

# **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 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**

#### **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

Being the 'Best we can be'

# Our Laudato Si key question this half term...

How can we be brave when we face the seemingly impossible?



# 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** 

# To infinity and beyond...



This half term, Year 5 are learning about.

We have lots of exciting things planned, including:

- Learning about the earth, moon, other planets in our solar system and our place in the universe.
- Experimenting with how shadows are formed and how they change depending on our position relative to the sun.
- Writing about space and those brave few humans who have left earth to explore its wonders.
- Devising musical compositions that take their inspiration from the planets.

#### How can I help my child with this topic:

Find out facts about the space missions –

What was the first creature sent into space?

Who was the first astronaut?

Who was the first man on the moon?

What other interesting facts can you find?

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 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 <u>must</u> be followed by a comma).

**Subject** – the noun that is doing the verb e.g. *The* <u>dog</u> chased the ball. **Object** – the noun that is having the verb done to it e.g. *The* dog chased the <u>ball</u>.

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

**Passive voice** – the object comes before the verb in a sentence e.g. *The* <u>ball</u> 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**

**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 & Balanced arguments**

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 with silent letters
- Words ending in ment
- Modal verbs
- Adverbs of possibility and frequency
- Statutory Spelling Challenge Words
- **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 gramma 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 existence muscle rhythm conscience explanation sacrifice accompany conscious necessary according familiar neighbour secretary controversy shoulder achieve convenience foreign nuisance signature aggressive correspond fortu оссири frequently amateur criticise sincere occur opportunitu ancient curiosity government sincerelu definite parliament soldier guarantee apparent appreciate desperate harass persuade stomach attached determined hindrance sufficient physical available develop identity prejudice suggest immediate privilege symbol average dictionary awkward disastrous immediately profession system embarrass individual bargain programme temperature bruise environment interfere pronunciation thorough category equip interrupt twelfth queue language cemetery equipped recognise variety committee equipment leisure recommend vegetable communicate especially lightning relevant vehicle marvellous yacht community exaggerate restaurant excellent mischievous competition rhyme

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

**Mixed number** – a whole (integer) and a fraction e.g. 1 %

**Improper fraction** – where the numerator is larger than the denominator e.g. 3/2. Improper fractions can be converted into mixed numbers e.g. 3/2 = 1 %

#### **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 -

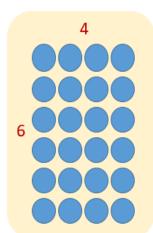
**Fluency** - Using number and calculation skills accurately and efficiently

Reasoning - Following a line of enquiry, justifying and proving their answers

**Problem Solving -** Solving real life and logical problems using mathematical understanding

### **Maths – Multiplication & Division**

#### **Multiplication and Division**



#### **Fact Family**

$$6 \times 4 = 24 \quad 24 \div 4 = 6$$

$$4 \times 6 = 24$$
  $24 \div 6 = 4$ 

#### This half term we are learning to:

Multiply and divide numbers mentally drawing upon known facts.

Multiply and divide whole number by 10, 100 and 1,000.

Solve problems involving multiplication and division including using knowledge of factors and multiples, squares and cubes.

Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.

**TIMES TABLES** – the best possible help with both multiplying and dividing is knowing your times tables.

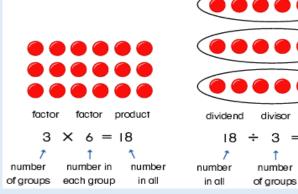
# **KEY MATH VOCABULARY**

# MULTIPLICATION & DIVISION

multiply product
times double
twice triple

quotient half of equal parts goes into divide ratio





each group

## **Religious Education**

# Advent and Christmas



Hope-Advent: waiting in joyful hope of Jesus: the promised one.



- What has been your experience of waiting?
- Why do you think waiting is a mystery?
- How do you think you can best use the time you spend waiting?
   What might help you?
- What do you think about when you are waiting for something exciting?
- How do you behave when you are waiting and why?
- What do you think is the difference between hope and expect?
- What do you think waiting hopefully means?



# Science: Space – To infinity and beyond

#### What should I already know?

- Earth is the planet we live on.
- The <u>sun</u> provides heat and light.
- Earth has a moon.
- Time facts: 365 days in a year, 12 months in a year, 24 hours in a day.

Vacabulary	
arbit	The path of a celestial body
ratatian	To spin or turn
solar	A star and everything that travels around it
.system	
planet	A <b>celestial body</b> that revolves around the <b>sun</b>
caemic	Related to space
galaxy	A collection of star systems
<b>AUI</b>	The star at the centre of the solar system
lunar	Relating to the maan
universe	Everything that exists anywhere
spherical	Shaped like a sphere
satellite	Any celestial bady arbiting around a planet or star
.celestial	An object in space
bady	
Sequence of planets from the sun	
Mercury	The smallest planet
Venus	The largest in the sky from earth
Earth	The only planet with water on its surface
Mars	Known as the 'red planet'
Asteroid belt	
Jupiter	The largest planet, a gas giant
Saturn	Famous for its rings, a gas giant
Uranus	A gas giant
Neptune	Blue in colour due to high methane levels
Pluto	This used to be a planet but is now known as a 'dwarf planet'
Mnemonic to recall the order of the planets	
"My Very Easy Method Just Speeds Up Naming Planets"	

#### Famous astronauts

Yuri Gagarin – First man in space on VOSTOCK I spacecraft (1951)

