

KNOWLEDGE ORGANISER Year 4



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.

Curriculum Development - Intent

LauDato Si, National Curriculum and Gospel Values

















Using our Secrets to Success...



















Rosenshine's Principles of Instruction

English

Reading
Writing
Phonics
Spelling
Punctuation
Grammar

Maths

Arithmetic Fluency Reasoning Problem Solving

RE

Knowledge &
Understanding
Engagement &
Response
Analysis & Evaluation

Parents in Partnership and Knowledge Organisers

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

Our Laudato Si key question this half term...

How can we reduce food waste?



Our Focus Gospel Value this half term is...



How do you show peace in what you do?

School Mission Statement

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





Amen

Earth

This half term, Year 4 are learning about the Rivers and Water Cycle.

We have lots of exciting things planned, including:

- Discovering the most important rivers and water ways in the world.
- Learning about early settlements and why they were adjacent to a source of water.
- Recreating the water cycle in an experiment.
- Designing boats and testing our creations.

How can I help my child with this topic:

Ask them to tell you what they have done at school – have discussions about their learning.

Look up activities about the Romans, discuss their clothing – read together, watch clips!

Talk to your child about an artist that you really like and look at some of their work together.

Practice times tables together, make games out of it.

Take part in some of the topic grid homework 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 4.



English - KEY VOCABULARY

Spelling Key Vocabulary -	Grammar key vocabulary - Pronoun - Word that takes the place of a noun e.g. it, he, she					
Compound Word - A word that contains two or more root words e.g. news+paper, ice+cream	Possessive Pronoun - Words that demonstrate ownership e.g. His, her Verb - Verbs are sometimes called 'doing words' because many verbs name an action that					
Key Word/Common Exception Word - A word which can't be phonetically decoded	 Modal Verb - An auxiliary verb that expresses necessity or possibility e.g. might, should, will, must Auxiliary Verb - A verb that helps make sense e.g. They have been swimming Adverb - These modifying the verb e.g. quickly, happily Adverbial - Linking ideas across paragraphs using adverbials of time [e.g. later], place [e.g. nearby] 					
Prefix - A prefix is added at the beginning of a word in order to turn it into another word e.g. disappear						
Suffix - Suffix A suffix is an 'ending', used at the end of one word to turn it into another word e.g. teacher	and number [e.g. secondly] or tense choices [e.g. he had seen her before] Fronted Adverbial - Words or phrases at the beginning of a sentence, used to describe the action that follows e.g. Later that day, I heard the bad news Question - Asks something e.g.: Why aren't you my friend?					
Homophone - Two different words are homophones if they sound exactly the same when pronounced e.g. hear/here	Statement - States a fact or something that has happened. E.g. You are my friend. Command - Something you have to do. E.g. Be my friend! Exclamation - When something is exclaimed- start with 'what' or 'how'. E.g. What a good friend you are!					

English

Grammar

Noun Phrase - A phrase where an adjective is used before a noun to describe it e.g. blue table, fierce fox

Tense - Shows whether you are writing about the past, present or future

Relative Clause - Clauses that begin with who, which, where, when, whose, that, or an omitted relative pronoun

Subordinate Clause - Typically introduced by a conjunction, that forms part of and is dependent on a main clause (e.g. 'when it rang' in 'she answered the phone when it rang').

out!"

Direct Speech - The part being spoken e.g. Rachel shouted loudly "Watch

Indirect / Reported Speech - Summarising what has been said e.g. He said they'd already eaten when he'd arrived.

Speech Marks - Punctuation used around the part being spoken e.g. The conductor shouted, "Sit down!"

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.

SPELLING

- Words with a /shun/ sound, spelt with 'sion'
- Words with a /shun/ sound splt with 'ssion'
- Words with a /shun/ sound spelt with 'tion'
- Words with a /shun/ sound spelt with 'cian'
- Words with 'ough' to make a long /o/, /oo/ or /or/ sound
- Year 3 and 4 CEW challenge.

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.

related to the meaning as a whole.

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

Comprehension – understanding the text and how content is

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

HOW TO HELP - Reading

- Dead Silver selected (late)
- 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 Y3 & 4 Common Exception words

Year 3 and 4 Common Exception Words

Aα	breath	consider	enough	group	island	natural	popular	Rr	surprise
accident	breathe	continue	exercise	guard	Kk	naughty	position	recent	Tt
accidentally	build	Dd	experience	guide	knowledge	notice	possess	regular	therefore
actual	busy	decide	extreme	Hh	LL	Oo	possession	reign	though
actually	business	describe	Ff	heard	learn	occasion	possible	remember	thought
address	Cc	different	famous	heart	length	occasionally	potatoes	Ss	through
although	calendar	difficult	favourite	height	library	often	pressure	sentence	Vv
answer	caught	disappear	February	history	Mm	opposite	probably	separate	various
appear	centre	Ee	forward	Ii	material	ordinary	promise	special	Ww
arrive	century	early	forwards	imagine	medicine	Pp	purpose	straight	weight
Bb	certain	earth	fruit	increase	mention	particular	Qq	strange	woman
believe	circle	eight	Gg	important	minute	peculiar	quarter	strength	women
bicycle	complete	eighth	grammar	interest	Nn	perhaps	question	suppose	

