

Year 5 & 6 English Knowledge Organiser

Spelling

Root word	The word before prefixes and suffixes were added to change meaning e.g. happy/unhappiness.
Common Exception	A word which can't be phonetically decoded.
Homophone	Two different words that sound exactly the same when pronounced but have different spelling. E.g. here/hear
Synonym/antonym	Synonym – words meaning the same e.g. beautiful/pretty Antonym – words meaning the opposite e.g. awful/wonderful

Reading

Prediction	Saying what will happen next as a result of something.
Sequencing	Ordering events by how they appear in the text.
Decoding	Breaking a word down into different phonemes to help read it.
Retrieval	Finding information from a text.
Vocabulary	Understanding the meaning of words within texts.
Inference	Making assumptions about what is happening in a text from what you already know.
Summarising	Identifying the key moments in a text.
Author's Intent	How the writer's choices of language, layout and structure impact the reader
Compare/contrast	Making informed opinions about what is the same and different within and across texts

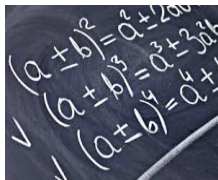
Grammar and Punctuation

Direct speech	Use of inverted commas to punctuate – used around the part being spoken e.g. The driver shouted, "Sit down!"
Reported speech	Summarising what has been said e.g. he said they'd already eaten when he arrived.
Clause	A group of words/part of a sentence, must contain a verb e.g. She answered the phone.
Embedded	A subordinate clause in the middle of a sentence, between two commas e.g. My bike, which is very old, is broken.
Subordinate clause	Typically introduced by a conjunction, that forms part of and is independent on a main clause. E.g. answered the phone when it rang.
Relative	Clauses that begin with a relative pronoun - who, which, where, when, whose, that
Parenthesis	Brackets, dashes or commas used to add extra information to a sentence
Semi-colon;	Used to mark the boundary between related clauses e.g. It's raining; I'm fed up.
Colon :	Used to mark the boundary between independent clauses e.g. I knew what I had to do: I ran Used to introduce a list e.g. I like many fruits: apples, bananas, grapes.
Hyphen -	Used to clarify meaning or avoid ambiguity
Ellipsis	Indicates an intended omission of a word, sentence or section of a text eg the door opened...

Suffix	Can be added to the end of verbs (e.g. helped, helper, helping) Can be added to the end of adjectives to form nouns (e.g. -ness, -er) Can be added to the end of nouns to form adjectives (e.g. -ful, -less – joyful)
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Writing key concepts					
Ambiguity	Using the conjunctions for, and, nor, but, or, yet and so.				
Cohesion	Using the conjunctions if, since, as, when, although, while, after, before, until and because.				
Modal verbs/adverbs	Shows when or where something happened e.g. before, after, during, in, under etc.				
Formality	Links ideas within and across paragraphs. Can be adverbials of time (e.g. later, in the morning), place (e.g. nearby, in the park) and number (e.g. firstly)				
Subject/object	A word that takes place of a noun or a name e.g. it, he, she Possessive pronoun – words that demonstrate ownership e.g. his, her, their				
Active/Passive	Devices used such as conjunctions, prepositions, adverbials and pronouns so a text flows and reads well.				
Subjunctive	Presentation device to guide the reader in a non-fiction text.				
Determiner	Used before a noun, a modifying word to determine the noun described. E.g. an apple, this apple, her apple, some apples, three apples.				
Alliteration	Two or more words next to or close to each other in a sentence which start with the same sound or effect. e.g. six sizzling sausages				
Simile	Comparing one thing to another using like or as. E.g. As tall as a giraffe, it towered above the rooftops. His cheeks were red, like a ready to eat tomato.				
Metaphor	Comparing two things, saying one this is the for effect.				
Tense	Past tense Describes what is happening e.g. I play football, I am playing football Present tense Describes what did happen e.g. I played football, I was playing football Present perfect describes a past event which is still taking place. He has played for the team for four years.				
Figurative language	Devices used to engage your readers, giving your writing a more creative tone (simile, metaphor, alliteration) Personification – the effect of giving an inanimate object human characteristics eg the tree danced				
Tense		Past	Present	Future	
	Simple past	I played	Present tense	I play	Simple future I will play
	Past progressive	I was playing	Present progressive	I am playing	Future progressive I will be playing
	Past Perfect	I had played	Present perfect	I have played	Future perfect I will have played





Subject: Maths

Unit: Place Value

Unit overview

This unit will look at reading and writing numbers up to 10 000 000. Children will also begin to learn how to order and compare numbers and be able to recognise the value of digits. The unit will then focus on negative numbers and how they are used in everyday life. Finally the unit will give the opportunity to solve problems.

