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 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

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…

What can we learn from Ancient Greek Civilizations to support the world today?

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

Science/Topic – Evolution and Inheritance

Key Vocabulary

offspring	The young animal or plant that is produced by the reproduction of that species.
inheritance	This is when characteristics are passed on to offspring from their parents.
variations	The differences between individuals within a species.
characteristics	The distinguishing features or qualities that are specific to a species.
adaptation	An adaptation is a trait (or characteristic) changing to increase a living thing's chances of surviving and reproducing.
habitat	Refers to a specific area or place in which particular animals and plants can live.
environment	An environment contains many habitats and includes areas where there are both living and non-living things.

Year 6 Skills:

- Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago
- Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents
- Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

Offspring
Animals and plants produce offspring that are similar but not identical to them. Offspring often look like their parents because features are passed on.

Variation
In the same way that there is variation between parents and their offspring, you can see variation within any species, even plants.

Adaptive Traits
Characteristics that are influenced by the environment the living things live in. These adaptations can develop as a result of many things, such as food and climate.

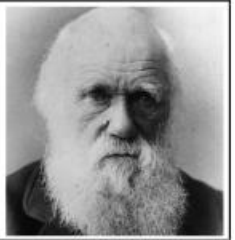
Inherited Traits
Eye colour is an example of an inherited trait, but so are things like hair colour, the shape of your earlobes and whether or not you can smell certain flowers.

Key Vocabulary

evolution	Adaptation over a very long time.
natural selection	The process where organisms that are better adapted to their environment tend to survive and produce more offspring.
fossil	The remains or imprint of a prehistoric plant or animal, embedded in rock and preserved.
adaptive traits	Genetic features that help a living thing to survive.
inherited traits	These are traits you get from your parents. Within a family, you will often see similar traits, e.g. curly hair.

Important scientists

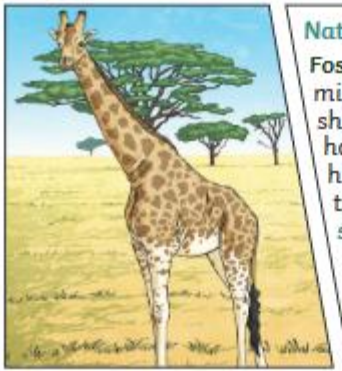
Charles Darwin



Charles Robert Darwin (12 February 1809 – 19 April 1882) was an English born evolutionary biologist, naturalist and geologist who was best known for his contributions to the science of evolution. He first formulated his theory in his book "On the Origin of Species" in 1859.

Mary Anning

Mary Anning (21 May 1799 – 9 March 1847) was an English fossil collector, dealer, and palaeontologist who became known around the world for important finds she made in Jurassic marine fossil beds in the cliffs along the English Channel at Lyme Regis in the county of Dorset in Southwest England.



Natural Selection

Fossils of giraffes from millions of years ago show that they used to have shorter necks. They have gradually **evolved** through **natural selection** to have longer necks so that they can reach the top leaves on taller trees.

Environments

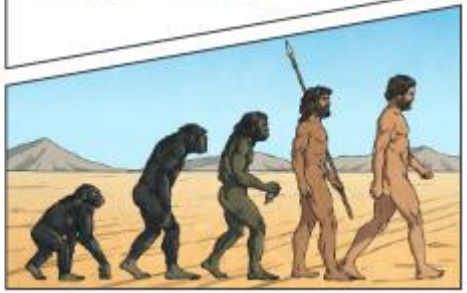
There are many types of **environment** around the world. Polar regions, deserts, rainforests, oceans, rivers, and grasslands are all **environments**.

Habitats

A good **habitat** should provide shelter, water, enough space and plenty of food.

Fossils are the preserved remains, or partial remains, of ancient animals and plants. **Fossils** let scientists know how plants and animals used to look millions of years ago. This is proof that living things have **evolved** over time.

Evolution is the gradual process by which different kinds of living organism have developed from earlier forms over millions of years. Scientists have proof that living things are continuously **evolving** - even today!



