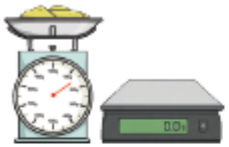
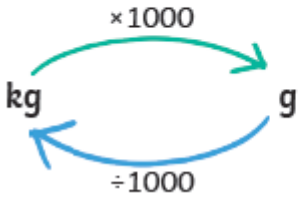
Year 5 and 6 – Converting units

Previously learned vocabulary	
kg	litre
mm	gram
cm	mass
litre	time
ml	millilitre
km	length
New Vocabulary	
capacity	Timetable

Converting mass





1000g = 1kg

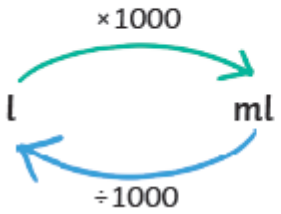
$\frac{1}{10}$kg = 0.1kg = 100g

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

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

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

Converting capacity



1000ml = 1 litre

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

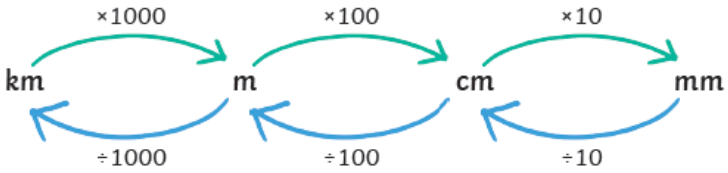
$\frac{1}{4}$l = 0.25l = 250ml

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

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

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

Converting length



1000 metres = 1 kilometre

100cm = 1m

10mm = 1cm

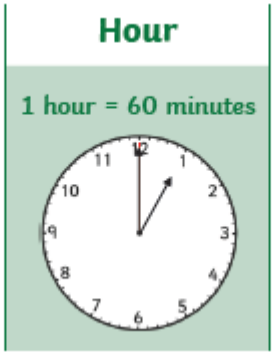
$\frac{1}{10}$km = 0.1km = 100m

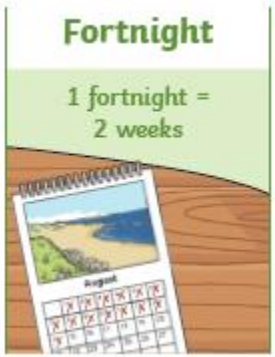
$\frac{1}{4}$km = 0.25km = 250m

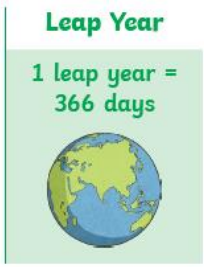
$\frac{1}{2}$km = 0.5km = 500m

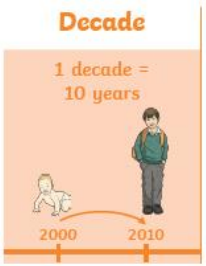
$\frac{3}{4}$km = 0.75km = 750m

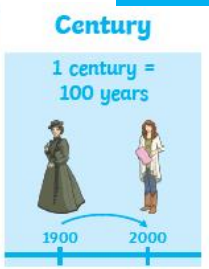
Units of time







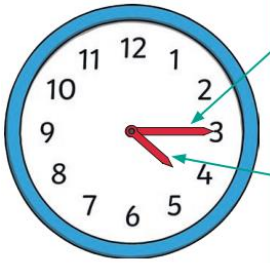




Time - Revision

Measurement vocabulary	
Analogue	Digital
Roman Numerals	Minutes
New Vocabulary	
12 hour	24 hour

Analogue and digital clocks



Minute Hand
The long hand points to the minutes past the hour.

Hour Hand
The short hand points to the hour. If this hand is pointing between the hours, it is the earlier hour of the two.

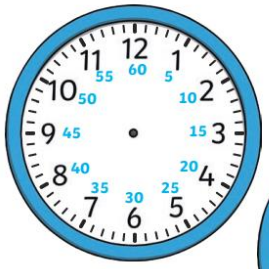
twelve o'clock

quarter past twelve

half past twelve

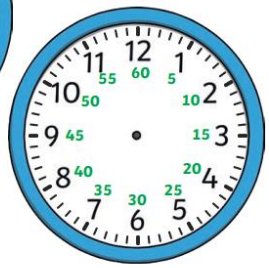
quarter to one

Durations of time



There are **60 seconds** in an minute.

There are **60 minutes** in an hour.



There are **24 hours** in a day

There are **7 days** in a week.

There are **12 months** in a year.

Convert 12 hour and 24 hour clock

01:00	1 a.m.	1 o'clock
02:00	2 a.m.	2 o'clock
03:00	3 a.m.	3 o'clock
04:00	4 a.m.	4 o'clock
05:00	5 a.m.	5 o'clock
06:00	6 a.m.	6 o'clock
07:00	7 a.m.	7 o'clock
08:00	8 a.m.	8 o'clock
09:00	9 a.m.	9 o'clock
10:00	10 a.m.	10 o'clock
11:00	11 a.m.	11 o'clock
12:00	12 p.m.	12 o'clock

13:00	1 p.m.	1 o'clock	
14:00	2 p.m.	2 o'clock	
15:00	3 p.m.	3 o'clock	
16:00	4 p.m.	4 o'clock	
17:00	5 p.m.	5 o'clock	
18:00	6 p.m.	6 o'clock	
19:00	7 p.m.	7 o'clock	
20:00	8 p.m.	8 o'clock	
21:00	9 p.m.	9 o'clock	
22:00	10 p.m.	10 o'clock	
23:00	11 p.m.	11 o'clock	
00:00	12 a.m.	12 o'clock	

Autumn term - Year 5 Maths – Addition and Subtraction

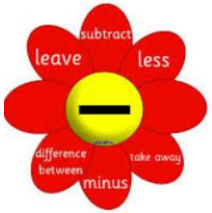
Previously learned Vocabulary
Thousands (Y4)
Operation (Y4)
Associative (Y4)
Derive (Y4)
Inverse (Y3)
New Vocabulary
million(s)
equivalence

Use inverse operations

143 + ___ = 200

so

200- 143 = 57

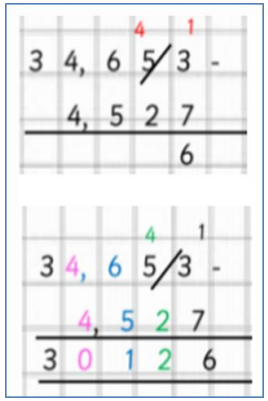


Add numbers with more than 4 digits using formal written methods – column addition

	4	5	8	6	4
+	2	3	4	9	7
	6	9	3	6	1
		1	1	1	

Starting with the ones, add each column in turn. Regroup tens, hundreds, thousands, ten thousands as required.

Subtract numbers with more than 4 digits using formal written methods – column subtraction



Starting with the ones, subtract each column in turn. Exchange tens, hundreds, thousands and/or ten thousands as required.