Websites/books linked to topic you may wish to read:

<https://www.bbc.co.uk/bitesize/topics/zsjqtfr>

Learning Outcomes

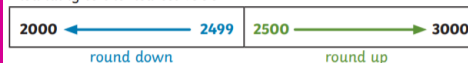
read, write, order and compare numbers up to 10 000 000 and determine the value of each digit
round any whole number to a required degree of accuracy
use negative numbers in context, and calculate intervals across zero
solve number and practical problems that involve all of the above.

Key Vocabulary

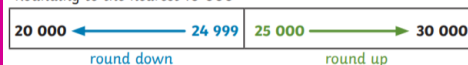
millions
thousands
hundreds
tens
ones
zero
place value
greater than
less than
order
round
rounded
negative number
sequence

Round Any Number

Rounding to the nearest 1000



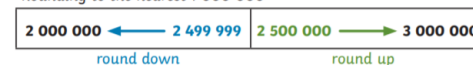
Rounding to the nearest 10 000



Rounding to the nearest 100 000



Rounding to the nearest 1 000 000



Compare and Order

equals

$$26 + 38 = 8 \times 8$$

Both calculations have the value 64.

greater than

$$223\ 873 > 98\ 256$$

The number on the left has 2 hundred thousands and the number on the right has 0 hundred thousands.

less than

$$901\ 198 < 1\ 091\ 098$$

The number on the right has 1 million and the number on the left has 0 millions.

smallest

81 782

127 352

127 835

137 019

200 002

greatest

Numbers to Ten Million

3 926 471

Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
3	9	2	6	4	7	1

three million, nine hundred and twenty-six thousand, four hundred and seventy-one

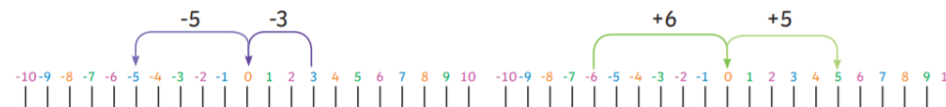
3 926 471
3 926 000 471



Negative Numbers

$$3 - 8 = -5$$

$$-6 + 11 = 5$$



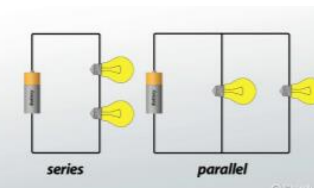


Subject: Science

Unit: Electricity

Unit overview

Students will learn the correct terminology and symbols they require to be able to discuss electricity in year 6 and to be able to write accurate answers relating to concepts such as ohms, volts and amps. After equipping your class with the vocabulary and knowledge they need to move forward, we have then supplied a series of three investigations. Electricity is important for a large number of reasons. It can be created through solar power, hydropower, wind power, natural gas, and nuclear power.



Websites linked to topic you may wish to look at:

<https://www.bbc.co.uk/bitesize/topics/zj44jxs>

<https://www.theschoolrun.com/what-is-electricity>

Key Vocabulary

circuit	A path that an electrical current can flow around.
symbol	A visual picture that stands for something else.
cell/battery	A device that stores chemical energy until it is needed. A cell is a single unit. A battery is a collection of cells .
current	The flow of electrons , measured in amps .
amps	How electric current is measured.
voltage	The force that makes the electric current move through the wires. The greater the voltage , the more current will flow.
resistance	The difficulty that the electric current has when flowing around a circuit .
electrons	Very small particles that travel around an electrical circuit .

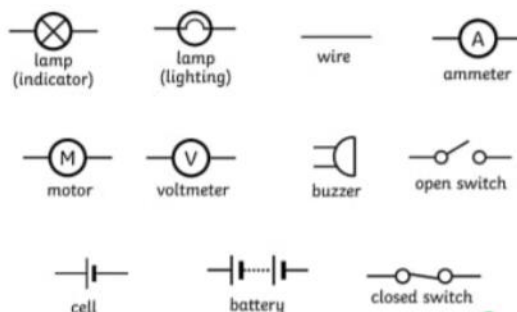
Learning Outcomes

Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.

Compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.

Use recognised symbols when representing a simple circuit in a diagram.