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

Number and the 4 Operations

Tenth, Hundredth - Tenth: the value of the digit in the tenths column e.g. 3.26 has 2 tenths. **Hundredths**: the value of the digit in the hundredths column e.g. 3.26 had 6 hundredths

Multiples - Times tables e.g. 2, 4, 6, 8, and 10 are multiples of 2. To get these numbers, you multiplied 2 by 1, 2, 3, 4, and 5 etc...

Factors - Numbers that when multiplied produces a given number e.g. 4 and 8 are factors of 32

Common Multiples - A number that is a multiple of two or more numbers. The common multiples of 3 and 4 are 12, 24... The least common multiple (LCM) of two numbers is the smallest number (not zero) that is a multiple of both

Common Factors - When you find the factors of two or more numbers, and then find some factors are the same they are the "common factors" e.g. 4 is a common factor of 16 and 32

Prime Number - A Prime Number can be divided evenly only by 1, or itself; it must be a whole number greater than 1. e.g. 5

Square Numbers - A number which is the product of itself. E.g. 9 is a square number $3 \times 3 = 9$ **Cubed Numbers -** A number multiplied by itself three times. The cube of 2 is 8 (2 x 2 x 2)

Composite Numbers - A whole number that can be divided evenly by numbers other than 1 or itself. Example: 9 can be divided evenly by 3 (as well as 1 and 9), so 9 is a composite number. But 7 cannot be divided evenly (except by 1 and 7), so is NOT a

composite number (it is a prime number)

Numerator/Denominator - The numerator is the top number in a fraction and the denominator is the bottom number e.g. here the numerator is 4 and the denominator is 5 = 4/5

Simplify Fractions - A fraction is in simplest form when the top and bottom cannot be any smaller (while still being whole numbers). Example: 2/4 can be simplified to ½ To simplify a fraction, divide the top and bottom by the highest number that can divide into both numbers exactly

Equivalent - Different fractions that name the same number e.g. $\frac{1}{2} = \frac{2}{4}$

Mixed Number - A number consisting of a integer and a proper fraction e.g. 5 ½

Improper Fractions - A fraction in which the numerator is greater than the denominator e.g. 5/4

Percentage - A percent is a ratio whose second term is 100. Percent means parts per hundred. In mathematics, we use the symbol % for percent

Negative Integers - A number to the left of zero on the number line. It is less than zero. E.g. -5.

Mean - The mean is the average of the numbers. To calculate: Just add up all the numbers, then divide by how many numbers there are

Ratio - Written with colons E.g. compare the number of girls to boys in a litter of puppies= 2:4

Proportion - Written as fractions 3/4 to say that there are three girls in every four children

Roman Numerals - Any of the letters representing numbers in the Roman numerical system: I = 1, V = 5, X = 10, L = 50, C = 100, D = 500, M = 1,000

Convert - A change in the form of a measurement, different units, without a change in the size or amount e.g. millimetres to



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 -

This half term we are learning about : Multiplication and Division and Fractions.

TIMES TABLES – Are a vital part of school learning. Please support your child as much as possible with learning all their times tables. At the end of this academic year, the children will be assessed on their knowledge of times tables.

Data Handling, Shape and Space Key Vocabulary -

Carroll Diagram and Venn Diagram - Carroll Diagram: A table to organise information with yes or no questions. **Venn Diagram:** A diagram representing mathematical or logical sets pictorially

Frequency Diagram - The frequency of a particular data value is the number of times the data value occurs. Often recorded using tallies

Bar Chart - A diagram in which the numerical values of variables are represented by the height or length of lines or rectangles of equal width

Line Chart / Graph - A type of chart which displays information as a series of data points called 'markers' connected by straight line segments

Pie Chart - A type of graph in which a circle is divided into sectors that each represent a proportion of the whole

Continuous Data - Data that can take any value (within a range) e.g. People's heights could be any value (within the range of human heights), not just certain fixed heights **Horizontal/Vertical** - A horizontal line is one which runs from left to right across the page. The vertical line runs up and down the page

Quadrants, X-Axis / Y-Axis - A co-ordinate plane is a two-dimensional number line where the vertical line is called the y-axis and the horizontal is called the x-axis. These lines are perpendicular and intersect at their zero points. This point is called the origin. The axes divide the plane into four quadrant

Translation - A term used in geometry to describe a function that moves an object a certain distance. The object is not altered in any other way. It is not rotated, reflected or re-sized **Dimension** - A square describes two dimensions, and a cube describes three dimensions

Perimeter, Area - Perimeter is the distance around a two dimensional shape. Area is the amount of space inside the flat (2-dimensional) object such as a triangle or circle

Reflex Angle - An angle which is more than 180° but less than 360°

Perpendicular - Perpendicular means "at right angles". A line meeting another at a right angle, or 90° is said to be perpendicular to it

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.