Use rounding to check answers to calculations with increasing accuracy

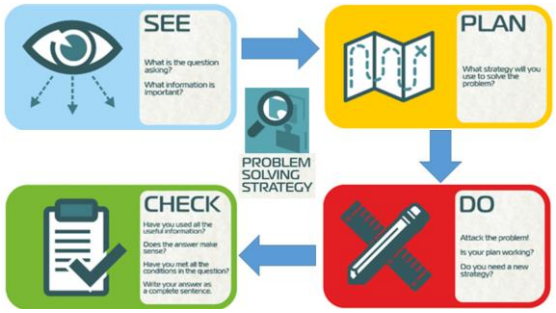
456 + 122

460 + 120 = 580

456
+ 122
578

Solve addition and subtraction multi-step problems, deciding which operations to use and why

Step 1: Understand the problem.
Step 2: Devise a plan (translate).
Step 3: Carry out the plan (solve).
Step 4: Look back (check and interpret).



Add and subtract numbers mentally with increasingly large numbers

<u>Use of rounding</u>

2001 – 1999 =

2001 – 2000 = 1

1 +1 = 2

Add the 1 back on as you took an extra 1 away

<u>Partitioning</u>

2500 + 1500 =

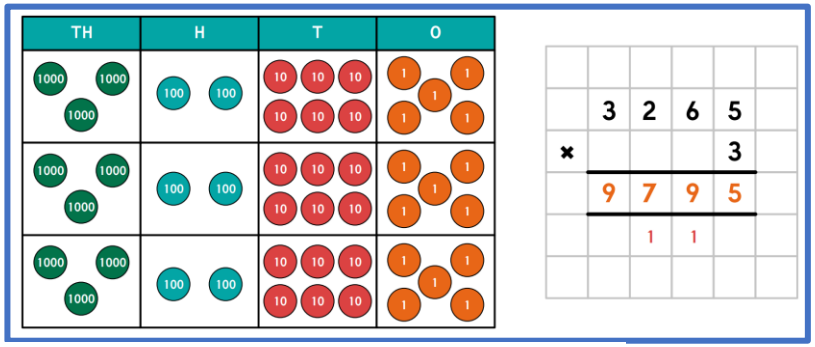
2500 + 1000 = 3500

3500 + 500 = 4000

Year 5 Maths – Multiplication & Division B

Previously learned vocabulary	
Factor (y4)	factor pairs (y4)
Remainder (y4)	Multiples (y3)
commutative (y2)	array
New Vocabulary	
composite	prime factor
square(d) ^{2}	cube(d) ^{3}

Multiply numbers up to 4 digits by a one-digit number.



2543 × 7 = 17 801

	2	5	4	3
×				7
1	7	8	0	1
1	3	3	2	

Remember to move any exchanged digits into the next column. After the next multiplication, add the exchanged number to the answer.

Multiply numbers up to 4 digits by a two-digit number.

1	~~3~~	~~2~~		
	1	5	4	Start with the ones.
×		2	6	154 × 6 = 924
	9	2	4	154 × 20 = 3080
3	0	8	0	3080 + 924 = 4004
4	0	0	4	
1	1			

2543 × 67 = 170 381

		2	5	4	3
	×			6	7
	1 1	7 3	8 3	0 2	1
1 1	5 3	2 2	5 1	8	0
1	7	0	3	8	1
	1	1			

Before multiplying by the number in the tens column, remember to use zero as a placeholder because the 6 in 67 is 6 tens (60).

Divide numbers up to 4 digits by a 1 digit number

		3	8
4	1	1 5	3 2

15 ÷ 4 = 3 remainder 3
Remember to exchange any remainders and move them into the next column.

Divide with remainders

		4	5	5	r	3
5	2	2	2 7	2 8		

28 ÷ 5 = 5 remainder 3
If your calculation has a remainder, remember to record it in the answer using the letter r

Efficient division

621 ÷ 3

600 ÷ 3 = 200
21 ÷ 3 = 7
200 + 7 = 207

408 ÷ 4

To divide by 4 we can halve and halve again.

408 ÷ 2 = 204

204 ÷ 2 = 102

so 408 ÷ 4 = 102

768 ÷ 8

To divide by 8 we can halve and halve again. Then divide the answer by 2.

768 ÷ 2 = 384

384 ÷ 2 = 192

192 ÷ 2 = 96

so 768 ÷ 8 = 96

Autumn term - Year 6 Maths – Addition and Subtraction

Previously Learned Vocabulary	
Millions (y5)	Round/ rounding (y4)
Equivalence (y5)	Integers (y3)
New Vocabulary	
Reason from known facts	

Use inverse operations

143 + ___ = 200

so

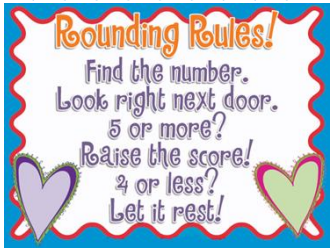
200- 143 = 57

Use rounding to check answers to calculations with increasing accuracy

456 + 122

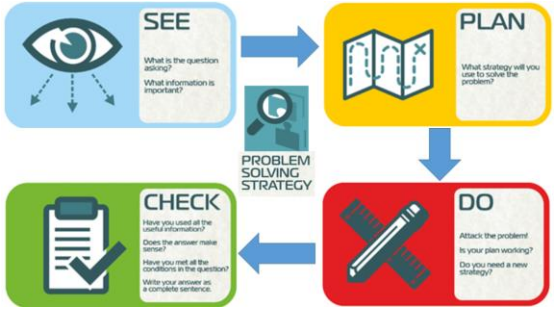
460 + 120 = 580

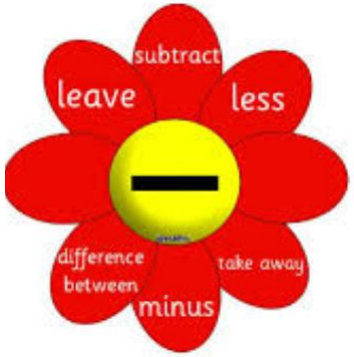
456
+ 122
578



Solve addition and subtraction multi-step problems, deciding which operations to use and why

Step 1: Understand the problem.
Step 2: Devise a plan (translate).
Step 3: Carry out the plan (solve).
Step 4: Look back (check and interpret).





Add and subtract integers

Column Method

	4	5	8	6	4
+	2	3	4	9	7
	6	9	3	6	1
		1	1	1	

Starting with the ones, add each column in turn. Regroup tens, hundreds, thousands, ten thousands as required.

	3	5	6 7	13 4	1 2
-		3	4	7	6
	3	2	2	6	6

Starting with the ones, subtract each column in turn. Exchange tens, hundreds, thousands and/or ten thousands as required.