Electrical Circuit Symbols



Series Circuit

A circuit that has only one route for the current to take. If more bulbs or buzzers are added, the power has to be shared and so they will be dimmer or quieter. If just one part of this series circuit breaks, the circuit is broken and the flow of current stops

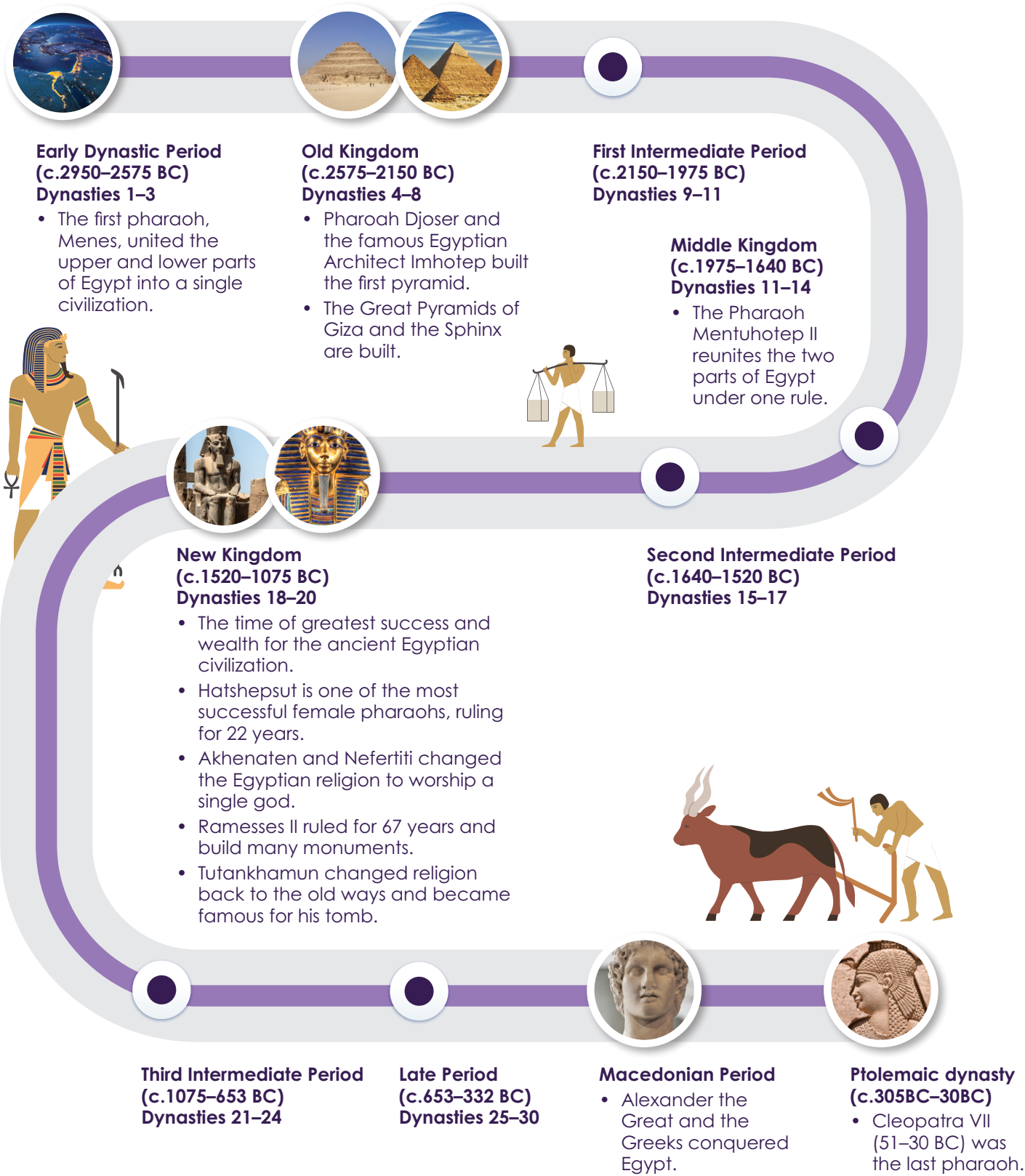
Facts

We use scientific symbols to represent the components (parts) of a circuit.
The brightness of a bulb or the loudness of a buzzer is affected by the number of cells in a circuit.
The brightness of a bulb or the loudness of a buzzer is affected by the voltage of cells in a circuit.
The number of components in a circuit can affect how they function.
The arrangement of components in a circuit can affect how they function.
The length of wires in a circuit can affect how the components function.

