ORMISTON SWB ACADEMY

Knowledge Organiser

Autumn Term 2024 – Year 7

Name: _____

Form: _____

Please remember to bring this into school everyday

Regular retrieval throughout a scheme of learning (daily, weekly and monthly) has been proven to reduce the rate of forgetting, supporting you to **retain more in long term memory**- making assessments/ exams way easier! The challenge for you as a student is to **make sure you use your knowledge organiser for each subject properly** to help you to know more and remember more over time. **We've created this walk through to support you** in using your knowledge organiser- for more support speak to your subject teachers

Using your Knowledge Organiser

You will use your knowledge organisers during lessons to engage and support with securing essential knowledge.
We expect you to use your knowledge organisers at home to support with independent study. Below you will find a step-by-step guide of 4 different revision strategies you can use at home. QR codes can be found at the back of this booklet which will link you to videos of these strategies in action.

Strategy 1- Look, cover, write, check – A really simple but effective way to use your knowledge organiser. Focus on a specific area of your knowledge organiser

1	2	3	4	5
Look	**Cover**	**Write**	**Check**	**Repeat**
Start with a **small section of knowledge** that you want to remember e.g *Henry VIII's wives in History.* Read through this section of the knowledge organiser (a couple of times if it helps)	Now **cover up this section** of your knowledge organiser with a post it note or scrap paper.	**Self quiz- what can you remember** and rewrite? Make sure you do this without looking back at your knowledge organiser.	**Remove the post it and check for accuracy**- did you get the key terminology? Was it spelt correctly? Was the order correct? If you drew a diagram, how much of this did you get correct? Most importantly- what did you miss out? Make your corrections in green pen.	After a short break away from your knowledge organiser repeat the look, cover, write, check **until you can recall all of the facts correctly without prompts.** This process can be used for any new knowledge that you want to acquire. It is good idea to do this on a regular basis, once a week.

Strategy 2-Self-Quizzing – You might try this after a few weeks of using your knowledge organiser. Get someone (or yourself) to set you 10 questions using your knowledge orgainser. These could be spellings, key words, equations etc to see how much you can remember! Record your score and see if you can beat your personal best each half term

1	2	3	4	5
Select topic	**Prepare the quiz**	**Answer it**	**Self check**	**Repeat**
Decide **which area you want to be quizzed** on (this might build up over time)	**Create 9 questions on that topic** or, ask somebody else to prepare 10 random questions for you.	**Set a time limit** (depending on the number of questions) and answer the questions without looking at your KO.	Now look at your KO to **self-check**- make a note of your score. Celebrate your successes and make a note of anything you missed or got incorrect.	**Return to this section** in 2/3 weeks- see if you can improve your score! Re-do those questions that you missed or got incorrect.

Contents Page

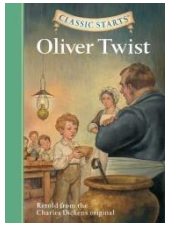
Year 7 – English – Oliver Twist

1813

1834

1837 - 1901

1839



1843

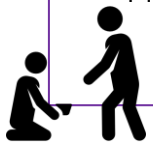
John Dickens

Dickens' father was imprisoned in the Debtors' Prison under the Insolvent Debtors Act of 1813

A young Charles was sent to work in a candle factory and felt shame

Before 1834, if people were poor, they went to their local church for charity and help.

After the 1834 Poor Law was passed, if you were poor you had to go and work in the workhouse (b) for your food and shelter. Some likened it to being in prison.



Oliver is naïve:
"Please sir, can I have some more?"

Oliver is vulnerable:
"Get up, or I'll strew (I) your brains upon the grass."

Bill Sikes is brutal :
"…seized a heavy club and struck her down"

Thesis Statement	Topic Sentence	Embed Quotations
Initially [text] is about _____, but it could also be about_____ . Although [the text] appears to be about _____, it is also referring to _____. Because [first idea], [second idea.] Despite [character + adjective], they can also be seen as [character + adjective.]	Each idea in the thesis will become the main point of a topic sentence. Topic sentence…. - Answers the question. - Is accurate. - Focuses on one thing.	The writer refers to _____ as '_____' and '_____'. When the text states, '_____' it reminds the reader of _____. [Character] says, "_____ ... _____," conveying _____. [Writer] repeats, "_____," because _____.

Key Word	Definition
Context	The setting in which the story is written in.
Chronological	Arranged in the order of time.
Workhouse	A building where poor people were sent to work for their basic needs.
Naive	Someone who doesn't have experience of how complicated life can be and therefore trust people too much.
Moral	A lesson that the author intended to teach the reader.
Vulnerable	When someone or something is in a situation in which they could be harmed.
Corrupt	Using your power in a dishonest or illegal way in order to make life better for yourself.
Construct	Something that has been made, created or built.
Villain	a bad person in a story, who harms other people or breaks the law to get what they want.
Manipulate	control or influence (a person or situation) smartly
Brutal	Something or someone who is very cruel and violent.

Year 7 – Maths – Unit NP1 – Place Value & Number Line

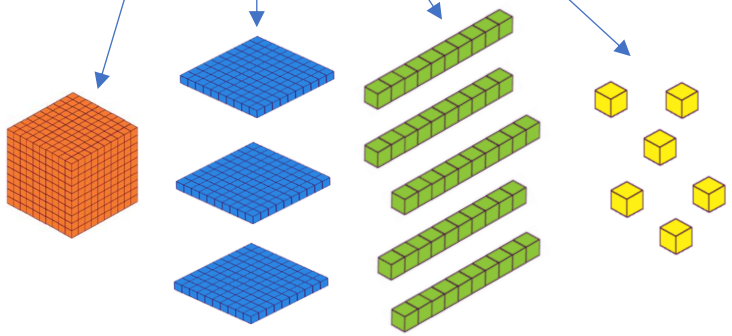
Place value

This is the number system we use every day.

Base 10 **place value** has a relationship of × 10 between columns, moving from right to left.

We can use a place value chart to help us read and write numbers in base 10.

Th Thousands	H Hundreds	T Tens	U Units	•	$\frac{1}{10}$ Tenths	$\frac{1}{100}$ Hundredths
1	3	5	6			



100,000	10,000	1,000	100	10	1	•	0.1	0.01	0.001	0.000 1	0.000 01
Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones	•	tenths	hundredths	thousandths	ten-thousandths	hundred-thousandths
3	5	4	9	4	3	•					

This number is written as
three hundred and fifty-four thousand, nine hundred and forty-three.

Reading and Writing Numbers

0 – Zero	**10** – Ten	**20** – Twenty
1 – One	**11** – Eleven	**30** – Thirty
2 – Two	**12** – Twelve	**40** – Fourty
3 – Three	**13** – Thirteen	**50** – Fifty
4 – Four	**14** – Fourteen	**60** – Sixty
5 – Five	**15** – Fifteen	**70** – Seventy
6 – Six	**16** – Sixteen	**80** – Eighty
7 – Seven	**17** – Seventeen	**90** – Ninety
8 – Eight	**18** – Eighteen	
9 – Nine	**19** – Nineteen	

Midpoints and medians

The midpoint of two numbers is exactly halfway between them. To find it quickly, we add together the endpoints and the halve the answer.

When we are given a list of numbers, in order, the middle number in the list is called the median.
If our list contains an even number of numbers, then there will be two numbers in the middle. The median is the midpoint of these two (which isn't actually in the list!)

Positive and negative integers

We can still draw vectors to represent negative numbers.

This is the number 4. Its sign is positive.
This is the number -4 ("negative 4"). Its sign is negative.
What is the same about them? What is different about them?

My mathematical journey

What do I need to remember from before?	What will I learn about in this unit?	Where does this lead?
Place value of numbers up to 10 000 000 (KS2)	Writing integers and decimals in expanded form and words	Addition & subtraction (NP2)
Rounding numbers to the nearest 10, 100, 1000, 10 000 and 100 000 (KS2)	Ordering numbers	Multiplication & division (NP3)
Rounding decimals to 1, 2 or 3 decimal places (KS2)	Rounding to decimal places and to significant figures	Percentages, fractions & decimals (NP8)
Ordering negative numbers on a number line (KS2)	Converting metric units	Estimation (NP9)
Multiplying and dividing numbers by 10, 100 and 1000	Finding the midpoint of two numbers	Analysing discrete data (SP1)
	Finding the median of discrete data	Using units of measure (all GM units and many SP units)
		Standard form (NP12)
		Indices & surds (NP15)

