



Year Six: Explore

Project Question:

How do communities work together to face adversity?

Project Values:

| | |
|------------|----------------------------------------------------------------------------------|
| Respect | Showing appreciation and admiration for someone or something. |
| Resilience | Being able to keep on with a task, no matter how hard it is. |
| Hope | Having a belief that things can be better and can improve. |
| Adversity | A difficulty or challenge that is hard to overcome. |
| Community | A group of people living together of having values or characteristics in common. |

School Vision Statement:

Our school is committed to bringing out the best in each other so that every member of the school community can know 'life in all its fullness' (John 10:10). Through learning of the teachings of Jesus, we believe that our children can explore and develop their understanding of Core Christian values as markers and guides for their own lives. We aim for the school's Core Christian values to inform and influence our pupils' moral compass and allow them to enjoy 'life in all its fullness'. These values are known as the 'Sunshine 6'. They are: Forgiveness, Perseverance, Honesty, Compassion, Courage and Respect.

We also uphold Article 29 from the UN Convention of Rights of the Child 'Education must develop every child's personality, talents and abilities to the full. It must encourage the child's respect for human rights, as well as respect for their parents, their own and other cultures and the environment.'





Year Six: Maths



At St Mary's, mathematics is taught daily in a progressive and systematic way, beginning in Reception, all the way through to Year 6. The school uses White Rose Maths as a basis for this planning and sequencing of progression.

The length of each block of learning is given as a guide: we will adapt how long we spend on new objective in response to what the children need. There is time built into each term for practice and consolidation of previous learning.

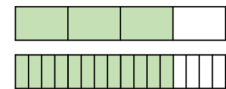
Fractions:

- Finding and recognising equivalent fractions
- Converting between improper fractions and mixed numbers
- Adding and subtracting fractions
- Adding mixed numbers
- Subtracting mixed numbers
- Multiplying fractions
- Dividing fractions
- Finding fractions of amounts
- Problem solving with fractions.

We use our multiplication knowledge to find equivalent fractions

$$\frac{3}{4} = \frac{12}{16}$$

$\times 4$ (top)
 $\times 4$ (bottom)



Multiplying Fractions

STEP 1 STEP 2 STEP 3

$$\frac{3}{4} \times \frac{2}{5} = \frac{3 \times 2}{4 \times 5} = \frac{6}{20} \xrightarrow{\text{Simplify}} \frac{3}{10}$$

Dividing Fractions

KEEP CHANGE FLIP

$$\frac{2}{3} \div \frac{1}{6} = \frac{2}{3} \times \frac{6}{1} = \frac{12}{3} = 4$$

Adding Mixed Numbers

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

convert mixed numbers to fractions

$$\frac{8}{5} + \frac{5}{2}$$

find LCD and add

$$\frac{8}{5} + \frac{5}{2} = \frac{16}{10} + \frac{25}{10} = \frac{41}{10}$$

convert back to a mixed number

$$4\frac{1}{10}$$

Geometry:

- Facts about circles;
- How to use pi to calculate the area of a circle
- How to calculate the diameter, radius and circumference;
- The difference between prisms and pyramids;
- Nets that will and won't make solid shapes.

Co-ordinates:

- Plotting points in all four quadrants of a grid;
- Drawing shapes and naming their points as co-ordinates;
- Find co-ordinates on unmarked grids;
- Translate, reflect and rotate shapes using co-ordinates.

Decimals and Percentages:

- Equivalence between fractions, decimals and percentages

Percent means 'out of a hundred'

$$\frac{50}{100} = \frac{5}{10} = \frac{1}{2} = 0.5 = 50\%$$

Ratio:

- Understand and use ratio to find answers to problems.

Pie Charts:

- Use protractors to draw pie charts;
- Calculate angles inside a pie chart.