Map Work

TYPES OF GEOGRAPHY

HUMAN GEOGRAPHY The impact of people on the earth

PHYSICAL GEOGRAPHY The natural world without people

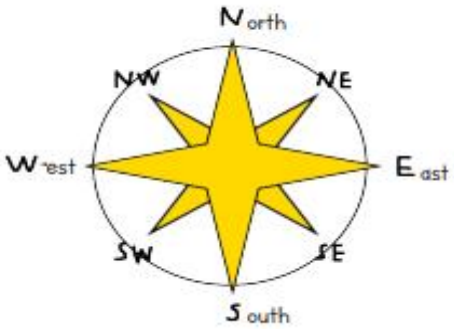
ENVIRONMENTAL GEOGRAPHY Human interaction with nature

WHAT IS GEOGRAPHY

"Geography is the study of the Earth's landscapes, peoples, places and environments. It is, quite simply, the study of the world we live in"

Geography is part of your everyday life; you use it every day without even realizing!

COMPASS POINTS



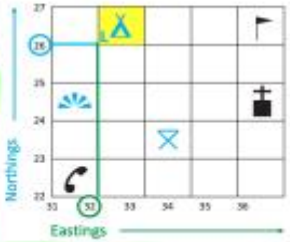
WHERE IS THE UK?

The United Kingdom (UK) is an Island country located in the continent of Europe, it is made up of four countries: England, Scotland, Northern Ireland and Wales.

THE UK

4 FIGURE GRID REFERENCES

Along the edges of each map there are numbers. These numbers help you work out where a location is on a map. Northings are numbers that go from bottom to top, Eastings go from left to right.



The first two numbers give the eastings

32 26

The second two numbers give the northings

Remember... eastings then northings!

Along the corridor and up the stairs!

MAP SYMBOLS

Symbols are useful for lots of reasons including, space saving on a map, multi-lingual (all languages can understand them), saves time, clear.

English - 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

WRITING - Recount Diaries & Myths and Legends

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 – 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 = ½)
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 ½
Improper fraction – where the numerator is larger than the denominator e.g. 3/2. Improper

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

Statistics — Knowledge Organiser

Key Vocabulary

- bar chart
- pictogram
- frequency table
- tally chart
- pie chart
- discrete data
- continuous data
- line graph
- sum
- difference
- comparison
- interpret
- mean average

Interpreting Data

Information can be show in tables, charts or graphs.

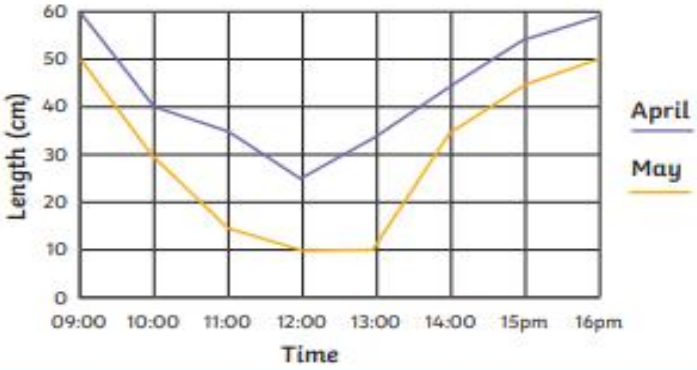
Interpreting data simply means understanding or working out what is being shown by a table, graph or chart and being able to answer questions about that information.

Line Graph

Line graphs are used to show changes to a measurement over time.

Data shown in a line graph is continuous.
Sets of points are joined together to make the line.

A line graph to show the length of shadows over time

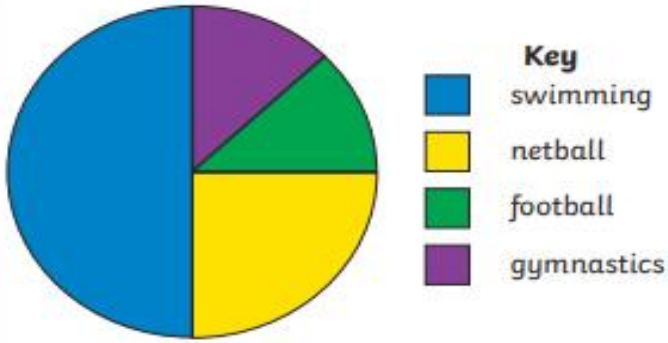


Pie Charts

Pie charts represent discrete data.