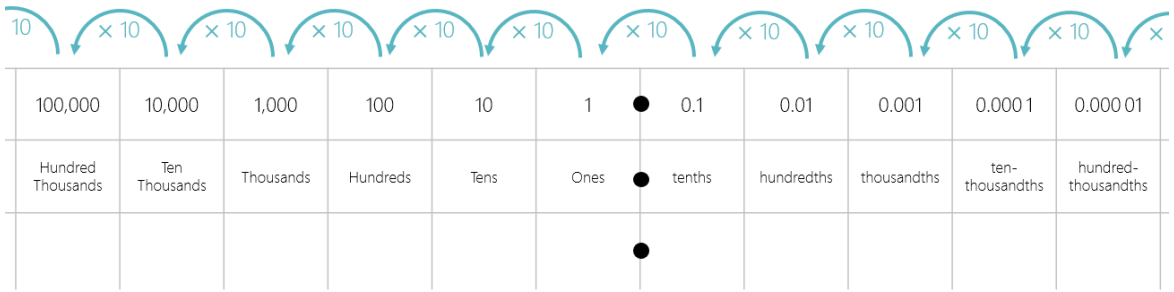
Key words & symbols

Word	Explanation
number	a value or a quantity used to count or measure
digit	a symbol we use to make numbers, such as "0" or "9"
numeral	a number written with digits, such as "213" or "0.5"
integer	a "whole" number (with no decimal part), such as 15 or 510, but not 2.5
base 10	our numeral system, where each column is worth a different power of 10
decimal	means "base 10" but more often used for non-integers written like this: 2.5 or 38.7
less than	numbers further left on the number line
greater than	numbers further right on the number line
ascending	going up
descending	going down

Symbol	How to read it
<	is less than
>	is greater than
≤	is less than or equal to
≥	is greater than or equal to
=	is equal to
≠	is not equal to
≈	is approximately equal to

Year 7 – Maths – Unit NP1 – Place Value & Number Line

Multiplying and dividing by 10, 100, 1000, etc



Every column is ten times greater than the one before it.

This means when we × 10, all digits move one place to the left.

If we × 100, they move two places left, × 1000 moves three places left, etc.

Common metric units

Some common ones. (modern)

Quantity to measure	Metric units
length	millimetre (mm) centimetre (cm) metre (m) kilometre (km)
mass	gram (g) kilogram (kg)
capacity	millilitre (ml) litre (l)

mm	cm	m
1000	100	1

m	km
1000	1

s	min	hrs
3600	60	1

mg	g	Kg
1000	100	1

ml	c l	l
1000	100	1

hrs	day
24	1

The metric units are part of the **système international (SI)** of units.

Convert:

5 m to cm

5m = 500cm

3500 g to kg

3500 g = 3.5 kg

900 ml to *l*

$900\ ml = 0.9l$

20 km to m

$20\ km = 20\ 000\ m$

Rounding: nearest 10, 100, 1000, etc

What is 36 458 to the nearest 1000?

36 458 → 37 000 / 36 000

$36\ 458 \approx 36\ 000$

What is 36 458 to the nearest 100?

36 458 → 36 500 / 36 400

$36\ 458 \approx 36\ 500$

Rounding: to decimal places

What is 0.77 to one decimal place?

0.77 → 0.8 / 0.7

$0.77 \approx 0.8$

What is 0.638 to two decimal places?

0.638 → 0.64 / 0.63

$0.638 \approx 0.64$

Rounding: to significant figures

Significant figures are digits in a number.

They start at the first non-zero digit.

e.g. Round 235 to 1 s.f.

The 1st s.f. is in the hundreds column

This means we round to the nearest hundred

235 ≈ 200 (to 1 s.f.)

e.g. Round 235 to 2 s.f.

The 2nd s.f. is in the tens column

This means we round to the nearest ten

235 ≈ 240 (to 2 s.f.)

significant figures start here

267

3060

0.0412

0.0035601

e.g. Round 0.408 to 1 s.f.

The 1st s.f. is in the tenths column

This means we round to the nearest tenth (1 d.p.)

0.408 ≈ 0.4 (to 1 s.f.)

Year 7 – Maths – Unit NP2 – Addition & Subtraction

$5 + 8 = 13$

summand + summand = sum

summand, summand, sum

$8 - 5 = 3$

minuend – subtrahend = difference

minuend, subtrahend, difference

Additive Inverses

The numbers in a zero pair are called additive inverses of each other.

$5 + (-5) = 0$

Additive Inverse of 5 is -5

Column method for addition and subtraction

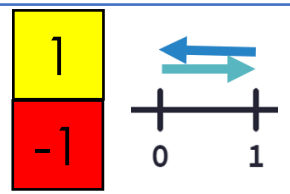
$$\begin{array}{r} 429 \\ \underline{283} \; - \end{array}$$

Make sure you line up digits using their place values.

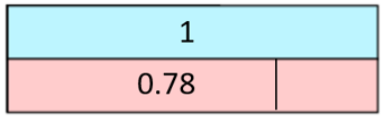
$$\begin{array}{r} 4.29 \\ \underline{0.283} \; + \end{array}$$

Zero Pairs

1 and -1 are called a zero pair because their sum is 0.



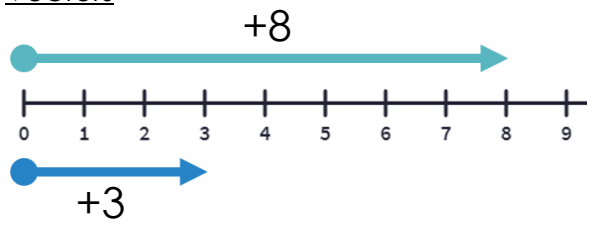
Number Bonds



Knowledge of number bonds helps with quick addition and subtraction.

Make all the digits after the decimal point up to 9, but make the last up to 10.

Vectors



Vectors represent the magnitude (size) of a number on a number line.

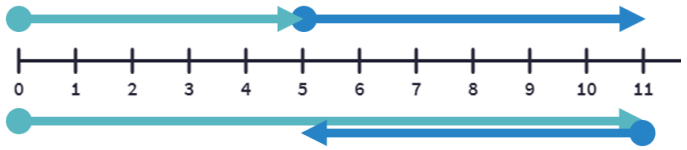
When we add or subtract numbers along a number line, we place then end to end.

Inverse Operations

Inverse operations are the opposite of one another, so they undo one another.

$5 + 6 = 11$

$11 - 6 = 5$



My mathematical journey

What do I need to remember from before?

- Place value (NP1)
- Vectors on a number line (NP1)
- Adding and subtracting whole numbers with pen and paper and mentally (KS2)
- Using rounding to check answers to calculations (KS2)

What will I learn about in this unit?

- Addition and subtraction with integers and decimals
- Commutativity & mental methods with integers and decimals
- Number bonds, complements, working with decimals
- Vectors, inverse operations, equality and zero pairs
- Perimeter
- Angle facts
- Mean and range

Where does this lead?

- Order of operations (NP5)
- Directed numbers (NP6)
- Simplifying expressions (A1)
- Adding & subtracting fractions (NP7)
- Solving linear equations (A2)
- Adding & subtracting numbers in standard form (NP12)
- Adding and subtracting surds (NP15)

Keyword/Skill	Definition/Tips
Integer	Whole number including 0 and negative numbers. No fractions or decimals.
Place Value	Hundreds, Tens, Ones, Tenths, Hundredths…
Negative numbers	Number less than zero. Can be integer, decimal or fraction, e.g. -2, -4.7, $-\frac{1}{2}$
Positive numbers	Numbers bigger than zero. Can be integer, decimal or fraction, e.g. 5, 3.6, $\frac{2}{5}$
Summand	The summands are the numbers being added
Sum	The answer when summands are added together
Zero pair	Two values with equal magnitude (size) but opposite signs, so they give a sum of 0, e.g. 2 + - 2 = 0
Complement	The complement of a decimal is the number you add to get to 1.
Difference	Answer after subtraction of two values
Column Addition	Standard written method of addition
Minuend	When we subtract, the starting/first number is the minuend
Subtrahend	When we subtract, the amount to be subtracted is the subtrahend

Year 7 – Maths – Unit NP2 – Addition & Subtraction

Commutativity

An operation is commutative if it can be applied to two numbers in **any order**

Examples

3 x 4 = 12 is the same as 4 x 3 = 12

2 + 5 = 7 is the same as 5 + 2 = 7

Addition and multiplication are commutative

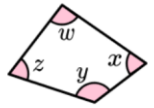
Non - Examples

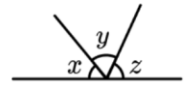
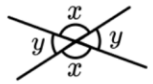
15 ÷ 5 is not the same as 5 ÷ 15

10 - 3 is not the same as 3 – 10

Division and subtraction are not commutative

Basic Angle Facts

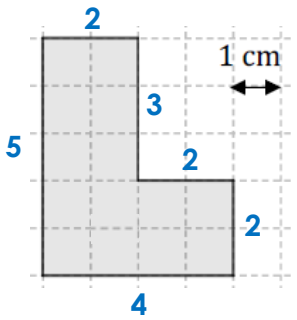
Angle Rule	Description	Diagram
Angles in a triangle	The sum of angles in a triangle is 180°. $x + y + z = 180$	
Angles in a quadrilateral	The sum of angles in a quadrilateral is 360°. $w + x + y + z = 360$	

Angle Rule	Description	Diagram
Angles on a straight line	The sum of angles on a straight line is 180°. $x + y + z = 180$	
Angles at a point	The sum of angles at a point is 360°. $w + x + y + z = 360$	
Vertically opposite angles	Vertically opposite angles are equal in size.	