Add and subtract numbers mentally with increasingly large numbers

Use of rounding

2001 – 1999 =

2001 – 2000 = 1

1 +1 = 2

Add the 1 back on as you took an extra 1 away

Partitioning

2500 + 1500 =

2500 + 1000 = 3500

3500 + 500 = 4000

Autumn Term – Y6 Maths – Multiplication and Division A

Previously Learned Vocabulary	
Product (y3)	Factor (y4)
Multiple (y3)	Prime (y5)
Remainder (y4)	Short division (y3)
Millions (y5)	Round/ rounding (y4)
Equivalence (y5)	Integers (y3)
New Vocabulary	
Common factors	Common multiples

Prime Numbers 1 to 100

2 3 5 7 11 13 17 19
23 29 31 37 41 43 47
53 59 61 67 71 73 79
83 89 97

Multiply and divide whole numbers by 10, 100 and 1000.

			3	.	0	2
		3	0	.	2	

x 10

			3	.	0	2
	3	0	2	.		

x 100

			3	.	0	2
3	0	2	0	.		

x 1000

	3	0	2	0	.	0
÷ 10 →		3	0	2	.	

	3	0	2	0	.	0
÷ 100 →			3	0	.	2

	3	0	2	0	.	0
÷ 1000 →				3	.	0 2

Divisibility Rules

A number is divisible if it can be divided evenly with no remainder.

10	if	The number ends in a 0.
9	if	When you add all the digits this number can be divided by 9.
8	if	The last 3 digits form a number that can be divided by 8.
7	if	For 3 digit numbers, double the last digit and subtract it from the first two digits. The total can be divided by 7.
6	if	The last number can be divided by 2 and the total of the digits can be divided by 3.
5	if	The last digit is a 5 or a 0.
4	if	The last two digits are a number that is divisible by 4.
3	if	The sum of the digits can be divided by 3.
2	if	The final digit is an even number .

Common factors

Factors of 48

1	2	3	4	6	8	12	16	24	48

Factors of 30

1	2	3	5	6	10	15	30

Common factors: 1, 2, 3, 6

Common multiples

Multiples of 3

3	...	18	21	24	...	39	42

Multiples of 7

7	14	21	28	35	42

Common multiples: 21, 42...

Primes

A prime number has only 1 and itself as factors: 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 33, 37, 41, 43

A composite number has factors other than 1 and itself.

Squares and Cubes

Square numbers result from a number being multiplied by itself (e.g. 5 × 5 = 25):

1, 4, 9, 16, 25, 36, 49, 64, 81, 100

Cube numbers result from a number being multiplied by itself twice (2 × 2 × 2 = 8):

1, 8, 27, 64, 125

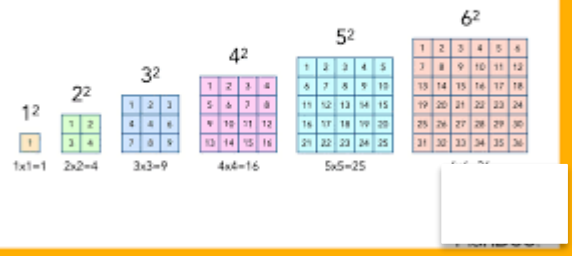
$1^3 = 1 \times 1 \times 1 = 1$

$2^3 = 2 \times 2 \times 2 = 8$

$3^3 = 3 \times 3 \times 3 = 27$

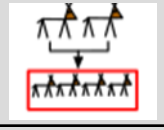
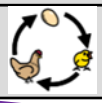
$4^3 = 4 \times 4 \times 4 = 64$

Square Numbers



Science – Living things and their habitats; life cycles Oak Class – Heptonstall School

Key Vocabulary

mammals 	type of vertebrate - animals that give birth to live young & feeds them milk, breathes with lungs and has body hair or fur.
birds 	type of vertebrate - animals that fly, have feathers & wings and lay eggs
Amphibians 	type of vertebrate - an animal that can live in and out of water, lays eggs and has damp skin
insects 	A type of invertebrate - insects are small animals with six legs and a hard outer shell called an exoskeleton. Most have wings and antennae.
offspring 	the young born of living organisms, produced either by a single organism or, in the case of sexual reproduction, two organisms
Sexual reproduction 	two parents are needed to make offspring which are similar but not identical to either parent
asexual reproduction 	one parent is needed to create an offspring, which is an exact copy of the parent
metamorphosis 	an abrupt and obvious change in the structure of an animal's body and their behaviour.
fertilisation	The action of fusing the male and female cells in order to develop an egg.
life cycle 	The changes living things go through to become an adult.

Key Information I will learn...

Reproduction

Humans develop inside their mothers and are dependent on their parents for many years until they are old enough to look after themselves.

Amphibians such as frogs are laid in eggs then, once hatched, go through many changes until they become an adult.

Some animals, such as butterflies, go through metamorphosis to become an adult.

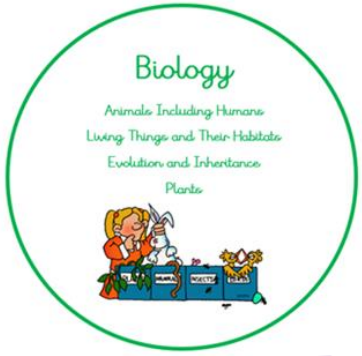
Birds are hatched from eggs and are looked after by their parents until they are able to live independently.

Interesting facts

Echidnas and platypus are mammals but they lay eggs rather than giving birth to live young

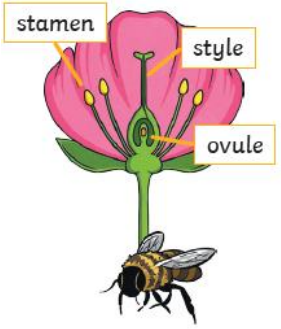
Influential individual

Sir David Attenborough

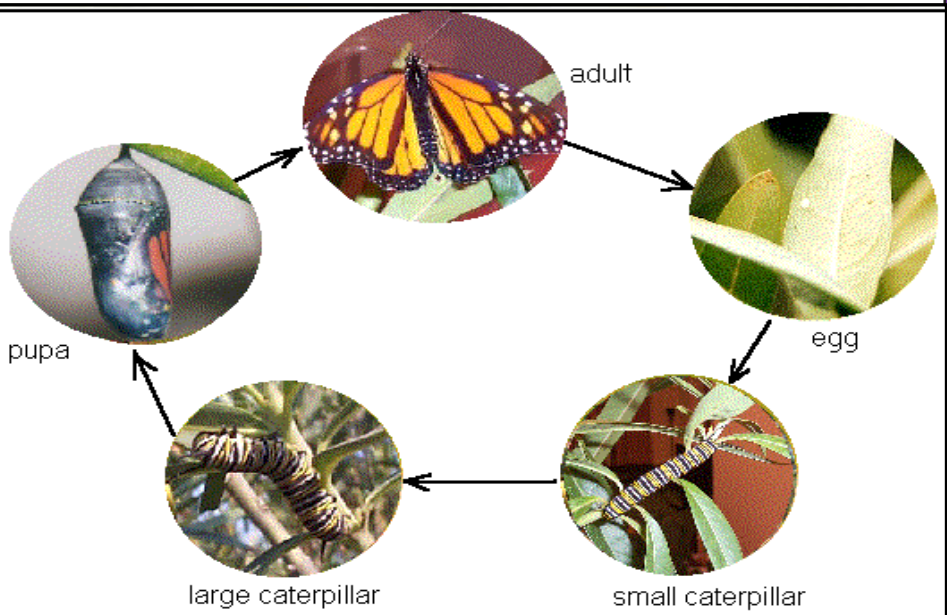


Plants

- Most plants contain both the male sex cell (pollen) and female sex cell (ovules), but most plants can't fertilise themselves. Wind and insects help to transfer pollen to a different plant.
- The pollen from the stamen of one plant is transferred to the stigma of another. The pollen then travels down a tube through the style and fuses with an ovule.