Find Equivalent Ratios

Ratio of Boys to Girls: 3 to 5 or $\frac{3}{5}$

| | | | | |
|-------|---|----|----|--|
| Boys | 3 | 6 | 9 | |
| Girls | 5 | 10 | 15 | |

Mult. by 2: $\frac{3}{5} \times \frac{2}{2} = \frac{6}{10}$ Mult. by 3: $\frac{3}{5} \times \frac{3}{3} = \frac{9}{15}$ Mult. by 4: $\frac{3}{5} \times \frac{4}{4} = \frac{12}{20}$

We use ratio lists and tables to understand the relationships between items in a problem.



Year Six : English

At St Mary's, we strive to help our children develop into articulate and imaginative communicators, who are well-equipped with the basic skills they need to become life-long learners. We believe that English learning is key to this. We aim to ensure that all of our children develop a genuine love of language and the written word, through a text-based, values rich approach.

We want our children to feel that their writing has a real purpose in the context our values based learn-

Writing to express: Diary

Imagining you were in Whaley Bridge and had to be evacuated.

Grammar focus: Adverbs and Adverbials.



Writing to express and entertain Voyage of the Dawn Treader

Grammar focus: SPEECH
PUNCTUATION and
Paragraphing - TiPToP



Writing to express. Poetry

Poetry about the need for water
using the poem: Blessing by Imtiaz
Dharker

Grammar: Descriptive Devices



Writing to express.

A letter to the makers of the
village drill.

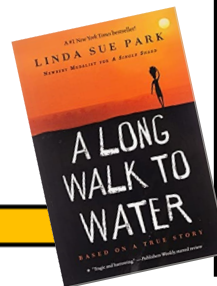
Grammar: modal verbs,
relative clauses,
subordinating conjunctions
and passive voice.



Writing to entertain.

A long walk to water
narrative

Grammar: Colons and Semi-
colons, cohesion across and
within paragraphs.



Writing to inform: explanations.

Science writing—Evolution
and inheritance.

Grammar: Colons and Semi-
colons, cohesion across and
within paragraphs.



Answering the Project Question:

How do communities work
together to face adversity?



Year Five : Explore



These are some of the important words we will be learning about during this project.

| RE | Geography | Design and |
|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Prayer Prayer Mat Prayer Subha beads Wudu Mosque Qur'an Torah Shawl Kippah | Interpret Analyse Describe Explain Grid reference Compass points Land use Data Conclusion Climate Physical feature Human feature Continent Ocean Tropics of Cancer and Capricorn Equator Climate | Evaluate Generate Develop Refine Combine Test Flood resistant Aesthetic Functional Prototype Pulley Exploded diagram Cross-sectional diagram Drill Well Budget |

| Science: | Science: |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Animals including Humans: Circulatory system Heart Ventricle Aorta Artery Vein Oxygenated Blood vessel Nutrient Diet Drugs Lifestyle | Evolution and Inheritance: Fossil Offspring Adaptation Evolution |



Year Five : Explore



Here are some ideas of activities you can try at home to help you learn more about this term's project.

Read it...

Can you find any newspaper/online news articles about flooding around the world?
Is flooding a worldwide problem? Why?
Is there anywhere in the world that suffers more than others?



Write it...

Make an information poster or leaflet about a major flood event in the UK.
Include information about:

- location
- causes
- effects (e.g. damage, cost etc.)



Draw it...

What is the water cycle? How much of the Earth is covered by water?

What are the **six** important processes that make up the water cycle? Draw a model of the water cycle.

Make it...

What can make flooding worse?
Make a model to show the different things that contribute to flooding.



Visit it...

One of Birmingham's reservoirs, Edgbaston, Bartley Green or Barnt Green. What can you find out about these man-made structures and can you imagine the disaster if they were to flood a community

Memorise it...

Can you learn and remember the stages of the water cycle. Learn the vocabulary and their meanings:

Evaporation, Transpiration, Condensation, Precipitation, Run Off, Infiltration.