Perimeter

Perimeter is the **distance** all the way around the **edge** of a shape.

By **counting edges** of **squares** along the **sides** of a shape on a grid, we can work out the perimeter of that shape.



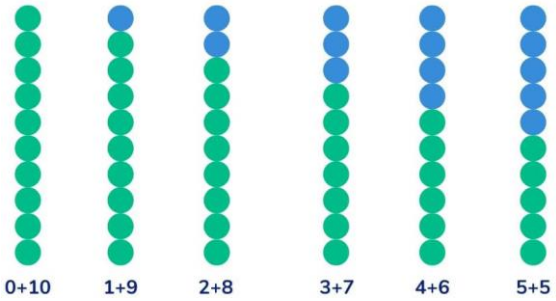
The perimeter of this L shape is
2 + 3 + 2 + 2 + 4 + 5 = 18 cm

Number Bonds

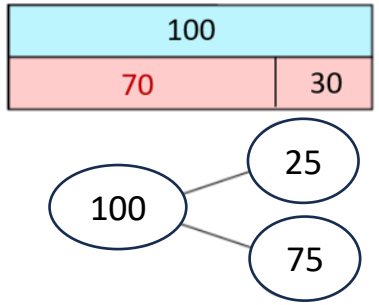
Number bonds are pairs of numbers that can be added together to make another number, like 10, 100, 1000 etc.

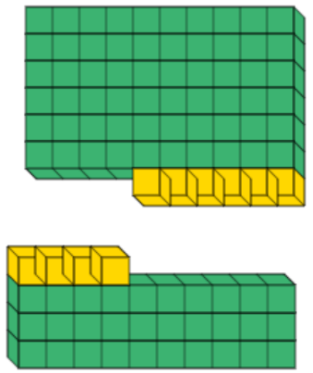
We can also have pairs of decimal numbers that add to make 1. This is called the **complement of a decimal.**

Number Bonds to 10

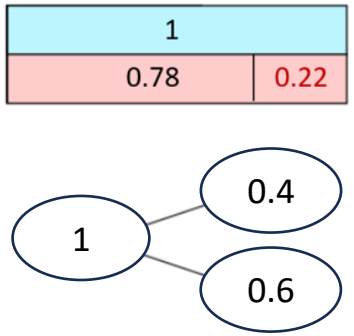


Number Bonds to 100





Complement of a Decimal/Number Bonds to 1



Keyword/Skill	Definition/Tips
Commutative	An operation that, in any order, gives the same result, e.g. 4 x 2 = 8 and 2 x 4 = 8, 5 + 2 = 7 and 2 + 5 = 7
Perimeter	The distance around a shape.
Number bonds	Pairs of numbers that add to make another given number.
Angle	The measure of a turn
Complement of a decimal	The decimal number you would add to another decimal number to make 1.

Year 7 – Maths – Unit NP3 – Multiplying & Dividing

Commutativity

An operation is commutative if it can be applied to two numbers in **any order**

Example

$3 \times 4 = 12$ is the same as $4 \times 3 = 12$

$2 + 5 = 7$ is the same as $5 + 2 = 7$

Addition and multiplication are commutative

Non - Example

$15 \div 5$ is not the same as $5 \div 15$

$10 - 3$ is not the same as $3 - 10$

Division and subtraction are not commutative

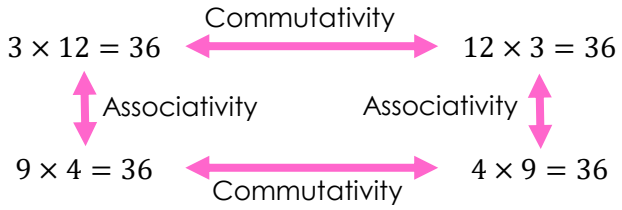
Associativity

Multiplication is associative. This means you can 'split up' parts of it and join the numbers in different ways. We call it decomposing and recomposing.

$3 \times 12 = 36$

$3 \times 3 \times 4 = 36$

$9 \times 4 = 36$



This shows us that 3×12 and 9×4 are the same calculation.

My mathematical journey

What do I need to remember from before?	What will I learn about in this unit?	Where does this lead?
Place value (NP1)	Multiplication and division with integers and decimals	Powers, roots and primes (NP4)
Vectors on a number line (NP1)	Area models for multiplication	Order of operations (NP5)
Multiplying and dividing on paper and mentally (KS2)	Multiples and factors	Directed numbers (NP6)
Using rounding to check answers to calculations (KS2)	Multiplying to stretch	Fractions (NP7)
	Area and volume	Percentages (NP8)
		Proportional reasoning (NP10)

Keyword/Skill	Definition/Tips
Integer	Whole number including 0 and negative numbers. No fractions or decimals.
Associativity	Getting the same result regardless of the grouping. E.g. 2 x 3 x 4 = 24 4 x 3 x 2 = 24
Commutative	An operation that, in any order, gives the same result, e.g. 4x2=8 and 2x4=8, 5+2=7 and 2+5=7
Product	Multiply

Multiplying – Grid Method

When multiplying two integers, a grid method is way to multiply which helps limit our mistakes.

Example:

Make sure you align your place value columns correctly!

35×748

×	700	40	8
30	21000	1200	240
5	3500	200	40

21000
3500
1200
240
200
40
26180

$35 \times 748 = 26180$

Multiplying Decimals

When we multiply decimals, we can first make an easier, related calculation without decimals, then reverse our changes to get the final answer.

Example:

0.5×0.6

$\times 10$ $\times 10$

$5 \times 6 = 30$

$\div 100$

$0.5 \times 0.6 = 0.3$

As we have multiplied by 10 twice, we need to divide by 100 (same as dividing by 10 twice).

You will sometimes need to use grid method

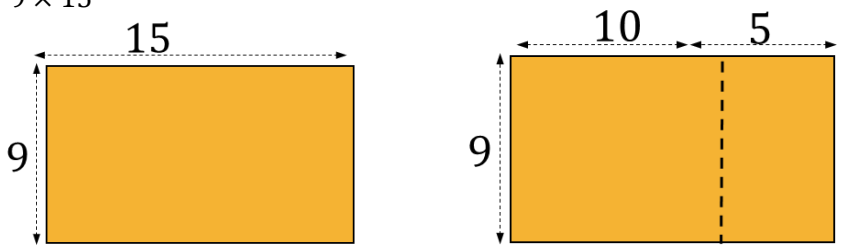
Year 7 – Maths – Unit NP3 – Multiplying & Dividing

Distributive Property

A way of splitting up a calculation to make it more manageable

Example:

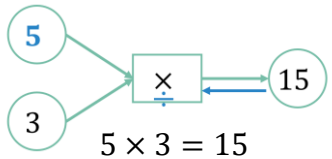
9×15



$$9 \times (10 + 5) = 9 \times 10 + 9 \times 5$$
$$= 90 + 45$$
$$= 135$$

Fact Families

From this diagram, we can see a family of facts.



$5 \times 3 = 15$

$3 \times 5 = 15$

$15 \div 3 = 5$

$15 \div 5 = 3$

Multiples & Lowest Common Multiple

Multiples can be thought of as numbers in a times table.

e.g. The multiples of 5 are the numbers in the 5 times table.

Multiples of 5: 5, 10, 15, 20, 25, 30, 35, …

Numbers have common multiples; these are multiples they share.

Multiples of 5: 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, …

Multiples of 4: 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56, 60, 64, …

The common multiples are: 20, 40, 60, …

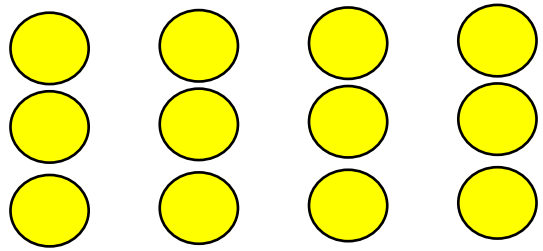
Questions usually ask what the lowest common multiple is.

Example:
What is the lowest common multiple of 12 and 16.
Multiples of 12: 12, 24, 36, 48, 60, 72, 84, 96, …
Multiples of 16: 16, 32, 48, 64, 80, 96, 112, 128, …
The lowest common multiple is 48. Make sure you check the list carefully.
96 is a common multiple but not the **lowest** common multiple.

Repeated Addition & Scaling

Multiplication can be represented in two ways, repeated addition & scaling

Repeated Addition

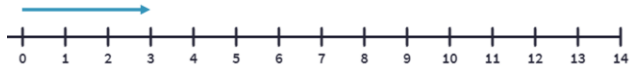


$3 + 3 + 3 + 3$

$= 4 \times 3 = 12$

There are 4 lots of 3

Scaling



We want 4 lots of 3

$= 4 \times 3 = 12$

There are 4 lots of 3

Year 7 – Maths – Unit NP3 – Multiplying & Dividing

Division

We are going to focus on using short division. The best method to use is bus stop.

