
- use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye
- explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes
- use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them

Key Vocabulary

light	A form of energy that travels in a wave from a source.
light source	An object that makes its own light .
reflection	Reflection is when light bounces off a surface, changing the direction of a ray of light .
incident ray	A ray of light that hits a surface.
reflected ray	A ray of light that has bounced back after hitting a surface.
the law of reflection	The law states that the angle of the incident ray is equal to the angle of the reflected ray .

Key Knowledge

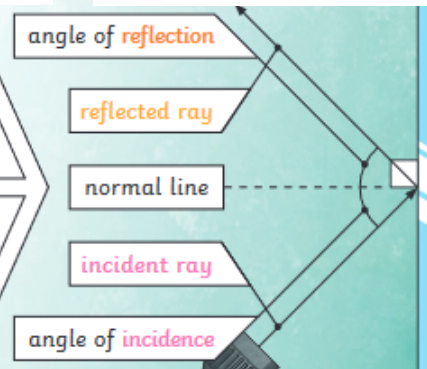


The spoon in this water looks as if it is bent. This is because **light** bends when it moves from air to water. When **light** bends in this way, it is called **refraction**.

The **law of reflection** states that the angle of **incidence** is equal to the angle of **reflection**. Whenever **light** is **reflected** from a surface, it obeys this law.

The angle of **reflection** is the angle between the normal line and the **reflected ray light**.

The angle of **incidence** is the angle between the normal line and the **incident ray of light**.



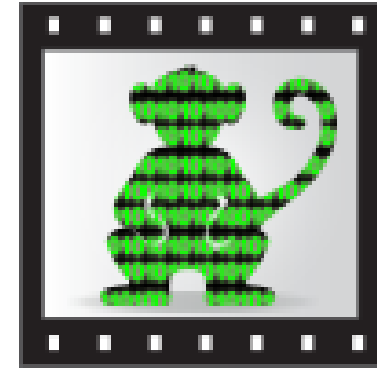
refraction	This is when light bends as it passes from one medium to another. E.g. Light bends when it moves from air into water.
visible spectrum	Light that is visible to the human eye. It is made up of a colour spectrum .
prism	A prism is a solid 3D shape with flat sides. The two ends are an equal shape and size. A transparent prism separates out visible light into all the colours of the spectrum .
shadow	An area of darkness where light has been blocked.
transparent	Describes objects that let light travel through them easily, meaning you can see through the object.
translucent	Describes objects that things let some light through, but scatters the light so we can't see through them properly.
opaque	Describes objects that do not let any light pass through them.

Computer Science – CODING

Purple Mash
2Code

Year 6 Skills:

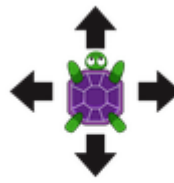
- use sequence, selection, and repetition in programs; work with variables and various forms of input and output
- use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs
- use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact



Driving Game



Dancer



2go



Football Game



Feed the duck

Year 6 History Skills:

- Use a range of sources to find out about an aspect of time past.



Ernest Shackleton, born in Ireland in 1874, was an Antarctic explorer who led three British expeditions to the Antarctic. He was one of the principal figures of the period known as the Heroic Age of Antarctic Exploration.

History Knowledge

Shackleton’s Journey

Originally intended for tourist cruises and polar hunting, the Endurance was one of the strongest wooden vessels in the world. She was named after Shackleton’s family motto:

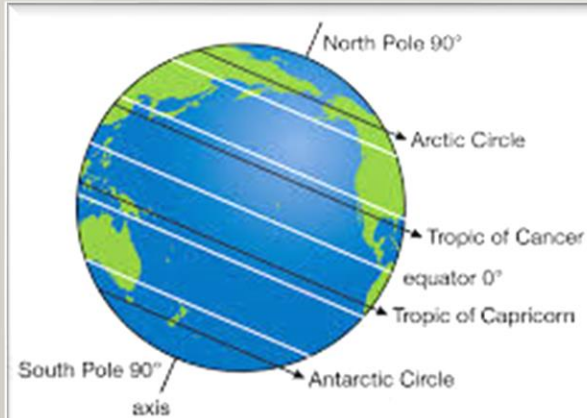
“By Endurance, We Conquer.”