- Some plants, such as strawberry plants, potatoes, spider plants and daffodils use asexual reproduction to create a new plant. They are identical to the parent plant.

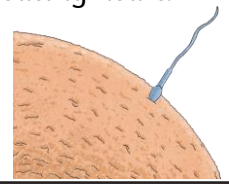


Summary of Butterfly's life cycle - Complete Metamorphosis

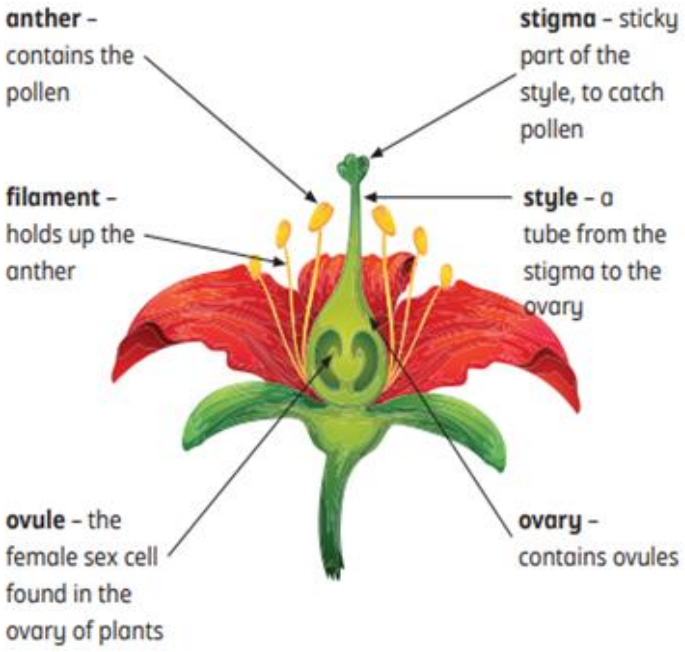
Reproduction in mammals

Mammals use sexual reproduction to produce their offspring.

- The male sex cell, called the sperm, fertilises the female sex cells.
- The fertilised cell divides into different cells and will form a baby with a beating heart.



Parts of a flowering plant



Key Questions

Can you name and describe the function of the main parts of flowers?

Can you explain the life cycle of a flowering plant?

What is asexual reproduction?

What do naturalists do?

Why is the work of naturalists important?

What is the same and different about the life cycles of different animals?

What are the male and female parts of a plant called?

Can you explain what pollination is?

Which mammals lay eggs rather than give birth to live young?

End Goals

Children will

- Describe the lifecycles of mammals, amphibians and insects using diagrams.
- Can describe similarities and differences between them.
- Understand the term reproduction in plants and animals.

Must Knows

Animals and their habitats; life cycles

Key Facts:

- The life cycle of a mammal has four main stages: foetus, young, adolescent and adult.
- Most mammals give birth to live young.
- Most mammals have mammary glands that produce milk to feed their young.
- When mammals become adults, they are able to reproduce.
- Amphibians are small vertebrates that need water or a moist environment to survive.
- The life cycle of a frog has four main stages: frogspawn, tadpole, froglet and adult frog.
- Tadpoles have gills to help them to breathe under water, a tail to help them to swim and a mouth to feed.
- Tadpoles take around 14 weeks to transform into frogs.
- An adult frog has no tail and is fully equipped to live both on land and in water
- Insects are small animals that have three body sections, six legs and antennae, and usually lay eggs.
- There are four main stages of the life cycle of an insect: egg, larva, pupa and adult.
- Larvae are the young form of insects.
- Pupae are insects in the stage of development between larvae and adults.
- Birds are vertebrates with wings, feathers and a beak.
- The life cycle of birds includes five stages: egg, hatchling, nestling, fledgling and adult bird.
- Birds reproduce by laying eggs. Eggs are incubated by parents until they hatch.
- An adult bird is able to reproduce and will have all its feathers.
- Sexual reproduction involves two parents producing offspring. Offspring produced by sexual reproduction are not identical to the parents.
- Fertilisation is the process by which a sperm cell joins with an egg cell to create a new life.
- The female part of a flowering plant is called the pistil, which consists of the stigma, style and ovary. The female sex cells in a plant are called ovules and are found in the ovary.
- The male part of a flowering plant is called the stamen, which consists of the anther and filament. The male sex cells in a plant are called pollen grains and are found on the anthers
- Plants reproduce sexually through pollination.
- Pollination involves the transfer of pollen from the male anther of a flowering plant to the female stigma of a flowering plant. Pollen grains attach to the sticky stigma and travel down the style into the ovary.
- Fertilisation occurs when a male pollen grain joins with a female ovule inside an ovary.
- Asexual reproduction involves only one parent. Offspring produced by asexual reproduction are identical to the parent. Some plants reproduce asexually by producing new plants at the end of runners or by producing bulbs or tubers. A starfish is an example of an animal that reproduces asexually.

Geography – Europe Oak Class – Heptonstall School

Key Vocabulary

	A quick transport system that runs underground through tunnels using trains.
	A piece of land that sticks out into the water but is still connected to the land.
	A way of getting from one place to another.
	A person visiting or travelling to a place for pleasure.

Map of Europe

Key Information I will learn...

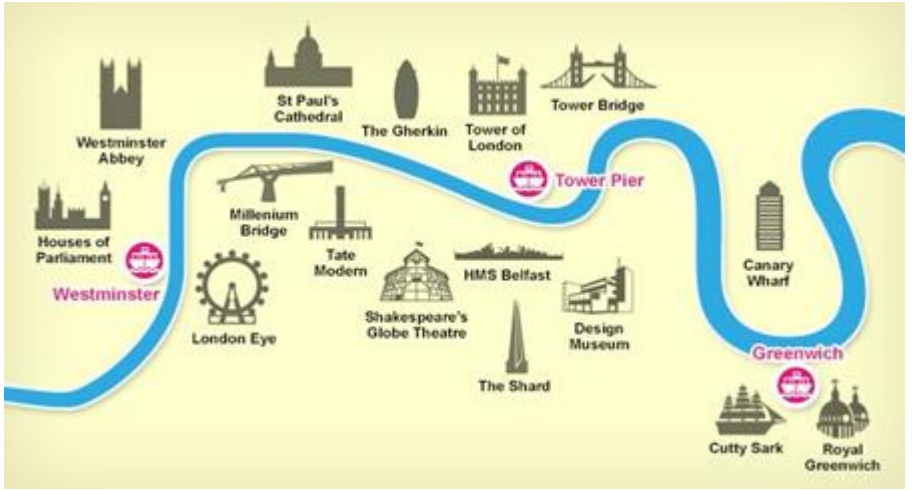
This is a Geography topic. We will be working as Geographers.