Example:

$$471 \div 3 = \frac{471}{3}$$

$$3 \overline{)\,4\;7\;1}$$

How many 3's go into 4?

$$3 \overline{)\,4^{1}7\;1} \quad 1$$

4 remainder 1

How many 3's go into 17?

$$3 \overline{)\,4^{1}7^{2}1} \quad 1\;5$$

5 remainder 2

You don't need to write separate bus stops. It would all go in the same one like this.

How many 3's go into 17?

$$3 \overline{)\,4^{1}7^{2}1} \quad 1\;5\;7$$

7

$$471 \div 3 = 157$$

Dividing Decimals

When the divisor is integer, we can use our knowledge of multiplication or short division.

$$8.36 \div 4 =$$

$$4 \overline{)\,8.3^{3}6} \quad 2.0\;9$$

Make sure you keep the decimal in the correct place!

When the divisor is not an integer, we first make an easier calculation that has the same answer.

$$12 \div 0.3 = \frac{12}{0.3}$$

$$= \frac{12 \times 10}{0.3 \times 10}$$

$$= \frac{120}{3}$$

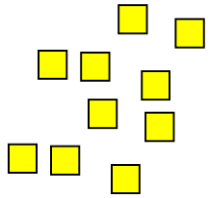
$$= 40$$

As we haven't changed the value of the fraction the answers are equivalent!

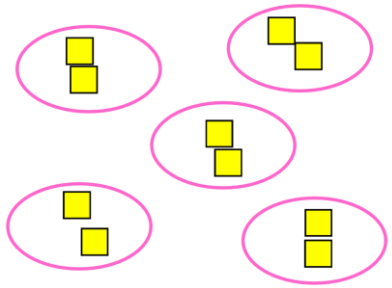
Representations of Division

There are three ways we can think of representing division. These are sharing, grouping & repeated subtraction. We will see the representations for $10 \div 5$

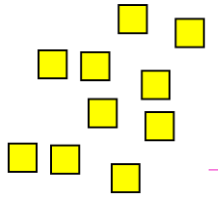
Sharing - $10 \div 5$



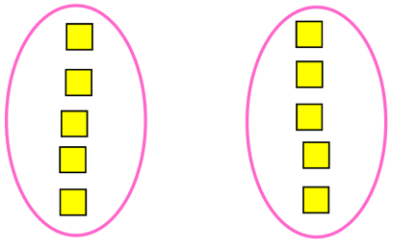
Think of this as 10 shared into 5 parts.



Grouping - $10 \div 5$



Think of this as the number 10 split into groups of size 5. The answer is the number of groups split into 5.



Scaling

We can instead think of this as the number of times we must subtract 5 from 10 to get to 0. The answer (2) is the number of times we subtract 5 to get to 0.

Year 7 – Maths – Unit NP3 – Multiplying & Dividing

Factors & Highest Common Factor

Factors can be thought of as the integers which multiply to make another.
e.g. 7 and 11 are factors of 77, because 7 × 11 = 77.
When writing the list of factors, make sure to be logical and list pairs until you have them all.
Example:
List all the factors of 24:
1, 24
2, 12
3, 8
4, 6
We can write them as an ordered list to check we have them all:
1, 2, 3, 4, 6, 8, 12, 24

Any numbers that are factors of two or more numbers are said to be **common factors** of those numbers.

Factors of 12:

1 x 12
2 x 6
3 x 4

} All the ways of making a product of 12.

1, 2, 3, 4, 6, and 12 are all the factors of 12.

Factors of 20:

1 x 20
2 x 10
4 x 5

} All the ways of making a product of 20.

1, 2, 4, 5, and 20 are all the factors of 12.

Both lists of factors here have 1, 2 and 4 included. Therefore, 1, 2 and 4 are common factors of 12 and 20.
You are usually asked what the highest common factor is. In this case the highest common factor of 12 and 20 is 4.
Make sure you check your list to get the highest common factor.

Factors & Highest Common Factor

Sometimes we solve problems by multiplying or dividing. We need to look for clues that tell us to multiply or divide.

If we are looking for "lots of" something, that often means *multiply*.
If we are looking to share something out, that often means *divide*.

In a train there are eight coaches each with 44 seats. How many seats are there on the train?

Here this would be a multiplication problem as there are 8 coaches with 44 seats which would be 8 'lots of' 44.

45 sweets are shared equally between 9 children. How many do they each get?

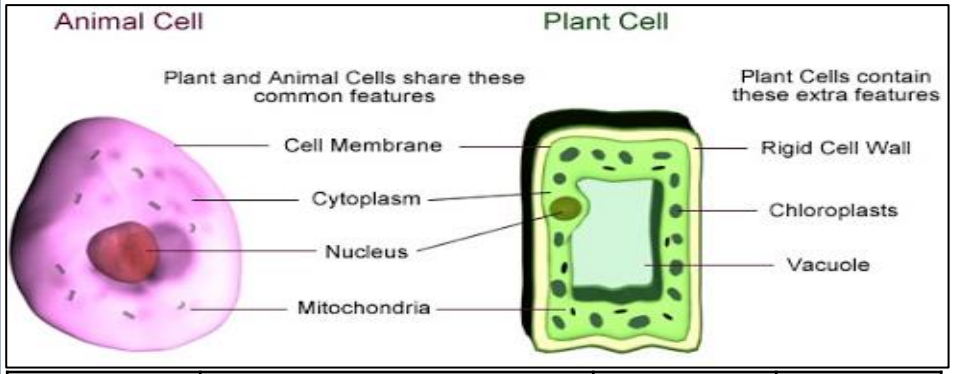
Here this would be a division problem as you are 'sharing' things out into groups.

Other Topics/Units this could appear in:

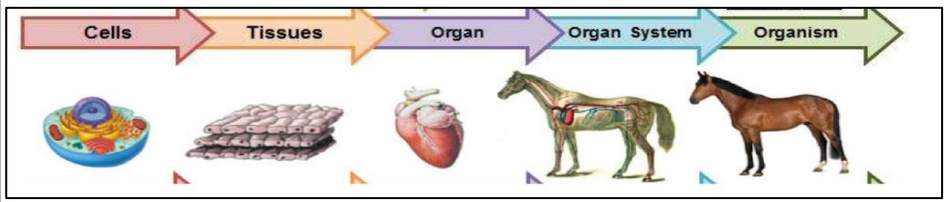
- Numbers, powers, rots, decimals and rounding
- Product of prime factors
- Multiples in context
- Factorising

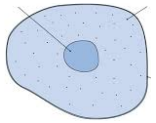
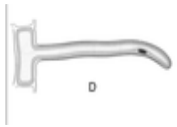
Keyword/Skill	Definition/Tips
Integer	Whole number including 0 and negative numbers. No fractions or decimals.
Product	Multiply
Factor	Numbers we can multiply together to get another number.
Distributive Law	Multiplying a number by a group of numbers added together is the same as doing each multiplication.
Multiples	The result of multiplying a number by an integer (comes up in its timetable)
Common multiples	A number that is a multiple of two numbers
LCM	Smallest whole number that is a multiple of two numbers
Factors	An integer that divides the number exactly leaving no remainder
Factor pairs	A set of numbers that multiply to equal the number
HCF	The highest common factor (HCF) of two or more numbers is the largest number that is a factor of all of the given numbers.

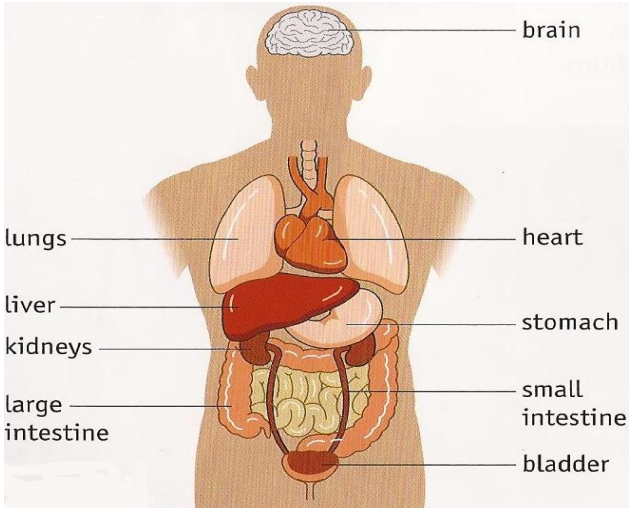
Year 7 – Science – B1a. Cells



Organelle	Function	Found in animal cells?	Found in plant cells?
Nucleus	An organelle that controls the cell's activities and where genetic information (DNA) is found	✓	✓
Cytoplasm	A jelly-like substance where chemical reactions occur	✓	✓
Cell Membrane	A layer around the cell that controls what enter and leaves it	✓	✓
Mitochondria	An organelle found in cells where respiration occurs	✓	✓
Cell Wall	Outer layer found in plant and bacteria cells that provide support and protection to the cell		✓
Chloroplast	An organelle found in plant cells that absorbs light and is where photosynthesis occurs		✓
Vacuole	A fluid filled sac found in plant cells that contains cell sap		✓
Ribosomes	The site where proteins are produced	✓	✓