A circle is divided into segments, where each segment represents a data category. The size of each segment matches its proportion of the total amount.

A pie chart to show children's favourite sports



24 children were asked in total.

Swimming = $\frac{1}{2}$ so $\frac{1}{2}$ of 24 = 12 children

Netball = $\frac{1}{4}$ so $\frac{1}{4}$ of 24 = 6 children

Football = $\frac{1}{8}$ so $\frac{1}{8}$ of 24 = 3 children

Gymnastics = $\frac{1}{8}$ so $\frac{1}{8}$ of 24 = 3 children

Maths – Measures

We are learning to: Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.

-Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3 dp.

-Convert between miles and kilometres

Converting Units — Knowledge Organiser

Key Vocabulary

- mass
- gram
- kilogram
- capacity
- volume
- millilitre
- litre
- millimetre
- centimetre
- kilometre
- foot
- inch
- ounce
- pound
- stone
- pint
- gallon

Converting Mass

1 tonne = 1000kg

1000g = 1kg

$\frac{1}{10}$ kg = 0.1kg = 100g

$\frac{1}{4}$ kg = 0.25kg = 250g

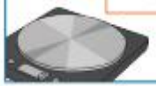
$\frac{1}{2}$ kg = 0.5kg = 500g

$\frac{3}{4}$ kg = 0.75 = 750g

÷ 1000 ÷ 1000

grams (g) kilograms (kg) tonnes (t)

× 1000 × 1000



Converting Capacity

1000ml = 1l

$\frac{1}{10}$ l = 0.1l = 100ml

$\frac{1}{4}$ l = 0.25l = 250ml

$\frac{1}{2}$ l = 0.5l = 500ml

$\frac{3}{4}$ l = 0.75l = 750ml

$\frac{1}{100}$ l = 0.01l = 10ml

÷ 1000

millilitre (ml) litres (l)

× 1000

Converting Length

1000m = 1km

100cm = 1m

10mm = 1cm

$\frac{1}{2}$ m = 0.5m = 50cm

$\frac{1}{4}$ m = 0.25m = 25cm

$\frac{3}{4}$ m = 0.75m = 75cm

$\frac{1}{10}$ m = 0.1m = 10cm

÷ 10 ÷ 100 ÷ 1000

millimetres (mm) centimetres (cm) metres (m) kilometres (km)

× 10 × 100 × 1000

Religious Education

Reconciliation

Come and See for yourself

Christians believe that, in Jesus Christ, the world has been reconciled to God. Through and in Christ, every human being is offered the power to reach out in forgiveness and peace, to receive and to offer reconciliation.

Word of God

St. Paul in his letter to the Ephesians, wrote:

"But now in Christ Jesus, you that used to be so far apart from us have been brought very close, by the blood of Christ. For he is the peace between us, and has made the two into one and broken down the barrier which used to keep them apart, actually destroying in his own person the hostility caused by the rules and decrees of the Law." Ephesians 2:14-15

Prayer and Reflection

I have chosen the way of faithfulness;
I set your ordinances before me.
I cling to your decrees,
O Lord; let me not be put to shame.
I run the way of your commandments,
for you enlarge my understanding.
Teach me, O Lord, the way of your statutes,
and I will observe it to the end.
Give me understanding that I may keep your law
and observe it with my whole heart.
Amen.
(Psalm 119: 30-34)

Computing

UNIT 6.4

We are network technicians

Exploring computer networks including the internet

In this unit, the pupils use unplugged activities to develop their understanding of networks; they learn about the domain name system and explore the school's network infrastructure.

CURRICULUM LINKS

Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration.

Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

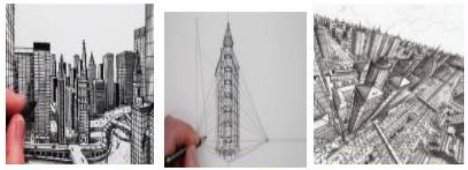
Art/DT

Art: Artist study

Architecture-
A term to describe buildings and other physical structures

Cityscape-
This is an artists representation of the physical aspects of a city or urban area. This can be a painting, drawing, print or photograph.

