



Year Four: Explore

Project Question:

How can our choices improve our future?

Project Values:

Sustainability	Something that will not run out when used.
Change	Making something different happen by ending something or starting something new.
Belief	An inner commitment to something you feel strongly about.
Choice	Making the decision to do or not do something.
Courage	To do something even though it may be difficult or scary, often being brave.

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 Four: Maths



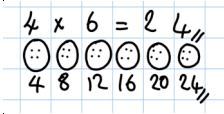
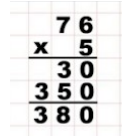
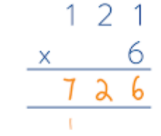
At St Mary's, mathematics is taught daily in a progressive and systematic way, beginning in Reception, all the way through to Year 6. The school uses White Rose Maths as a basis for this planning and sequencing of progression.

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.

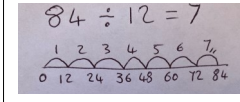
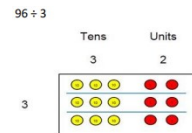
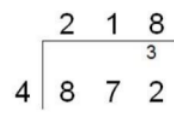
1. Number: Multiplication and Division (3 weeks)

- Consolidating all times tables;
- Finding and using factor pairs
- Multiplying and dividing by 10 and 100
- Using related facts
- Informal written methods for multiplication
- Formal written methods to multiply by a 1 digit number
- Dividing by a 1 digit number

These are the methods we will use for multiplication:

Numberline:  Expanded Method:  Written Method: 

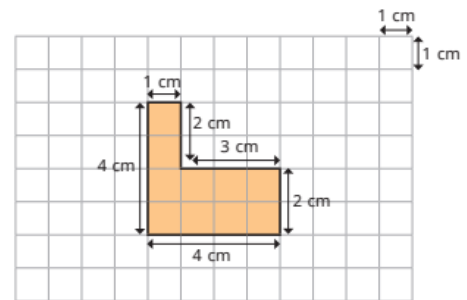
These are the methods we will use for division:

Numberline:  Expanded Method:  Written Method: 

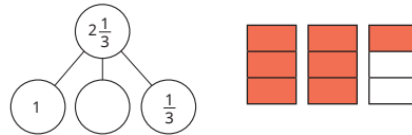
2. Length and Perimeter (2 weeks)

- Measuring in kilometres and metres
- Equivalent lengths (kilometres and metres)
- Finding and calculating perimeter of rectilinear shapes *
- Finding missing lengths
- Perimeter of regular and irregular polygons

*rectilinear shapes have straight lines that meet at right angles. They look like they have been made from rectangles stuck together.



3. Fractions (4 weeks)

- Understanding the whole
- Fractions beyond the whole 
- Partitioning a mixed number
- Comparing and ordering mixed numbers
- Improper fractions
- Converting improper fractions to mixed numbers
- Equivalent fractions and fraction families
- Adding fractions
- Adding mixed numbers
- Subtracting fractions

4. Number: Decimals (3 weeks)

- Recognising tenths and hundredths;
- Understand place value below 0;
- Divide by 10;
- Divide by 100;
- Divide by 1000
- Dividing 2 digit numbers by 10 and 100

This is how we use understanding of place value to show children what happens when we divide by 10, 100 and 100.

We teach them to draw this for themselves.

$12.8 \div 1000 = 0.0128$

Hundreds	Tens	Units	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$	$\frac{1}{10000}$
	1	2	8			
		0	0	1	2	8



Year Four: 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 entertain.

Energy Island - Allun Drummond

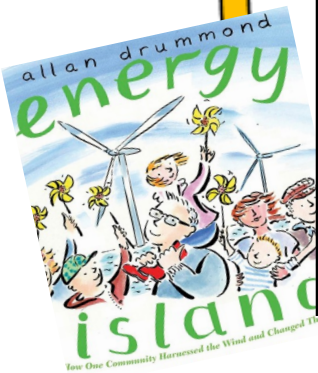
Grammar Focus: Fronted Adverbials and commas for clarity (after an adverbial)



Writing to entertain.

The Tower to the Sun - Colin Thompson

Grammar Focus: Prepositions and prepositional phrases.



Writing to inform.

Wind Power as a source of renewable energy.

Grammar Focus: Conjunctions (to explain, sequence and contrast) including commas for clarity after a subordinate clause.