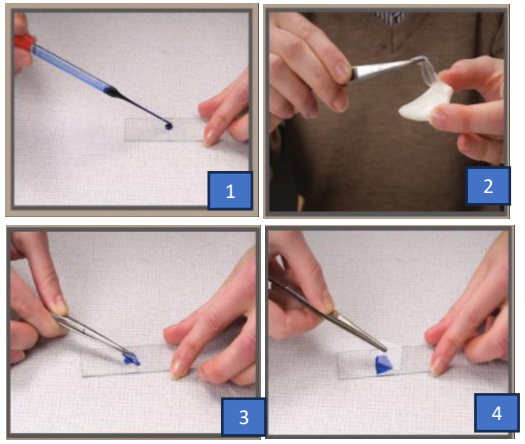


Name of Specialised Cell	Diagram	Adaptations
Egg cell		Very large surface area and contains half the genetic information
Sperm Cell		Has a tail so it can swim to the egg cell with genetic information
Red Blood Cell		No nucleus- contains haemoglobin so it can carry oxygen around the body
Root Hair Cell		Has an increased surface area so it can absorb more water and mineral ions
Palisade Cell		Contains many chloroplasts needed for photosynthesis to occur



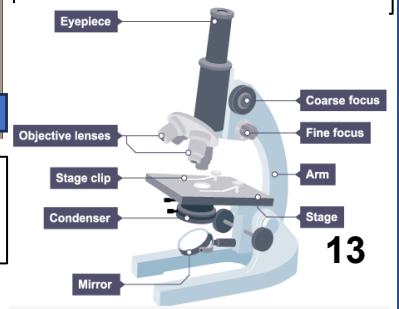
Keyword	Definition
Movement	Animals move to escape a predator or to find food, shelter or mate. Plants will move to reach sunlight and nutrients
Respiration	A process that happens in mitochondria that releases energy that the cell will use to carry out reactions
Sensitivity	When organisms are aware of their environment e.g., how hot or cold it is, how much light there is
Growth	When organism increases in height, length, mass
Reproduction	When organisms make more of their species
Excretion	When organisms remove waste products that are made during reactions
Nutrition	Animals and plants break down nutrients so they can be more easily used for energy and growth
Organelle	Parts that make up a cell
Cell	The single unit building block of life
Tissue	A group of similar cells working together
Organ	A group of similar tissues working together
Organ system	A group of organs working together
Organism	A living thing
Specialised cell	A cell that has differentiated (changed) to do a particular job
Microscope	Scientific equipment that allows you to see objects you cannot see with the naked eye

Preparing a microscope slide



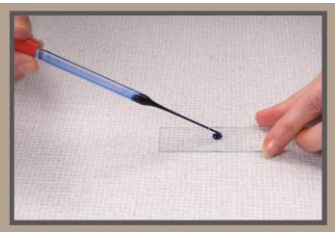
1. Place a stain on the microscope slide.
2. Use forceps to take a thin layer of cells (specimen).
3. Place your layer of cells on the slide
4. Place a coverslip on top of the cells ensuring there are no air bubbles.

Total magnification = magnification of eyepiece x magnification of objective



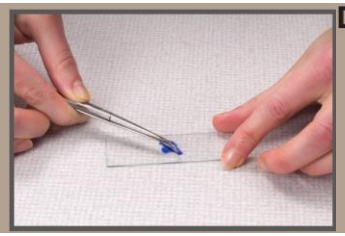
Year 7 – Science – B1a. Cells

A | Take a slide and place a drop of water in the centre. The water may contain a **stain** to make the specimen show up better.

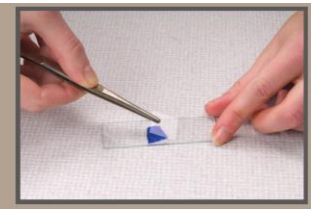


B | Use some forceps to peel off the inside layer of a piece of onion.

C | Place your onion skin onto the drop of water on your slide.



D | Use some forceps to lower a coverslip onto your specimen. If you do this carefully and slowly you will not get air bubbles trapped under the coverslip.



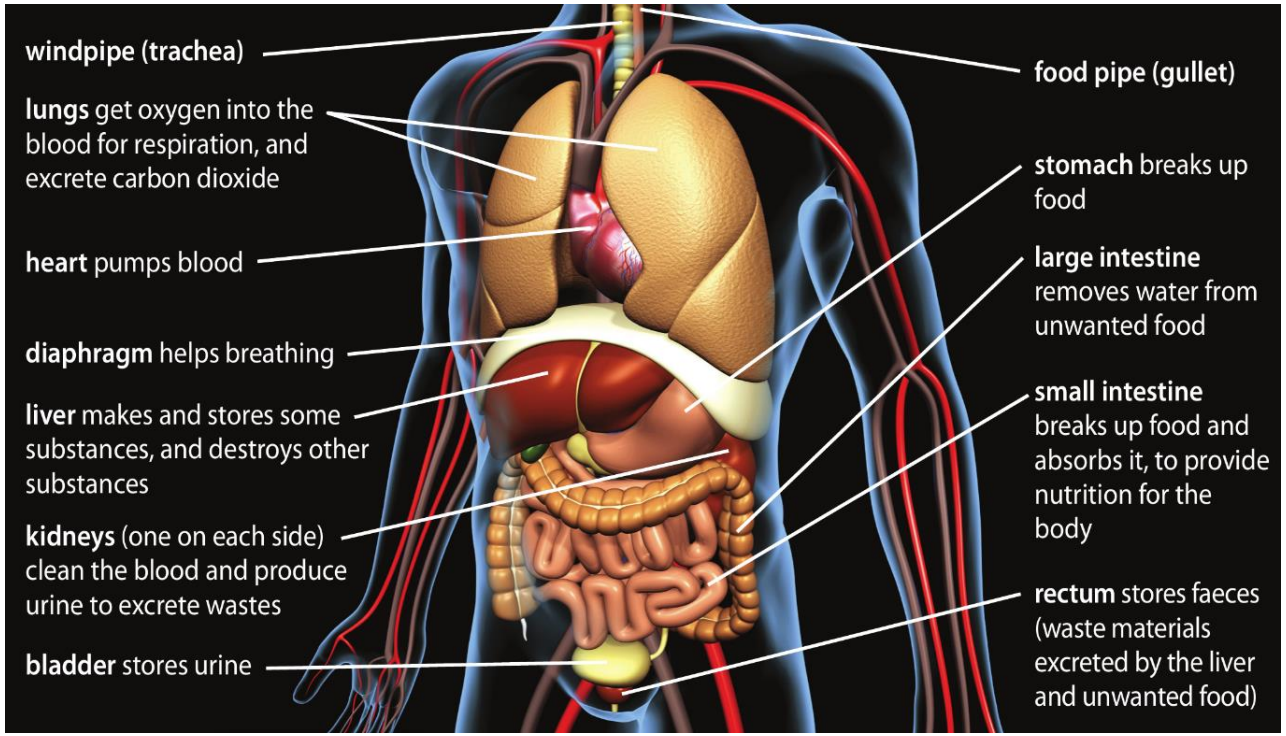
A | Place the smallest **objective lens** (the lowest **magnification**) over the hole in the stage. Turn the **coarse focusing wheel** to make the gap between the objective lens and the stage as small as possible.

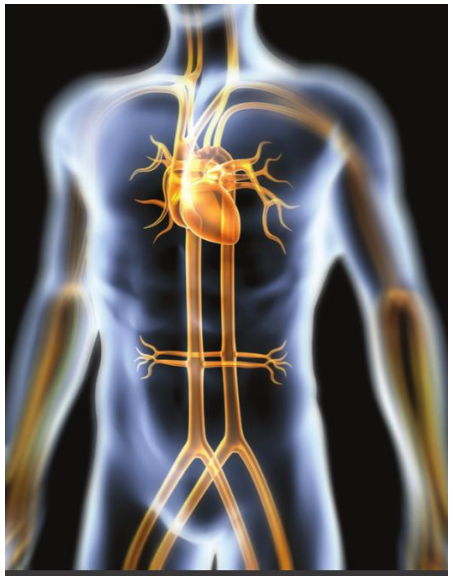
B | Place the **slide** under the clips on the **stage**. The slide contains the **specimen** (the thing you want to look at). Then adjust the light source so that light goes up through the hole.

C | Look through the **eyepiece lens**. Turn the coarse focusing wheel slowly until what you see is in focus (clear and sharp).