Perspective-
Using one, two and three point perspective drawing methods will help to create buildings and cityscapes with scale, depth and detail.



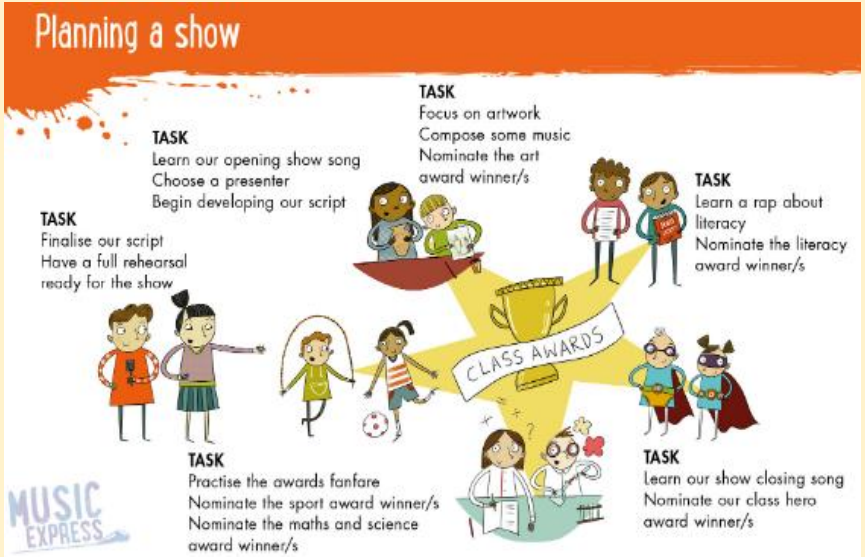
Artist link- Stephen Wiltshire
He is a British architectural artist who draws detailed cityscapes. He draws lifelike urban scenes from memory.

His technique- Pen and ink to create detailed mark- making.
Mark- making is using different effects like lines, dots, marks and textures

Mixed media-
Using a variety of different art mediums and techniques to create a single piece of art

Artist Ian Murphy creates mixed media textural drawings of buildings and details

Music



RSE

Making Babies
Menstruation
Is God Calling You?
Under Pressure
Self-Talk
Sharing Isn't Always Caring
Cyberbullying
Types of Abuse
Impacted lifestyles
Making Good Choices

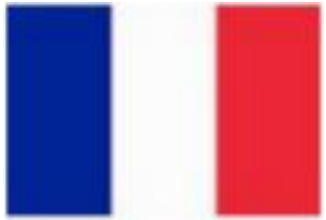
PE

Athletics

Year 6 Skills:

- Choose, combine and perform skills more fluently and effectively in invasion, striking and net games.
- Understand, choose and apply a range of tactics and strategies for defence and attack use these tactics and strategies more consistently in similar games.
- Understand the need to prepare properly for games
- Develop the consistency of their actions in a number of events
- Increase the number of techniques they use
- Choose appropriate techniques for specific events
- Understand the basic principles of warming up

French



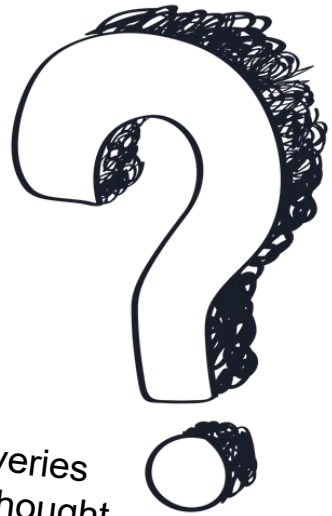
Les Habitats

Throughout this unit we introduce the children to a variety of habitats and look at which plants and animals live and grow there. The children will always have as much visual support as possible in every lesson so that the clues for decoding are accessible to them. We teach them how to decode and access language.

Foundation Subject
IMPACT QUESTIONS

Geography
How can I use grid references to identify a location on a map?

PE
How can I sequence a series of movement patterns?



Science
How did Darwin's discoveries change the wat people thought about the world?

Music
How can I represent my emotions through music and performance?

Computing
How are networks organized and built?

PSHE
How can I learn to build resilience as I experience peer pressure?

Art/DT
How can I use another artist as inspiration for my own work?