Writing to express.

Formal letter to the World Future Council about our project findings.

Grammar: Conjunctions (to explain, sequence and contrast)

Apostrophes for possession.

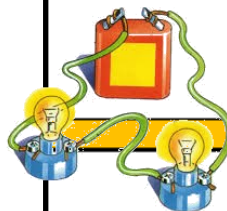
Writing to express.

Persuasive letter in role as wind farm designers recommending, to a community, why the location that they live in would be ideal for a wind farm.

Grammar: Conjunctions (to explain)

Writing to inform.

Writing based on our Science Project—Electricity.



Answering the Project Question:

How can our choices improve our future?



Year Four: Explore

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

RE	Geography	Design and Technology
Judaism Jew Synagogue Torah Commandments Shabbat Rosh Hashanah Yom Kippur Pesach	Describe Collect Interpret Evaluate Compare Contrast Fossil fuels Renewable Energy Wind energy Hydropower Solar power Wave and tidal power Environment Map Atlas Grid Reference Compass Point Turbine Data Conclusion	Design Develop Refine Evaluate Template Cut Shape Measure Process Component Electrical Innovation

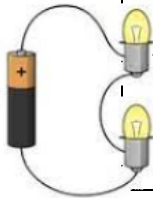


Year Four: Explore Science



Electricity

We complete our electricity learning and show our understanding of circuits by identifying whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery. We learn to recognise that a switch opens and closes a circuit and associate this with whether a circuit will work or not. We learn to recognise some common conductors and insulators, and associate metals with being good conductors.



Important Vocabulary: circuit, component, bulb, wire, cell, battery, current, switch, conductor, insulator, appliance

PSHE and Relationships Education

At St Mary's, our PSHE and Relationships Education Curriculum across the school seeks to prepare children for the rich, diverse and sometimes difficult experiences they will face both in school and in the wider world. During each term, children learn about the following aspects of PSHE:



KIVA & Anti-Bullying	No Outsiders	E-Safety
<p>KIVA means kind and we intend that all of our children will learn to be kind and recognise kindness in others and that they will use this learning to become positive members of our school and the wider community. Through progressive learning we will ensure that all children are aware of their own rights and responsibilities as members of the St Mary's family.</p> <p>Anti-Bullying and preventing Peer on Peer Abuse at St Mary's:</p> <p>Our children have lessons focussed on learning our values, demonstrating kindness and understanding that bullying, in any form, is unacceptable;</p> <p>-Two clear messages are taught through school:</p> <ol style="list-style-type: none"> To define bullying we say, "STOP -Several Times on Purpose." If this is what has happened, then it is bullying. To encourage pupils to use their voice, we encourage them to: "Start Telling Other People." 	<p>The No Outsiders programme teaches children about the 2010 Equality Act through carefully selected stories. There are 5 stories used during each school year. This term, the No Outsiders texts are:</p> <ul style="list-style-type: none"> Dogs Don't Do Ballet The Way Back Home 	<p>We follow the E-Safety programme written by National Online Safety. This programme includes two E-Safety themes to be explored each term.</p> <p>During this term, the themes are:</p> <ul style="list-style-type: none"> Online Reputation Privacy and Security

If you have concerns about bullying in our school, please inform any school based adult and we will follow our KIVA procedures to: investigate, understand, set targets, communicate clearly and review.

Help us to prevent bullying in our school—Thank you.



Year Four: Explore

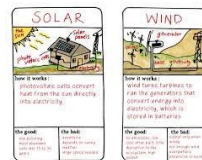
Here are some ideas of activities you can try at home to help you learn more about this term's project.

Read it...

Read, learn about and explore stories, poems and traditional tales that are about the environment and the planet.

Write it...

Learn about some famous renewable energy sources from around the world and create a fact file or leaflet on what you've learnt.



Draw it...

Paint or draw an image of the planet and consider all the way in which it is special. Think about how we can improve the planet and look after it. This message can be presented in your art.



Make it...

Design and create your own model of a renewable energy type using any materials you choose!



Visit it...

Visit your local library to find some non-fiction books, or use the internet to learn some facts about unusual renewable energy sources, such as hydropower. Write down any new and amazing facts that you learn.

Memorise it...

Have a go at memorising some of the key vocabulary needed for our new project, such as, renewable, energy, sources, electricity, solar and hydropower.