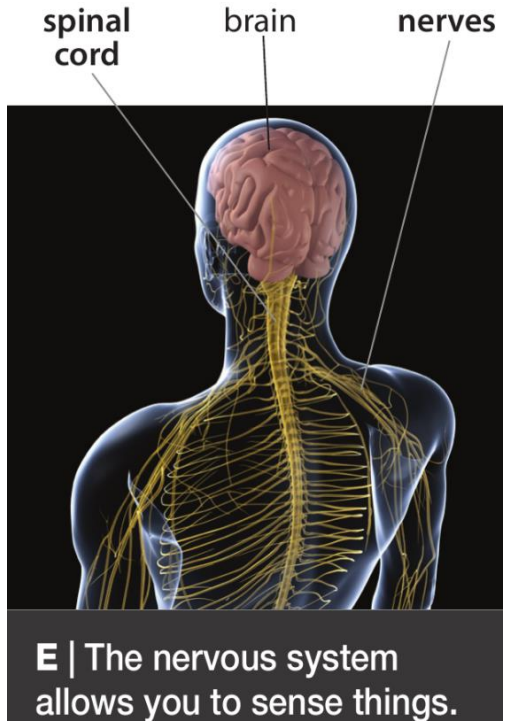
D | To see a bigger **image**, place the next largest objective lens over your specimen.

E | Use the **fine focusing wheel** to get your image in focus again. Do not use the coarse focusing wheel since you can break the slide and damage the objective lens. If you can't see your specimen clearly go back to a lower magnification.





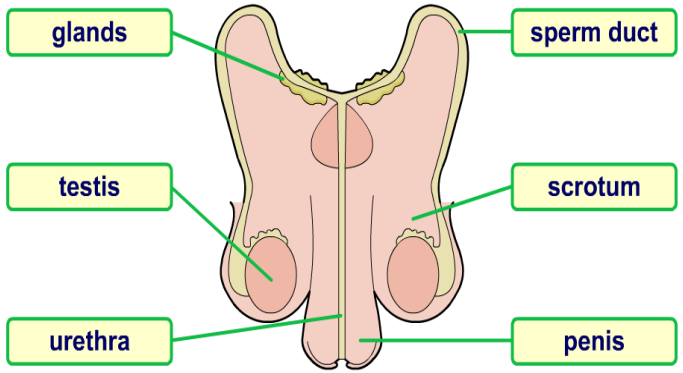
B | The circulatory system carries oxygen and nutrients (from food) around the body.



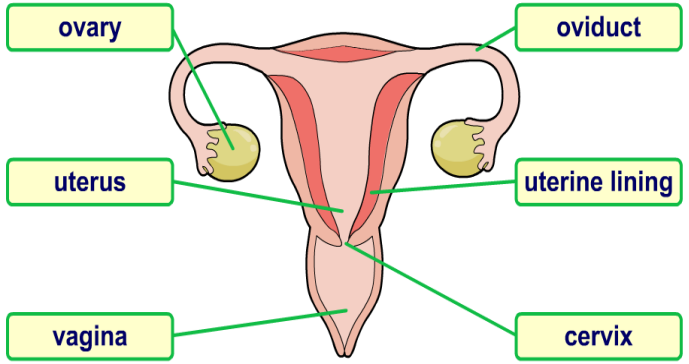
E | The nervous system allows you to sense things.

Year 7 – Science – B1b. Body Systems

What are the parts of the male reproductive system?

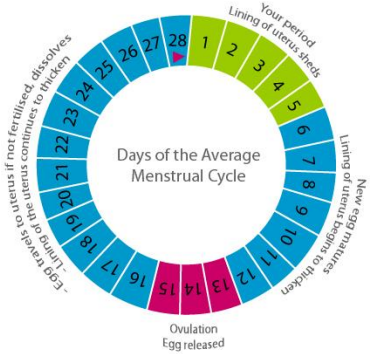


What are the parts of the female reproductive system?



Reproductive Organ	Function
Testis	Where sperm are produced
Scrotum	Sac of skin holding and protecting the testis
Urethra	Carries sperm outside the body
Glands	Adds fluids to the sperm
Sperm Duct	Carries sperm from the testis
Cervix	The opening or the neck of the uterus
Uterus	Large muscular organ where the baby will develop
Uterine Lining	Where the fertilised egg is implanted
Oviduct	Carries the eggs from the ovaries to the uterus
Ovary	Where eggs are matured and released

The Menstrual Cycle

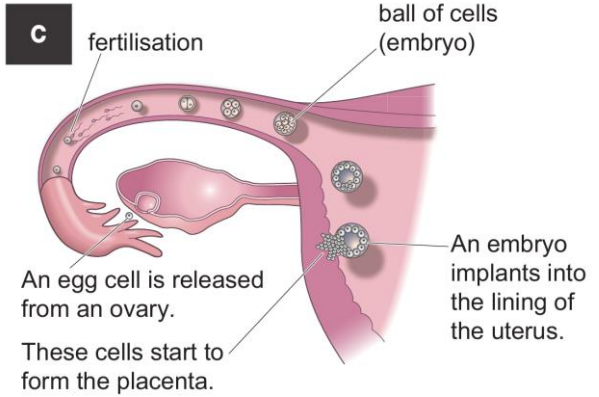


The function of the menstrual cycle is to **prepare a females body for pregnancy**.

Role of oestrogen in the menstrual cycle:

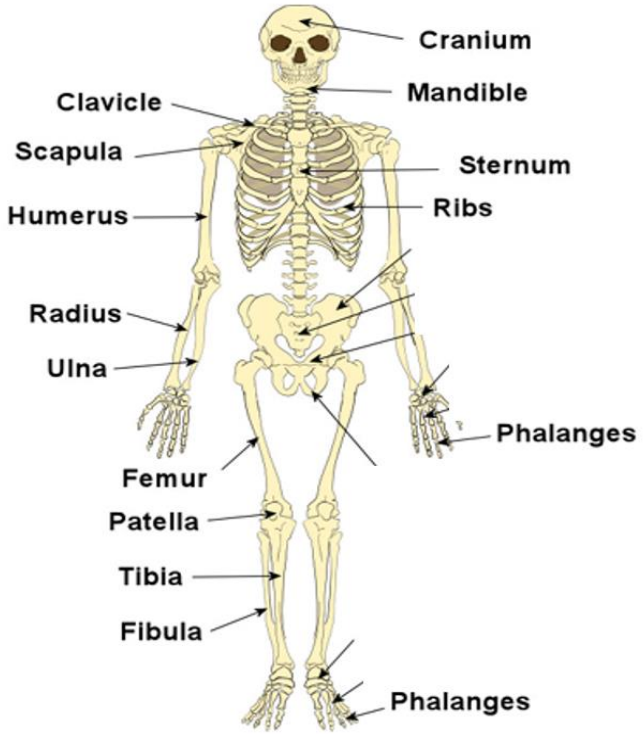
- **Build the uterus lining**

Fertilisation and Implantation



Keyword	Definition
Puberty	The change that occurs in males and females into mature adult bodies ready for reproduction initiated and controlled by hormones.
Menstrual Cycle	A monthly series of changes that occurs in females to prepare for pregnancy, on average the cycle is 28 days long
Menstruation	The stage of the menstrual cycle where the lining of the uterus breaks down. Also known as a 'period'.
Ovulation	Happens around day 14 of the menstrual cycle, this is when an egg cell is released from an ovary
Fertilisation	When the nucleus of a sperm cell enters an egg cell and fuses (joins) with the nucleus of an egg cell, creating a zygote
Embryo	The word used to describe the early stages of baby development
Implantation	When a fertilised egg (zygote) embeds into the wall of the uterus
Placenta	An organ that grows in the uterus during pregnancy where substances are exchanged between the mother and the baby
Gestation	The period of time during which a baby develops and grows. In humans, this is stated as 9 months
Labour	The process of childbirth, beginning with contractions and ending with the delivery of the baby
Infertility	When a baby cannot be conceived naturally
Balanced diet	Eating the right amount of each of the 7 nutrient group
Deficiency disease	A disease caused by not having enough a particular nutrient
Enzymes	Molecules that will break down large food molecules
Digestion	The process of breaking down food into smaller molecules the body can use
Sperm	Male sex cell (gamete)
Egg (ovum)	Female sex cell (gamete)