London Underground

The Underground opened in 1863 becoming the first underground rail system.

What do we need?

The River Thames runs through London. Most of the famous landmarks in London are on the banks of the River.



England

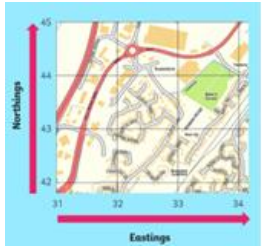
London is the capital city of England.

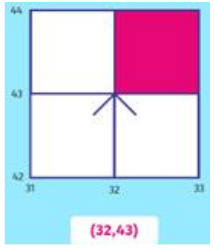
Italy

Rome is the capital city of Italy.

Grid reference

We use grid references to help us find places on a map





Key Questions

How countries are in Europe?

Which river runs through London?

What are the four major physical regions in Europe?

What is the climate like in England?

What is the climate like in Italy?

What was the first underground railway system?

What attracts tourists to London and Rome?

End Goals

Children will;

Locate the countries of Europe using maps, and their environmental regions, key physical and human characteristics (rivers, mountains, capitals, landmarks) and major cities

Study, understand, write about, draw and label key similarities and differences of human and physical geography studied between a region of the United Kingdom and another region of Europe, including climate, land use, settlements and key physical features (eg, mountains, coasts and rivers)

Identify, describe and understand key physical features of the continent of Europe, including the UK (eg, coasts, rivers, mountainous regions, planes and semi-desert)

Identify some European cities and settlements

Topic Must Knows
Europe

Key Facts

- There are 50 countries in Europe but only 44 of them have their capital city on the European continent.
- London is the capital city of England.
- Rome is the capital city of Italy.
- Europe can be divided into four major physical regions: Western Uplands, North European Plain, Central Uplands and Alpine Mountains.
- London has an underground transport system which was the first underground rail system in the world.
- England has a temperate climate whereas Italy has a Mediterranean climate.
- Italy is made up of three main landforms: beaches, mountains and valleys.
- England is mainly made up of low hills, plains and some uplands and mountainous areas.
- London and Rome attract a lot of tourists because of the human and physical features.

Must know quiz score:.....

Art – Fashion design Oak Class – Heptonstall School

Key Vocabulary

Fashion designer	A creative professional who develops new and original clothes and accessories
Design brief	An outline of the goal and strategy for a design project
Fit for purpose	Goods that must be capable of being used for the intended purpose
Contemporary	Living or occurring at the same time
Texture	The feel, appearance of a surface
Material	The matter from which a thing is made from

Key Information I will learn…

Fashion designers

Alice Fox
Alice's garments are influenced by old family photos, deckchairs and fairground rides.

Rahul Mishra
Rahul Mishra is the first Indian designer to showcase at the Paris Haute Couture Week

Pyer Moss
Pyer Moss (pronounced 'Pierre') founder Kerby Jean-Raymond grew up in Brooklyn, the son of Haitian immigrants, and has been engaging with the fashion industry since his teenage years

Tatyana Antoun
Tatyana Antoun is a fashion designer from Beirut, Lebanon. Her work is heavily influenced by 80's power dressing and the Club Kids of New York during the 90's.

Key questions

How do designers bring their own identity to their designs?
How can you make 2d designs 3d?
How can you reflect on your fashion designs?

End points

Children can
Use sketchbooks to explore mark making
Make visual notes to capture, consolidate and reflect upon the artists studied.
Explore ideas relating to design (though do not use sketchbooks to design on paper), exploring thoughts about inspiration source, materials, textures, colours, mood, lighting etc
Experiment with colour mixing and pattern, working towards creating paper "fabrics" for fashion design.
Mix colour intuitively to create painted sheets. Use pattern to decorate, working with more paint or ink. Transform these 2d patterned sheets into 3d forms or collaged elements to explore fashion design (see column 6 "making").
Option to work in 3d to devise fashion constructed from patterned papers.
Understand that architects and other artists have responsibilities towards society.
Understand that artists can help shape the world for the better.

DT Unit – Developing a recipe Oak Class – Heptonstall School

D&T - Cooking and nutrition: Developing a recipe

Nutritional value helps us understand how healthy a food is. Nutrition information on food labels can help us make better choices for our bodies by showing us the amounts of nutrients like fibre, protein and sugar.

Cross-contamination is when harmful bacteria from one food get onto another. To prevent it, use different coloured chopping boards for different types of food.

- Red - raw meat
- Blue - raw fish
- Yellow - cooked meat
- Green - salad and fruit
- Brown - root vegetables
- White - bakery and dairy

Spaghetti bolognese is a popular dish that can be adapted in many ways. Adapting and developing the recipe by adding, substituting and removing ingredients can ensure that it suits dietary needs and tastes.


Taste testing

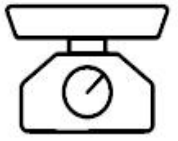

Juicing


Snipping


Grating


Mixing


Cutting


Measuring

Key Questions

Why do we use different coloured chopping boards when preparing food?

What does cross contamination mean?

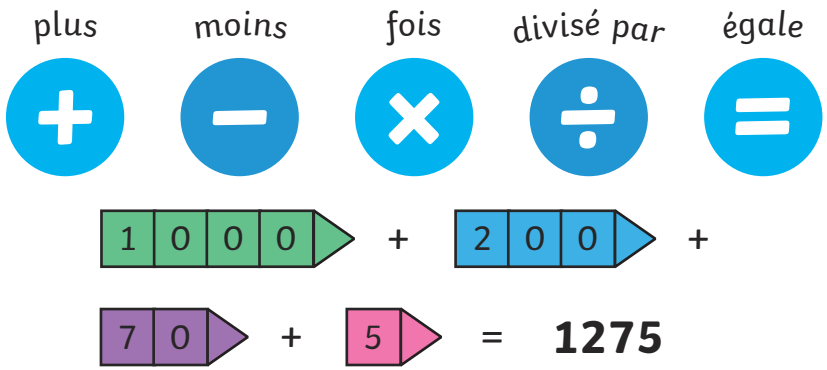
How can you adapt a recipe to make in more nutitional?

