## 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



## English

 Reading Writing Phonics Spelling Punctuation Grammar
## RE

Knowledge \&
Understanding
Engagement \&
Response
Analysis \& Evaluation


Parents in Partnership and Knowledge Organisers

The Culture Team
History
Geography French (MFL)

## Using our Secrets to Success...



Rosenshine's Principles of Instruction

Problem Solving

## Maths

 Arithmetic Fluency ReasoningThe 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... <br> 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,<br>To act justly,<br>To love tenderly,<br>And to walk humbly.



Amen


## Settlers and Invaders

This half term, Year 4 are learning about the Roman Empire and its invasion of Britain. We have lots of exciting things planned, including:

- Diving into scenes from Horrid Histories.
- Creating roman mosaics
- Learning all about Roman legends.


## 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-

Compound Word - A word that contains two or more root words e.g. news+paper, ice+cream

## Key Word/Common Exception

 Word - A word which can't be phonetically decodedPrefix - 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

Homophone - Two different words are homophones if they sound exactly the same when pronounced
e.g. hear/here

## Grammar key vocabulary -

Pronoun - Word that takes the place of a noun e.g. it, he, she
Possessive Pronoun - Words that demonstrate ownership e.g. His, her
Verb - Verbs are sometimes called 'doing words' because many verbs name an action that someone does e.g. run, cook

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] 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?
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').

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

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 theirstories.
- 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.
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.

## 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 Y3 \& 4 Common Exception words

## Year 3 and 4 Common Exception Words

| Aa | 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 | LI | 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 $8(2 \times 2 \times 2)$
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 $1 / 2$ 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. $1 / 2=2 / 4$
Mixed Number - A number consisting of a integer and a proper fraction e.g. $5^{1 / 2}$
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: $I=1, V=5, X=10, L=50, C=$ $100, D=500, M=1,000$

## 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 theiranswers

## Problem Solving -

Solving real life and logical problems using mathematical understanding


## Maths

## This half term we are learning about : Place value.

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 intersectat 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 $180^{\circ}$ but less than $360^{\circ}$
Perpendicular - Perpendicular means "at right angles". A line meeting another at a right angle, or $90^{\circ}$ is said to be perpendicular to it

## HOW TO HELP

Mental arithmetic games-e.g. Countdown.
Regularly revisit times tables facts up to $12 \times 12$.

Use maths in dailylife - 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.

## IXL

TT Rockstars

## People - Our family/Baptism



- What do I know about my family tree?
- What are some of the stories from scripture about the family of Jesus?
- In which ways did characters in the bible lived out their lives?
- What links can I make between these stories and what people believe out God and Jesus?
- What choices did certain believers such as Ruth do in their lives?
- What are the roots of Jesus' human family?
- What do Christians believe about how God leads and guides people?



## Science

## Year 4 Skills:

## Animals including Humans

- Describe the simple functions of the basic parts of the digestive system in humans.
- Identify the different types of teeth in humans and their simple functions.

- Construct and interpret a variety of food chains, identifying producers, predators and prey.

| Key vocabulary: |  |
| :--- | :--- |
| Canine | Esophagus |
| Molar | Gall bladder |
| Premolar | Intestines |
| Enamel | Pancreas |
| Dentine | Predator |
| Pulp | Prey |
| Cementum |  |
| Uvula |  |
| Pharaynx |  |
| Tonsil |  |
| Hard and soft palate |  |

## Computer Science -



## Rising Stars

## We Are Software

 DevelopersYear 4 Skills:

- Play and analyse educational games - identifying features that make it a success.
- Plan and design a game.
- Make a prototype of the game you have designed.
- Make a prototype and once completed then test it.
- Evaluate your design.


| Word bank |
| :--- |
| debug |
| input |
| interface |
| output |
| program |
| prototype |
| repetition |
| variable |

## Art

## Year 4 Skills

- Do they use their sketch books to adapt and improve their original ideas?
- Do they keep notes about the purpose of their work in their sketch books?
-Can they experiment different styles
which artists have used?
-Can they identify and draw simple objects, and use marks and lines to produce texture?

Key Vocabulary :

- Tiles
- Mosaic
- Tesserae
- Chequerboard
- Wealth
- status



## Music

## Musical focus: Composition

An external music teacher will be providing the children with the opportunity to learn about tempo and rhythm through the use of samba drums. The children will learn about the cultural heritage of the instrument and learn about how rhythm expresses emotion.

## Year 4 Skills

Controlling pulse and rhythm

- Recognise rhythmic patterns.
- Perform a repeated pattern to a steady pulse.
- Identify and recall rhythmic and melodic patterns.
- Identify repeated patterns used in a variety of music. (Ostinato).



## Key Vocabulary

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


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 forkeeping us safe?
How can we manage our wellbeing in our relationships when feelings change?



## Dance

## Year 4 Skills

- To perform dances using a range of movement patterns in the context of the Roman Empire.
- Perform skills and actions more accurately and consistently.
- Create dance sequences with actions that represent ideas.
- 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

What is the function of the different parts of digestive system in humans?

## History

What was the impact of the Roman Empire on Britain?

Art
Why were mosaics an indication of wealth during the height of the Roman Empire?

## PE

How can choreographed actions communicate ideas and emotions?

## Music

Can you compose a piece of music using varying rythm?

## Computing

Can you use basic algorithms and code to generate an online quiz?