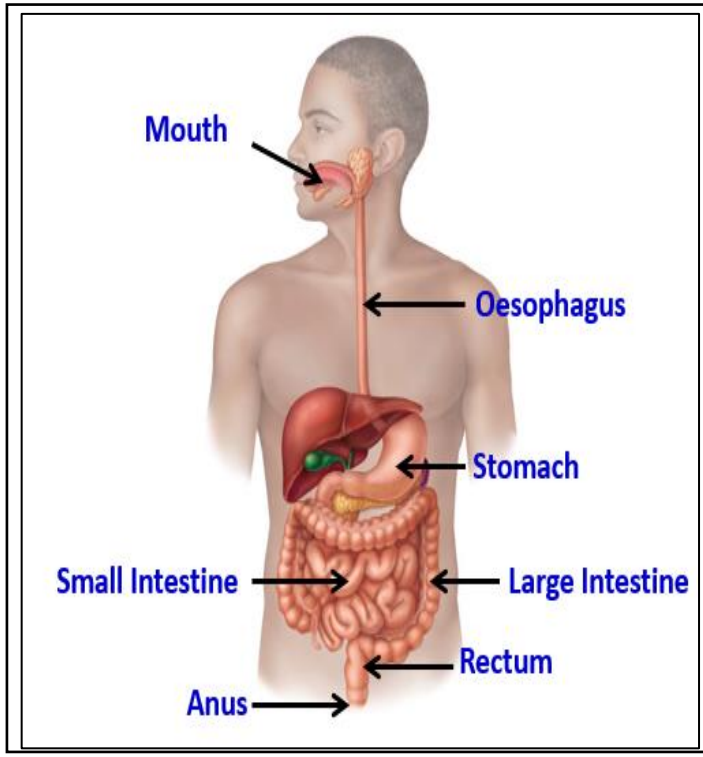
Year 7 – Science – B1b. Body Systems



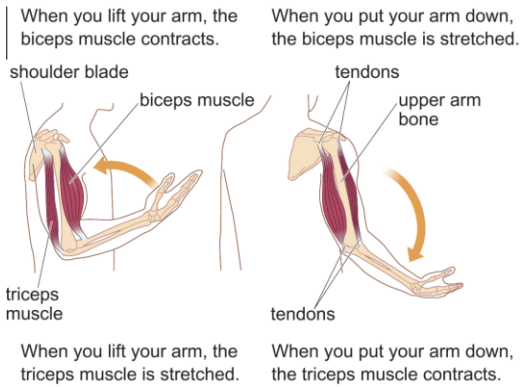
The Skeleton has 4 purposes:

1) **It gives the body SHAPE and SUPPORT**
2) **It allows the body to MOVE**
3) **Red blood cells are produced in the MARROW**
4) **It PROTECTS the major organs**

Joints - Bones are linked together by joints. Most joints allow different parts of the skeleton to move. The human skeleton has joints called **synovial joints**.



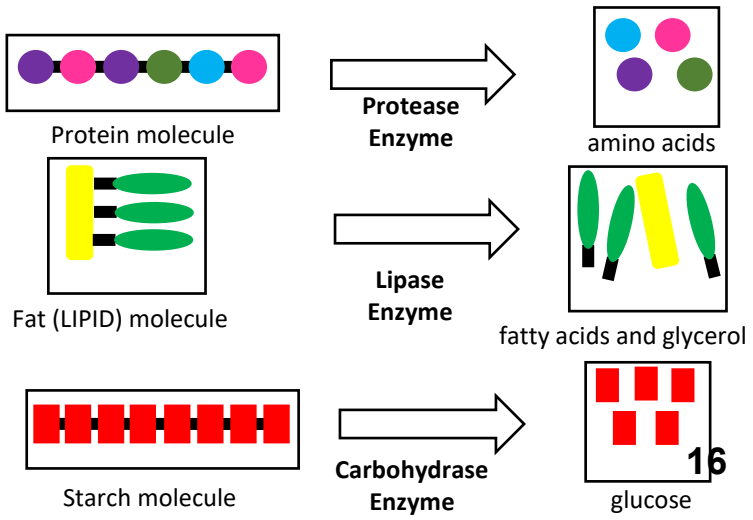
1. **Mouth-** where food is broken down by teeth
2. **Oesophagus-** long muscular tube where food is taken from the mouth to the stomach
3. **Stomach-** where proteins are digested. Contains hydrochloric acid to kill pathogens
4. **Small intestine-** the final stage of digestion. Glucose, amino acids, fatty acids and glycerol are absorbed into the blood here
5. **Large intestine-** water is reabsorbed here from undigested food to make faeces
6. **Rectum-** where faeces are stored
7. **Anus-** where faeces leaves the body via egestion



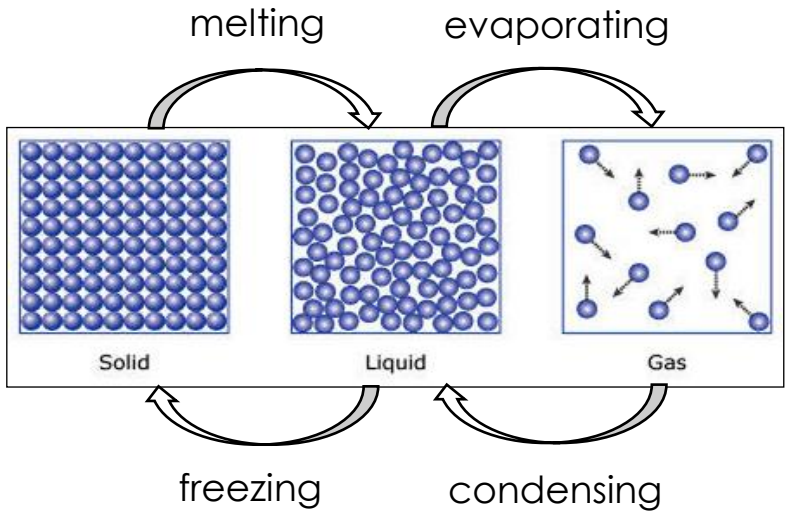
Joint Type	Example of Joint	Type of movement joint allows	How the joint is held together
Fixed Joint	Skull	Movement only at certain points	Held by tough, fibrous tissue, developed in childhood
Slightly Moveable Joint	Spine	Slightly moveable joints	Separated by cartilage and held together by tough bands of ligament
Freely Moving Joint	Elbow	Freely moving joints	None - as it would be a severe disadvantage

Enzymes are substances that speed up biological reactions in our bodies.

Enzymes are not living things. They are just special proteins that can break large molecules into small molecules. Different types of enzymes can break down different nutrients:



Year 7 – Science – C1a. States of Matter & Atoms, Elements & Compounds



H_2O

Element symbol

Number of atoms

atom *Examples: Mg, C, He*	**molecule** *Examples: O_2, MgO*
element *Examples: Mg, O_2*	**compound** *Examples: MgO, CO_2*

Writing Equations

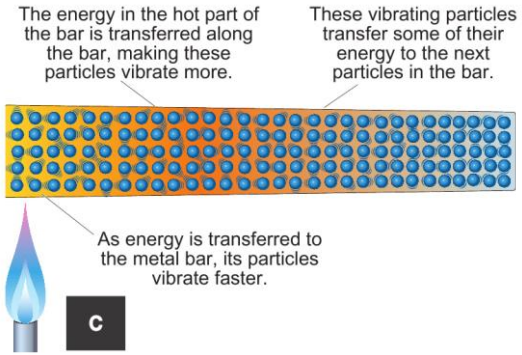
word: magnesium + oxygen -> magnesium oxide

symbol: 2Mg (s) + O_2 (g) -> 2MgO (s)

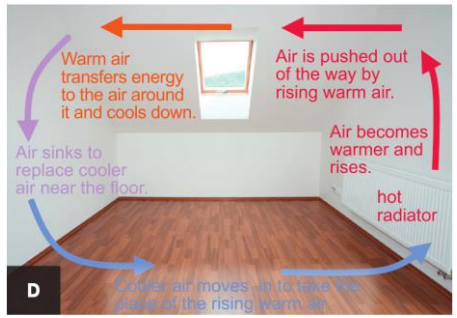
reactants -> product

Keyword	Definition
Arrangement	The arrangement of particles describes where they are in relation to each other.
Atom	A neutral particle, everything is made of atoms.
Boiling	An unnatural process where a liquid is heated up and turned to gas due to continuous heating.
Compound	A substance made up of two or more different elements chemically joined together.
Condensing	The changing of state from gas to liquid.
Density	The mass of a substance in a given volume.
Diffusion	The movement of liquid or gas particles from a place of high concentration to a place of low concentration.
Element	A substance that cannot be broken down into other substances – it only contains one type of atom.
Energy	Energy is needed to make things happen *e.g. chemical, kinetic, heat, light, sound.*
Evaporating	The changing of state from liquid to gas.
Formula	The shorthand way to represent a molecule *e.g. O_2, MgO.*
Freezing	The changing of state from liquid to solid.
Gas	One of the three states of matter - particles are randomly arranged, spread out, have lots of energy and move quickly.
Liquid	One of the three states of matter - particles are randomly arranged, touching and have enough energy to move from their position.
Melting	The changing of state from solid to liquid.
Molecule	A group of two or more atoms chemically joined together – they could be the same or different.
Movement	The process of changing the position of particles from one place to another.
Particle	The tiny things that materials are made of.
Pressure	The force exerted on a certain area.
properties	A characteristic that you can use to describe matter *eg melting point, hardness, density.*
Solid	One of the three states of matter - particles are ordered in rows and columns, touching, only have enough energy to vibrate but cannot move from their position.
Sublimation	The change of state from solid to gas. The reverse of this is called reverse sublimation.
State of matter	There are 3 – solid, liquid and gas.
Symbol	The shorthand way to represent an element *e.g. O, Mg*

Year 7 – Science – P1a. Energy



Conduction usually happens best in solids because the particles are very close together. Conduction does not take place very well in liquids. It hardly happens at all in gases because the particles are a long way apart.