XL

TT Rockstars

Religious Education

Local church - Community

The experience of community is an essential and enjoyable part of life for people of every age and faith. The cycle of a year and the span of a lifetime contain occasions for regular celebrations as well as unexpected surprises, when people want to celebrate with family, friends and communities.





Be Real About Loving

Dear Friends

We all have been given lovely gifts.

When you give, give with a loving heart.

If you have a job to do, do it really well.

If you are helping someone, do it happily.

Be real in your love for each other.

Do not just pretend to be good.

Love and care for each other as good brothers and sisters.



- Think back to your childhood. Which celebrations of community life did you most enjoy?
- How did you celebrate? Who took part?
- Which celebration are you looking forward to in the coming months?
- How will you celebrate? Who else will take part?

Science

Year 4 Skills:

Can they identify common appliances that run on electricity? Can they identify and name the basic parts of a simple electric circuit? (cells, wires, bulbs, switches, buzzers)

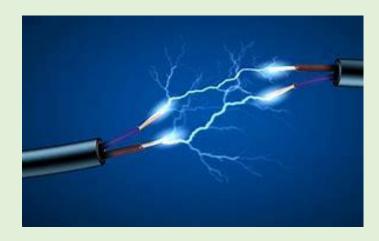
Can they identify whether or not a lamp will light in a simple series circuit based on whether or not the lamp is part of a closed loop with a battery? Can they recognise that a switch opens and closes a circuit and associate this with whether or not a lamp will light in a simple series circuit?

Can they recognise some common conductors and insulators, and associate metals with being good conductors?



Key vocabulary:

Electricity, appliance, device, mains, plug, electrical circuit, complete circuit, circuit diagram, circuit symbol, components, cell, battery, positive/negative, connect, connection, short circuit, wire, crocodile clip, bulb, bright/dim, switch, buzzer, motor, faster/slower, conductor, insulator, metal/non metal.



Design and Technology

Year 4 Skills Pupils will learn to:

- design and draw the blueprint of a boat
- Consider which materials would be best suited to the creation of a boat.
- Go through the creation phase
- Test their design on water
- Assess their design/decide what they would do differently next time.

Key Vocabulary:

Scale
Proportion
Placement
Design
Observe

Evaluate



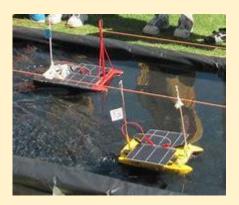
Music

Musical focus: Composition
The children will learn about the cultural heritage
of the instrument and learn about how rhythm
expresses emotion.

Year 4 Skills

Understand the place of silence in music.

- How it creates rhythm.
- How it draws the attention of the audience to particular parts of a piece of music.
- How it provides musicians with key information.



Key Vocabulary

- ·Timbre
- Texture
- ·Pitch
- Dynamics
- Duration
- Tempo
- ·Structure



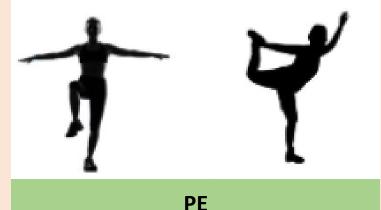
PSHE

Healthy lifestyles and keeping safe.



Key Questions:

What can we do to lead a healthy lifestyle?
What are some healthy choices we can make?
How can we keep ourselves safe within school?
How can we keep ourselves safe when out and about?
Why is it important to read the labels on medicines?
What is the difference between danger, risk and hasard?
Who is responsible for keeping us safe?
How can we manage our wellbeing in our relationships when feelings change?



Gymnastics

Year 4 Skills

- To perform moves using a range of movement patterns.
- Perform skills and actions more accurately and consistently.
- Use compositional devices when creating their sequences, such as changes in speed or direction.
- Describe their own and others work, making simple judgements about the quality of the performances and suggesting ways they could be improved.

Foundation Subject IMPACT QUESTIONS

Science

Can you create a small closed circuit?

History

What characterizes the early settlements around the world?

<u>Art</u>

Create a 3D globe using recycled and manmade materials.

PE

How is balance related to our centre of gravity?

Music

Can you compose a piece of music using varying rhythm including deliberate use of silence?

Geography

Explain the water cycle.