End Goals

Adapting a traditional recipe, understanding that the nutritional value of a recipe alters if you remove, substitute or add additional ingredients.
Writing an amended method for a recipe to incorporate the relevant changes to ingredients.
Designing appealing packaging to reflect a recipe.
Researching existing recipes to inform ingredient choices.
Cutting and preparing vegetables safely.
Using equipment safely, including knives, hot pans and hobs.
Knowing how to avoid cross-contamination.
Following a step by step method carefully to make a recipe.
Identifying the nutritional differences between different products and recipes.
Identifying and describing healthy benefits of food groups.
To understand where meat comes from - learning that beef is from cattle and how beef is reared and processed.
To know that recipes can be adapted to suit nutritional needs and dietary requirements.
To know that I can use a nutritional calculator to see how healthy a food option is.
To understand that 'cross-contamination' means bacteria and germs have been passed onto ready-to-eat foods To know that coloured chopping boards can prevent cross-contamination.

Key Vocabulary – Numbers

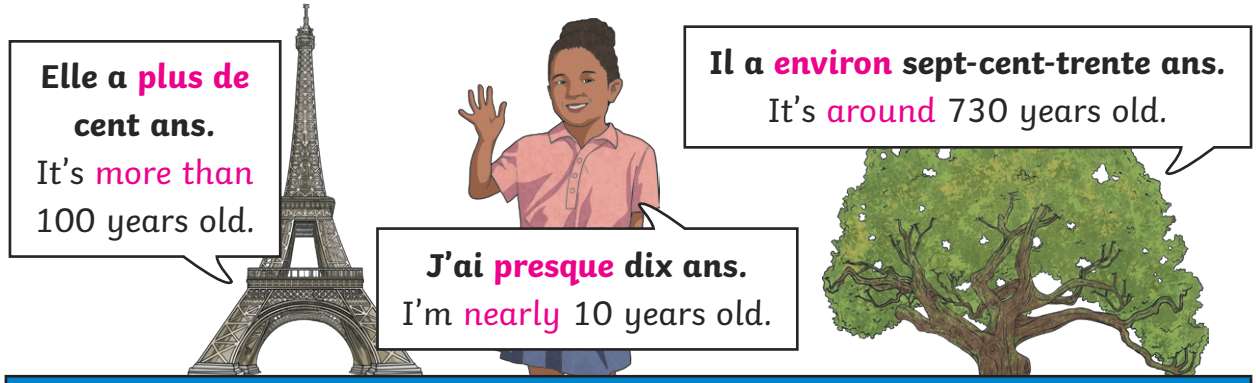
cent 100	**deux-cents** 200	**trois-cents** 300
quatre-cents 400	**cinq-cents** 500	**six-cents** 600
sept-cents 700	**huit-cents** 800	**neuf-cents** 900
mille 1000	**deux-mille** 2000	**trois-mille** 3000
quatre-mille 4000	**cinq-mille** 5000	**six-mille** 6000
sept-mille 7000	**huit-mille** 8000	**neuf-mille** 9000



Mille **plus** deux-cents **plus** soixante-dix **plus** cinq **égale** mille-deux-cent-soixante-quinze.

Key Vocabulary – Verb Avoir (To Have)

j'ai I have	**tu as** you have (informal, singular)	**il/elle a** he/she/it has
nous avons we have	**vous avez** you have (plural/singular formal)	**ils/elles ont** they have (m/f)



Key Knowledge and Grammar

- In French, the verb **avoir** [to have] is used to talk about age. The expression **J'ai** _____ **ans** literally means 'I have _____ years' rather than 'I am _____ years old'.
- The second person singular of you (**tu**) is informal and should only be used to address children, close friends or by an adult to a child. The French use the same word **vous** both for plural you and formal you. It is very impolite for a younger person to address an adult as **tu** unless they are very close family.
- When a noun is plural, we must choose the correct form of the verb. For all-male groups, use **ils**; all-female groups use **elles**; a mixture of male/female or masculine/feminine takes **ils**.

Key Vocabulary – Verb Être (To Be)

Quelle est la date ?
What's the date?

Hier, c'était mardi, treize décembre. Yesterday was Tuesday 13th December.	**Aujourd'hui, c'est mercredi, quatorze décembre.** Today is Wednesday 14th December.	**Demain, ce sera jeudi, quinze décembre.** Tomorrow will be Thursday 15th December.

Key Vocabulary – Verb Être (To Be)

je suis I am	**tu es** you are (informal, singular)	**il/elle est** he/she/it is
nous sommes we are	**vous êtes** you are (plural/singular formal)	**ils/elles sont** they are (m/f)

Voici l'empereur Napoléon. Il est né le quinze août dix-sept-cent-soixante-neuf et il est mort le cinq mai dix-huit-cent-vingt-et-un.

This is the emperor Napoleon. He was born on 15th August 1769 and he died on the 5th May 1821.

Quelle est votre date de naissance ?
What's your date of birth?

Je suis né à Sheffield.
I was born in Sheffield.

Je suis née le 5 mars 2002.
I was born on 5th March 2002.

Où êtes-vous né ?
Where were you born?

Key Knowledge and Grammar

To say when someone was born, use the correct form of the verb **être** (to be) followed by **né**, which is called the past participle. This needs to agree with the gender and number of the subject, e.g. **elle est née en 2005** (she was born in 2005), **ils sont nés à Londres** (they were born in London).

Key Knowledge and Grammar

- The years up to 1099 and 2000+ are said just as numbers (e.g. 721 = **sept-cent-vingt-et-un**), although any round numbers usually include **l'an** before them (e.g. 850 = **l'an huit-cent-cinquante**, 2010 = **l'an deux-mille-dix**).
- The years 1100 to 1999 are often said like old-fashioned English dates (such as seventeen hundred and eighty-nine), as two pairs of 2-digit numbers, with **cent** between, (e.g. 1789 = **dix-sept-cent-quatre-vingt-neuf**, 1340 = **treize-cent-quarante**), but they can also be said just as numbers (e.g. 1730 = **mille-sept-cent-trente**).

Purple Mash Computing Scheme of Work: Knowledge Organisers

Unit: 5.8
Word Processing with Microsoft Word

Key Learning

- To know what a word processing tool is for.
- To add and edit images to a word document.
- To know how to use word wrap with images and text.
- To change the look of text within a document.
- To add features to a document to enhance its look and usability.
- To use tables within MS Word to present information.
- To introduce children to templates.
- To consider page layout including heading and columns.

Key Resources

purple mash

2Connect

Microsoft Word

Key Questions

What is a word processing tool used for?

A word processing tool is used to create, edit and print off a document. This can contain text, images, tables or charts. Documents are a type of file that portray information.

What features can you use to make a document more readable?

You can change the font format to give the document a theme and make it more readable. By changing the paragraph formatting, you can ensure the words are spaced evenly. You can add images and use text wrapping to ensure they are positioned well on the page.

How do you successfully add an image to a document?

If you have an image saved onto your computer, you click on insert – pictures – insert image from this device. You can resize and move the image and ensure it fits well on the page by changing the text wrap setting.

Purple Mash Computing Scheme of Work: Knowledge Organisers

Unit: 5.8
Word Processing with Microsoft Word

Key Vocabulary

Bulleted lists
A list with bullet points, used when the items do not have an order.

Copy and Paste
A way of transferring words or images from one location to another.