Geography Knowledge – Shackleton's Journey

Year 6 Geography Skills:

- Use the 8 points of a compass, the 4 and 6 figure co-ordinate grid referencing for map reading and identify the significance of longitude and latitude.
- Identify the position of the Equator, Northern & Southern Hemisphere, Tropics of Cancer & Capricorn, Arctic & Antarctic and Greenwich/Prime Meridian in relation to time zones.
- Compare and contrast location by investigating and studying key human and physical geographical characteristics.



Art

Year 6 Skills

- Create shades, tones and tints using paints.
- Develop printing technique on paper and fabric.
- Research, describe and recreate varied techniques used by artists.



Key Vocabulary :

Shade
Tone
Tint
Palette
Print
Detail
Layering
Perspective



Music

Year 6 Skills

- Exploring beat and syncopation through songs and body percussion.
- Developing coordination and rhythm skills.
- Exploring and combining different rhythms through dance.

Unit: World unite
Musical focus: Step dance performance
Subject link: PE

Key Vocabulary

- Syncopation
- Coordination
- Rhythm
- Body percussion.





PSHE

KEEPING
MYSELF
SAFE



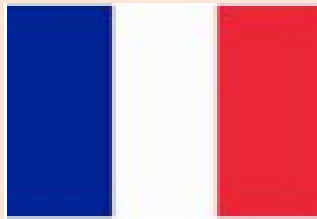
Key Questions:

1. How can we stay safe online?
2. What personal information is it safe to share?
3. Is it possible to take back something that's posted online?
4. Is addiction the same as a habit?
5. Are all medicines drugs? Can medicines ever be harmful?

French

Focus topics:

- Revision of greetings and introductions.
- Revision of colours.
- Foods and healthy eating.
- Christmas

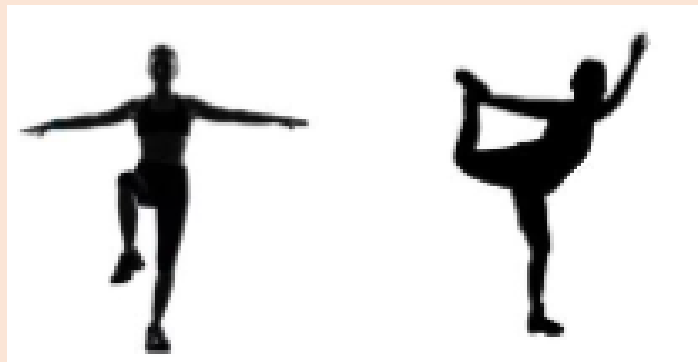


PE

Gymnastics

Year 6 Skills

- Develop shapes and balances.
- Develop methods of flight.
- Combine and perform gymnastic actions fluently incorporating apparatus.
- Develop and compose sequences.



Foundation Subject IMPACT QUESTIONS

Geography

What are the Equator, Tropics of Cancer & Capricorn, Poles and lines of longitude and latitude?

History

Why was Shackleton so important for Antarctic exploration? What can we learn from his attitudes?

Religious Education

How do we prepare for advent?
What expectations do we have of ourselves and why?

PE

What makes an effective sequence in a gymnastic performance?

Science

How does light travel and how does it enable us to see objects?

Coding

What do you need to do to make objects move on command?

Art.

How do artists create and use shades, tones and tints of the same colour and why?

Music

Can you create your own short dance sequence to match the rhythm of a piece of music?

PSHE

Should you always share your personal information online? Can you take back information you have posted or comments you have made?

French

Can you tell someone which foods are good for you and which foods are bad for you in French?