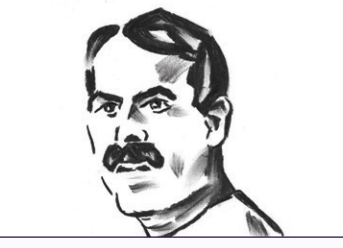


There were over 30 dynasties that ruled ancient Egypt over the course of 3000 years. A dynasty is when one family held power, handing down the throne to an heir. Many ancient Egyptians kept records of the different rulers however over time some information has been lost. Despite this, historians have still been able to piece together most of ancient Egypt's past.

Here is a timeline of the dynasties and some of the notable pharaohs that ruled.



Glossary		
1	afterlife	a belief in some religions that there is life after death
2	amulet	an ornament or small piece of jewellery thought to give protection against evil, danger, or disease
3	archaeologist	a person who studies human history and prehistory by examining sites and artefacts
4	civilization	a society, culture and particular way of life in a certain area
5	Egyptology	the study of the language, history and culture of ancient Egypt
6	embalmer	a person whose job it is to preserve the body using chemicals
7	hieroglyphics	the formal writing system used by the ancient Egyptians. Each character or symbol would stand for a word or part of a word
8	irrigation	the supply of water to land or crops to help growth. Usually this means making channels
9	Embalmer	a person whose job it is to preserve the body using chemicals
10	mummification	Preparing a body so it does not decay.
11	papyrus	a material prepared in ancient Egypt from the stem of a water plant to make paper and rope
12	pharaoh	a ruler in ancient Egypt
13	pyramid	a monumental structure with a square or triangular base and sloping sides that meet in a point at the top, especially one built of stone as a royal tomb in ancient Egypt.
14	reign	ruling as a king or queen
15	tomb	a monument to the memory of a dead person

Significant People and Places			
			
Egypt	The River Nile	Valley of the Kings	Pyramids of Giza
A country made up of 90 per cent desert located in the north-eastern corner of Africa.	The world's longest river. The life source of the Egyptian people.	The royal burial ground of pharaohs such as Tutankhamun, Seti I and Ramesses II.	The pyramid tombs built for the Pharaohs Khufu, Khafre and Menkaure.
			
Tutankhamun	Cleopatra	Ramesses II	Howard Carter
Tutankhamun is known as the 'Boy King'. He is forever remembered because of his tomb and the treasures that were discovered within.	The last pharaoh of Egypt. Cleopatra was known for her intelligence and for bringing peace and wealth to a divided Egypt.	Known as the 'Great Pharaoh', Ramesses II ordered the construction of many impressive statues and temples.	Carter was the archaeologist who made the greatest discovery of the 20th century when he found Tutankhamun's tomb in 1922.



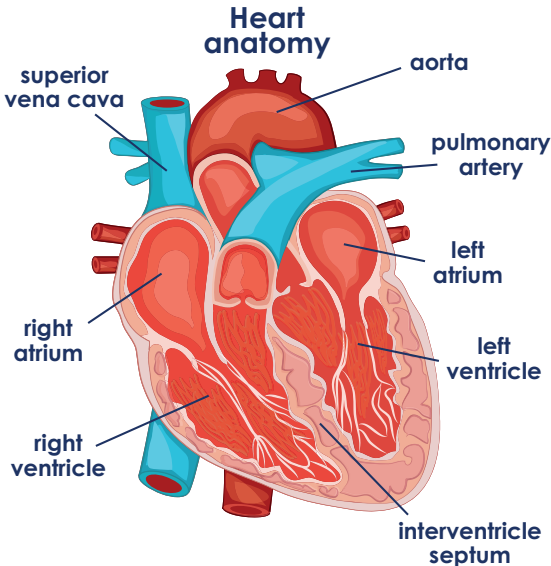
Glossary		
1	addiction	the uncontrollable nature of not being able to stop something
2	arteries	a blood vessel that transports blood away from the heart
3	atrium	the upper part of the heart
4	blood vessels	a tube-like structure carrying blood
5	capillaries	the smallest of the 3 blood vessels delivering oxygen and nutrients
6	carbon dioxide	also known as CO ₂ , the gas exhaled by humans — a waste product
7	circulatory system	the system that carries blood around the body
8	depressant	a substance or drug that reduces brain activity
9	diastole	the heart filling with blood
10	erythrocyte	red blood cells
11	leukocytes	white blood cells
12	nutrients	a substance that humans need to live and grow
13	oxygen	also known as O ₂ . Oxygen is needed by humans to survive
14	plasma	carries the red and white cells around the body
15	platelets	helps the blood clot if you have an injury
16	stimulant	a substance or drug that enhances brain activity
17	systemic system	the circuit that pumps oxygenated blood to the body
18	systole	the heart pumping out blood
19	veins	a blood vessel that transport blood towards the heart
20	ventricle	the lower chambers of the heart

The heart

The heart is made up of 4 main chambers: 2 upper chambers called left atrium and right atrium and two lower chambers called left ventricle and right ventricle. These chambers are separated by valves to ensure that the blood only goes from the top down to the bottom and not the other way.