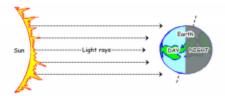
Valentina Tersehkova – First woman in space from Russia on VOSTOCK 6 (1963)

Neil Armstrong – First man on the moon in APOLLO 11 (1969)

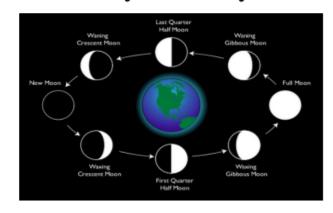
Helen Sharman – First British astronaut in space (1991)

Tim Peake – Mast recent Briton to go into space (2015)

#### Day and night diagram



#### Phases of the moon diagram

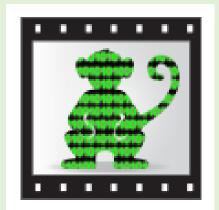


# **Computer Science – CODING**

#### Year 5 Skills:

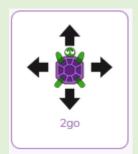
- Understand what algorithms are
- •Understand that programs execute by following precise and unambiguous instructions
- Create original artwork and sound for a game
- •Design and create a computer program for a computer game, which uses sequence, selection, repetition and variables
- •Detect and correct errors in their computer game
- •Use iterative development techniques (making and testing a series of small changes) to improve their game

# Purple Mash 2Code













#### **Year 5 History Skills:**

 Examine causes and results of great events and the impact on people.



Apollo 11 was the spaceflight that first landed humans on the Moon. Commander Neil Armstrong and lunar module pilot Buzz Aldrin formed the American crew that landed the Apollo Lunar Module Eagle on July 20, 1969, at 20:17 UTC.

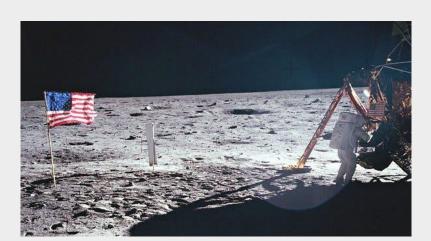
# History Apollo 11

#### **Neil Armstrong Quotes:**

"That's one small step for a man, one giant leap for mankind."

"Houston, Tranquillity Base here. The Eagle has landed."

"Mystery creates wonder and wonder is the basis of man's desire to understand."

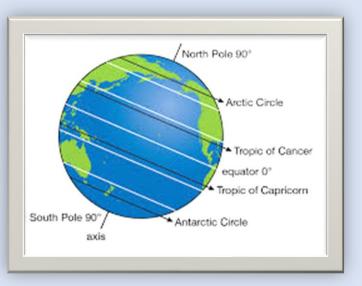


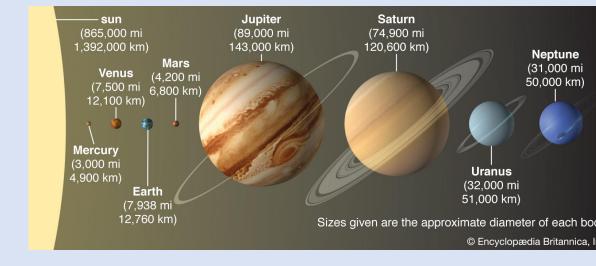
# **Geography Knowledge To infinity & Beyond**

#### **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 5 Skills**

- Demonstrate a secure knowledge about primary and secondary, warm and cold, complementary and contrasting colours.
- Work on preliminary studies to test media and materials.
- Create imaginative work from a variety of sources.
- Explain a few techniques, inc' the use of poly-blocks, relief, mono and resist printing.
- Choose the printing method appropriate to task.
- Build up layers and colours/textures.
- Organise their work in terms of pattern, repetition, symmetry or random printing styles.
- Choose inks and overlay colours.

#### **Key Vocabulary:**

Print
Relief
Pattern
Repetition
Symmetry
Overlay
Primary Colours
Secondary Colours



#### Music

#### **Year 5 Skills**

- Listening to music with focus and analysing using musical vocabulary
- Relating sound sequences to images
- Interpreting images to create descriptive sound sequences

Unit: Solar system

Musical focus: Listening
Subject link; Science

#### **Key Vocabulary**

- Timbre
- Dynamic
- Structure





#### **PSHE**



#### **Key Skills:**

Demonstrate strategies to deal with both face-to-face and online bullying;

Demonstrate strategies and skills for supporting others who are bullied;

Recognise and describe the difference between online and face-to-face bullying.

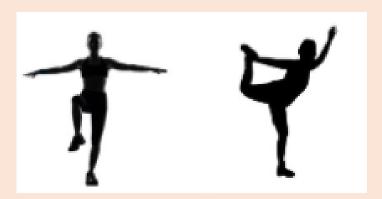


#### PE

#### **Gymnastics**

#### **Year 6 Skills**

- perform actions, shapes and balances consistently and fluently in specific activities
- know and understand the basic principles of warming up and why it is important for good quality performance
- understand why physical activity is good for their health



# Topic/Science What object, does the Earth orbit? Can you explain how shadows are formed and shadows change over why they change ime?

# Foundation Subject IMPACT QUESTIONS



Why Is it important before physical



Music

What does the musical term timbre mean?

Computing

Which is the odd one out? Sprite, avatar, background, debug. Explain why.

**PSHE** 

Can you describe the difference between online and face to face bullying?

Art

What are primary and secondary colours?