Cursor
The flashing vertical line that shows your place in a Word document.

Hyperlink
A clickable link from a document to another location, often a webpage.

Formatting
Changing the look of a document by selecting fonts, colours and how the text is spaced or aligned.

Word Processing tool
A program which allows you to write, edit and print different documents.

Caps Lock
A button on the computer keyboard which changes the letters to upper case (capital letters).

Copyright
When an image, logo or idea has a legal right to not be copied or used without the owner's permission.

Document
A type of file which shows written information and/or images and sometimes charts and tables.

Merge cells
A tool you can use when making a table to join cells which are next to each other in columns or rows.

Text wrapping
A feature which helps you place and position an image neatly on a page or within a paragraph of text.

Captions
Text under an image to provide more information about what is shown.

Creative Commons
Images where the copyright holder, often the creator, has given permission for the image to be used as long as the creator is attributed.

Font
A set of type which shows words and numbers in a particular style and size.

Page Orientation
The direction that the rectangular page is viewed. Portrait means longer side going upwards, Landscape means the longer side going sideways.

Readability
How easy and pleasant it is to read and understand a document.

Word Art
A way to treat text as a graphic so that you can add special effects to text.

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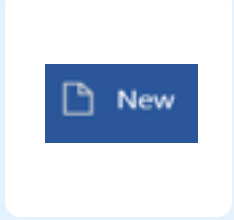
Purple Mash Computing Scheme of Work: Knowledge Organisers

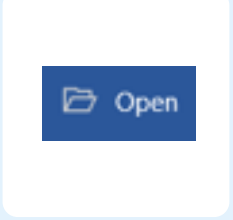
Unit: 5.8

Word Processing with Microsoft Word

Key Images



Open a new document



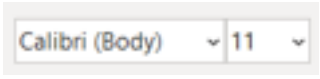
Open an existing document

Save your work

Undo key

Insert a table

Text wrapping

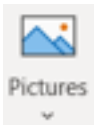


Font Category

Design tab where you can change the style of the document

Insert tab where you can add an object such as a picture or table

Home tab where many editing tools are found



Insert a picture

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Purple Mash Computing Scheme of Work: Knowledge Organisers

Unit: 6.8
Binary

Key Learning

- To examine how whole numbers are used as the basis for representing all types of data in digital systems.
- To recognise that digital systems represent all types of data using number codes that ultimately are patterns of 1s and 0s (called binary digits, which is why they are called digital systems).
- To understand that binary represents numbers using 1s and 0s and these represent the on and off electrical states respectively in hardware and robotics.

Key Resources

purple mash

2Dos


2Connect


2Question


Free code gorilla

Key Vocabulary

Base 2
A number system in which there are two separate integers that can be used to make all numbers. This is also called the **binary** system.

Bit
A single 0 or 1 is called a bit. This word comes from '**B**inary Dig**it**'.

Base 10
A number system in which there are ten separate integers that can be used to make all numbers. This is also called the **decimal** and the **denary** system.

Digit
A single integer used to show a number.

Words used to describe numbers of bits and the computer memory space used:

Nibble - 4 bits

Byte - 8 bits.

Kilobyte (KB) - 1024 bytes

Megabyte (MB) - 1024 KB

Gigabyte (GB) - 1024 MB

Terabyte (TB) - 1024 GB

Integer
Any whole number. This includes negative and positive numbers but not fractions or decimals.

Transistor
A transistor is a tiny switch that is activated by the electronic signals it receives.

Switch
An act of changing to or adopting one thing in place of another.

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Unit: 6.8
Binary

Key Vocabulary

Machine code
The code that signals to a computer which transistors should be on or off. Machine code is written in binary.

Megabyte (MB)
1024 KB.

Nibble
4 bits.

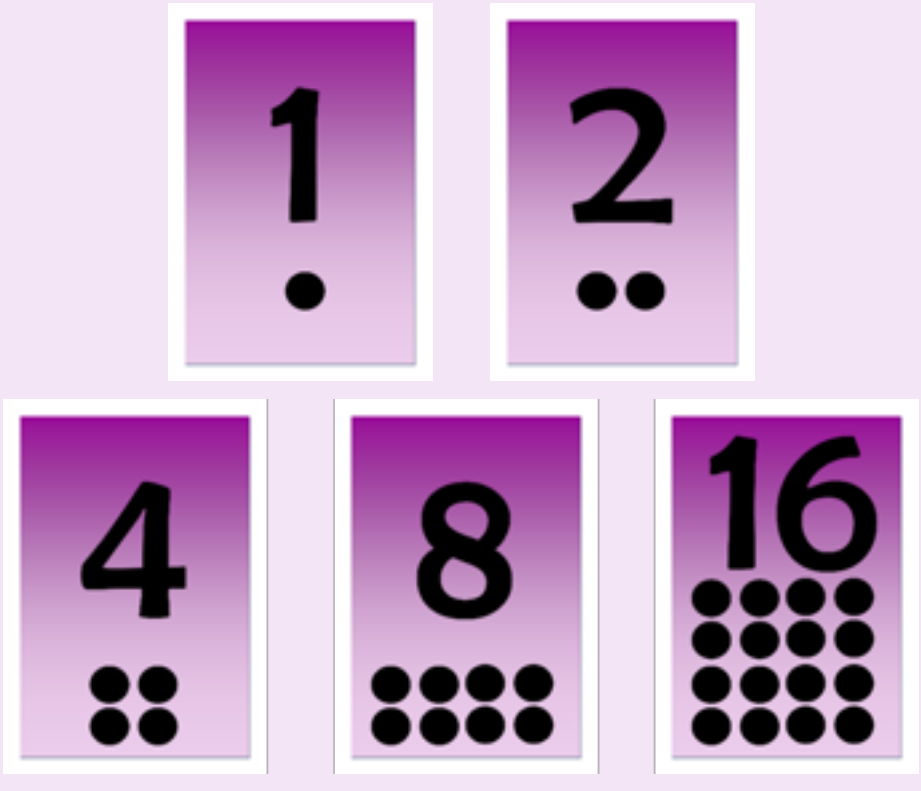
Switch
A component that can be one of two states at any time: on or off.

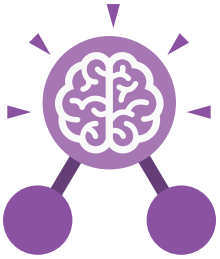
Terabyte (TB)
1024 GB

Transistor
A tiny switch that is activated by the electronic signals it receives.

Variable
A variable is used in programming to keep track of things that can change while a program is running. A variable must have a name. The value of the variable is the information to store.

Key Images





Unit: 6.8
Binary

Key Questions

How does binary relate to the programs that you use or create?

In a computer, everything is translated into binary stored by on and off switches that pass electronic signals that the computer interprets. It can then pass the correct signals to the components of the computer such as the sound card to make the requested sound. Or graphics card to make images appear on the screen.

How does binary relate to computer memory?