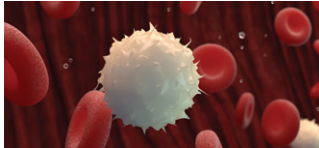
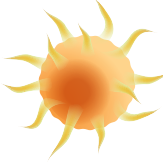
You have 4 main blood vessels that carry blood to and from the heart, they are called: pulmonary artery, pulmonary vein, aorta and superior vena cava.

Your heartbeat is made up of 2 sounds- often referred to as a 'lub'-'dub'.



What is blood?

Blood is a vital component of our circulatory system. It carries oxygen to the parts in the body that require it such as the brain, muscles and digestive system. It also protects us from infection or disease and regulates our body temperature to ensure we function at our best. Blood is made up of 4 key parts; each play a major part in keeping us alive! These 4 parts are: red blood cells, white blood cells, platelets and plasma.

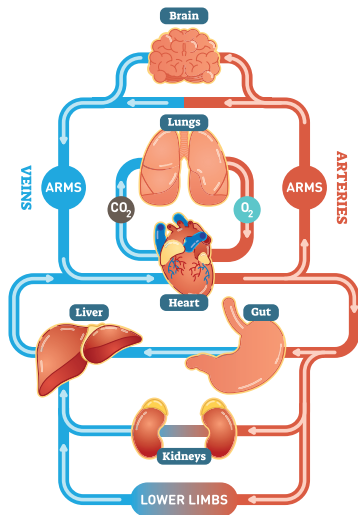
Red blood cells	White blood cells	Platelets	Plasma
These cells carry oxygen and nutrients around the body. They carry a red protein called haemoglobin — giving our blood its colour. 	These cells help to keep us well. If they detect disease, infection or viruses they attack. 	Platelets are small parts of cells. Their function is to block up holes in blood vessels. If you graze your knee, platelets will help clot the blood to stop bleeding. 	Plasma makes up approximately 55% of your blood. It is straw-coloured and carries the cells around the body. 

The circulatory system

The circulatory system is made up of two circuits. The pulmonary circuit and the systemic circuit.

- The pulmonary circuit transports blood to and from the lungs from the heart.
- The systemic system transports the blood from the heart around the body and back again.

The circulatory system relies on 3 types of blood vessel: arteries, veins and capillaries.



The lungs play a major part in the circulatory system providing the body with oxygen and removing the waste product carbon dioxide from the body.

Exercise, nutrients and drugs

Exercise is important in keeping the body healthy. Cardiovascular exercise strengthens the heart. A strong heart pumps more blood to the muscles delivering the much-needed oxygen.



Nutrients are transported around the body in the blood. They are diffused through the digestive tract membrane into the capillaries.



Drugs affect our body in a range of ways. There are three categories of drug: legal, legal with restriction and illegal. Within this there are four types of drug: stimulants, depressants, analgesics and hallucinogens.





Subject: Religious Education
Unit: The Story of the People of God

Unit overview

This unit will give the children opportunities to develop their knowledge and understanding of the structure of the Bible and the forms of literature that are found in the different books. Children will be introduced to stories of significant people in the Old Testament. They will learn what some of these stories tell us about their relationship with God.

Related scripture linked to topic you may wish to read:

Exodus 19: 17-20 The giving of the commandments to Moses

Genesis 4: 1-13 The story of Cain and Abel

Joel 2 : 12 -17 The writings of Old Testament prophets

Learning Outcomes

Know the Bible is a library of books.

Be able to identify some styles of literature found in the Bible

Know stories of significant people from the Old Testament and discuss the relationship they had with God.

Key Vocabulary

Vocabulary

Commandment

Esther

Exodus

Israelite

Moses

New Testament

Old Testament

parable

prayer

prophet

proverb

Window of reflection

Think of a key figure from the Old Testament, how can they inspire you?

What story from the Old Testament can you recall?



Tasks linked to unit:

- 1) Explore some Jewish celebrations to go with the Old Testament stories that you have studied.
- 2) Plan a collective worship on the story of Moses and Manna in the desert, think of how this can link to the Eucharist and what is given in this sacrament.
- 3) What values and attitudes did many of the prophets demonstrate?