A single 0 or 1 is called a bit. The word comes from Binary Digit. The bigger the program, the more bits are used so more memory space is taken up. For example, 1 byte is 8 bits, 1 megabyte (Mb) or 8,388,608 bits, 1 gigabyte (GB) is 8,589,934,592 bits!

How would you write the numbers 0 to 10 in binary?

0, 1, 10, 11, 100,101,110,111,1000, 1001, 1010.

Cricket is played on a cricket pitch between 2 teams of 11 players. One team starts as the 'batting' team and the other team start as the 'fielding' team. The aim is to score the most 'runs'. A run is scored when a batter hits the ball and runs to the opposite end of the pitch.

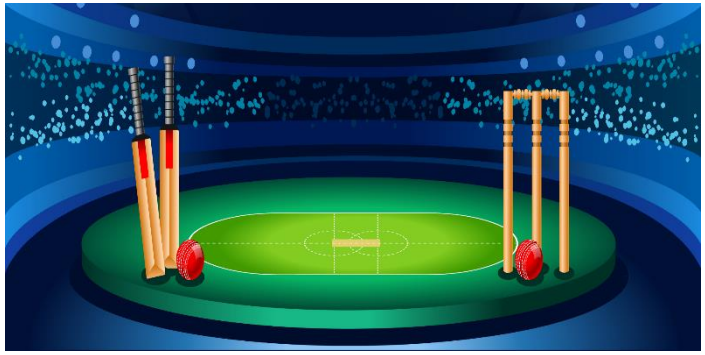
Ben Stokes

Club: Durham

National Team: England (captain)

Position: All-rounder

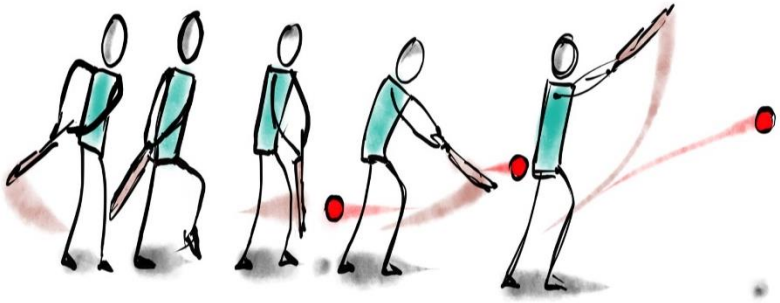
Fact: An all-rounder is a player who can bat, bowl and field.

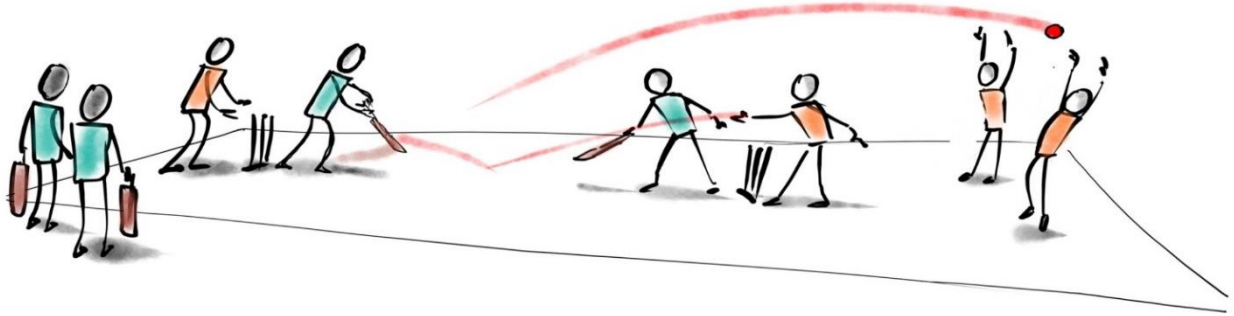


wicket keeper **wickets** **runs**

overarm **underarm** **bowling**

batting **striking** **teamwork**





STEPS TO SUCCESS

These are the skills I need to achieve success in UKS2 Cricket:

To throw and bowl in different ways.

To play shots into different areas of the field.

To retrieve, catch, intercept, and stop a ball when fielding.

To use skills and tactics to outwit opponents when fielding.

To use skills and tactics to outwit opponents when batting.

To participate in competitive games.

RE Unit 5.4 What do Christians believe about the old & new covenants?
Oak Class – Heptonstall School

Key Vocabulary

Old testament	The 1st part of the Christian Bible
New testament	The 2nd part of the Christian Bible
Gospel	Means truth. It's also one of the 1st 4 books of the New testament
Trinity	Means group of three – god is 1 God but 3 persons; father, son and the holy spirit
Holy spirit	Part of the trinity
Covenant	A promise that creates the relationship between God and his people
Messiah	A leader seen to be the saviour of a group
Incarnation	A person who represents a God in the flesh
Salvation	Being released from sin and its consequences

Key Information I will learn…

Jesus 'I am …' statements

- The bread of life
- The light of the world
- The door the sheep
- The resurrection and the life
- The way, the truth and the life
- The vine

The ten commandments

1. Always put God first.
2. Do not worship any other Gods.
3. Use God's name with respect.
4. Respect God's holy day.
5. Respect your parents.
6. Do not hurt other people.
7. Be faithful in marriage.
8. Do not steal.
9. Do not lie.
10. Do not want what others have

Religious figures

Abraham – father of Judaism, Christianity & Islam.

Moses – led the Jews out of slavery in Egypt and took them to the Holy land.

King David – the young shepherd who killed the giant, Goliath.

Jesus – believed to be the son of God

Muhammad – an Arab leader, social and political leader who founded Islam

End Goals

Children will

- Explain the term covenant and reflect on the covenant Abraham had with God
- Suggest reasons why Abraham is important to Christians
- Reflect on the covenant between Abraham and God
- Suggest reasons why Abraham is important to Christians, Jews and Muslims
- Explain the term Abrahamic faith
- Make connections between Moses and Abraham
- Explain Moses' covenant with God
- Discuss who Moses was and reflect on why he was important to Jews and Christians
- Suggest reasons why the Ten Commandments are important for Jews and Christians
- Explain who King David was and reflect on why he was important to Christians
- Make connections between David and Abraham and David and Jesus
- Reflect on David's covenant with God
- Reflect on the meaning of 'incarnation'
- Explain the terms 'Messiah' and 'Saviour'
- Investigate evidence from Bible extracts that support Christian beliefs about Jesus
- Reflect on the different titles attributed to Jesus

Abraham

Abraham is important to Christians, Jews and Muslims, which is why all these religions are called Abrahamic Faiths.

- He is important to Christians because he sacrificed many things for God.
- He is important to Jewish people as he is believed to be the first Hebrew and the founder of Judaism.
- He is important to Muslims as he appears as a prophet in the Quran and Muslims mention him when they pray

Key questions

- What does the word covenant mean?
- Why is Abraham important to Christians?
- What do we know about the prophets from the old testament?
- What do Jews and Muslims believe leaders from writings in the Torah and Quran?
- Why is Moses important to Christians and Jews?