Energy is transferred through **fluids** (liquids and gases) by convection. When part of a fluid is heated it expands and becomes less dense than the fluid around it. It floats upwards through the remaining fluid. Cooler fluid moves in to take its place and a **convection current** forms. Convection currents can also form when part of a fluid is colder than its surroundings.

When you stand near something hot, such as a radiator, your skin feels warmer. Energy is transferred from hot objects by radiation (sometimes called **infrared radiation**).

All things give out or **emit** infrared radiation. The hotter the object, the more infrared radiation it emits. When radiation hits something, it can be **absorbed** (taken into the object) or **reflected**.

Infrared radiation transfers energy by waves, in a similar way to light. It does not need a **medium** to travel through, and it can also go through transparent substances like air or glass. Infrared radiation can also be focused. Energy travels to the Earth from the Sun by infrared radiation and this energy will burn paper if you focus it using a magnifying glass.

Keyword	Definition
Burn	Common term for combustion. A reaction with oxygen in which energy is transferred to the surroundings as heat and light.
Calorimetry	The measurement of heat change during a chemical reaction
Chemical	Energy store that is emptied during chemical reactions when energy is transferred to the surroundings.
Compare	When you compare things, you consider them and discover the differences or similarities between them.
Conduction	The transfer of heat by passing on energy (or electrical charge) to nearby particles.
Convection	The process by which heat travels through fluids (gases and liquids).
Describe	If you describe a person, object, event, or situation, you say what they are like or what happened.
Efficiency	A measure of how much of the total energy transferred in a process achieved a desirable useful outcome.
Elastic Potential	An energy store that is filled when a material is stretched or compressed.
Electrical	Energy store resulting from the movement of electrical charge (electrons).
Energy	This is the ability to make something happen when it is transferred.
Evaluate	If you evaluate something or someone, you consider them in order to make a judgment about them, for example about how good or bad they are.
Food	A chemical store of energy, that you once eaten and digested can be used to release energy.
Gravitational potential	Energy store that is filled when an object is raised.
Heat	Heat is the transfer of internal energy from one region to another., measured in Joules.
Joule	Unit of energy, represented by the symbol J.
Kinetic	An energy store filled when a moving object speeds up.
Light	A form of radiation that can transfer energy in a wave.
Non-renewable	An energy resource that will be used up, and not replenished in our lifetime.
Nuclear	An energy store associated with nuclear interactions.
Radiation	Radiation is the transfer of internal energy in the form of electromagnetic waves. This radiation lies in the infrared region of the electromagnetic spectrum. It does not require particles to move, it can travel through a vacuum.
Renewable	An energy resource that can be readily replenished in our lifetime.
Sound	A form of energy transferred by sound waves.
Temperature	A measurement of how hot or cold something is, unit of measurement is °C
Thermal	An energy store that is filled when an object is heated.
Thermometer	A piece of equipment used to measure temperature.
Transfer	The process by which energy moves from one store to another.
Transformation	Energy transformation is the process of changing one form of energy to another.

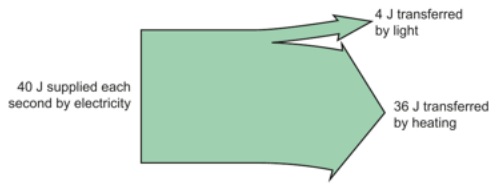
Year 7 – Science – P1a. Energy

Energy resource	Advantages	Disadvantages
fossil fuels (used to generate electricity, to power transport and for heating)	▪ cheap compared with other resources ▪ convenient to use in cars and other vehicles	▪ release polluting gases when they burn ▪ non-renewable
nuclear (used to generate electricity)	▪ no polluting gases	▪ power stations are very expensive ▪ produces dangerous waste materials ▪ non-renewable
renewable resources (mainly used to generate electricity)	▪ no polluting gases ▪ renewable	▪ most are not available all of the time

Energy cannot be created or destroyed, so the total amount of energy supplied must be equal to the total amount transferred or stored.

We can calculate efficiency using the following formula:

$$\text{efficiency} = \frac{\text{useful energy transferred}}{\text{total energy supplied}} \times 100\%$$



$$\text{efficiency} = \frac{4}{40} \times 100$$

$$= 10\%$$

Transferring Thermal Energy		
	Temperature change	**Direction of energy flow**
Object hotter than surroundings	Temperature of object decrease until it is the same as the surroundings	Energy flows out of the object to the surroundings
Object colder than surroundings	Temperature of object increases until it is the same as the surroundings	Energy flows into the object to the surroundings
Object the same temperature of the surrounds	The object's temperature stays the same	The is no net flow of energy

Energy	Example
Light Energy	Sun, light bulb, torch
Thermal Energy (heat)	Oven, electric fire
Sound Energy	Radio, speakers, TV
Electrical Energy	Electric car, laptop
Nuclear Energy	Nuclear power station, nuclear bomb
Chemical Energy	Food, batteries, coal
Gravitational Potential Energy	Book on a shelf, boulder on a cliff
Elastic Potential Energy	Bow, wind-up toy, stretch spring
Kinetic Energy (movement)	Person running, rolling ball

Energy can be stored. For example, energy is stored in the chemical substances in food, petrol and **cells** (batteries). We call this **chemical energy**. Things happen when energy *moves* from a store. We say that the energy is **transferred**.

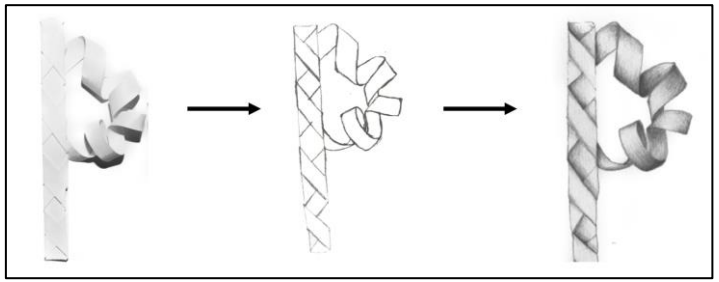
This can happen by:

▪ heating ▪ light ▪ sound ▪ **electricity** ▪ **forces**.

Types of thermal insulation	
Appliance/feature	**Description**
Boiler	This has a large surface area to allow for large amounts of heat energy to be transferred to its surrounding through convection
Radiator	This is specially designed to have a heating element at the bottom. Convection currents heat all the water in it.
Double Glazing	Windows and doors with 2 planes of glass with air trapped between them (or a vacuum between them). Air is a poor conductor and there is no convection because the air is trapped and cannot for convection currents
Loft Insulation	A thick layer of the loft floor. It works because it's a poor conduction and traps air, stopping convection
Floor Insulation	An insulation layer under the floor. Prevents heat loss because it is a poor conductor
Draught excluders	Brushes and seals on doors. Prevents warm air escaping from the home
Cavity wall insulation	Insulation place in the cavity of the walls. It works because it traps air which is a poor conductor. However, energy could still be lost due to convection so a insulating material is injected into the gap to create pockets of air and prevent convection currents forming

YEAR 7 ART VISUAL ELEMENTS KNOWLEDGE ORGANISER

Throughout our Autumn term in Year 7 we study the Visual Elements of art and design so we can understand all the different processes and skills you will come across during KS3.



How to complete an Artist Research

Answer the following questions...

Research into the artist

- Artist biography (two sentence)
- Artist techniques, skills and processes
- What is the title of the work you have selected?

Describe the Art

- What do you see in the work? What is happening?
- What is the context? (abstract, typography, sculpture)
- What visual elements have been used? How?
- What do you think is good about the work? Not good?
- How does the work make you feel? Why?

When adding tone to an observational drawing follow the below steps…

1 Look at your model carefully and ask the following questions: **'Where are the dark areas?' 'Where are the light areas?'**

2 Think about your **stroke size, direction** and **hold** on the pencil.

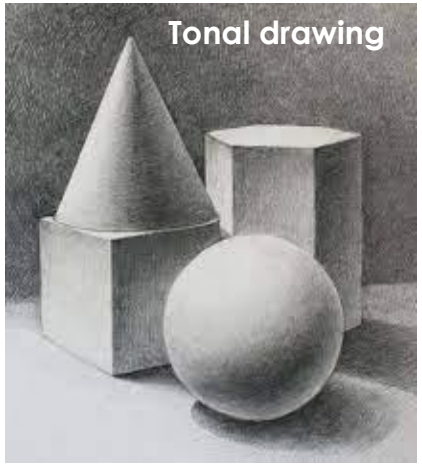
3 Aim to add at least **5 levels** of tone

4 Blend your tones to create a **gradation** (do not smudge!)

5 Look every **3 seconds** at your model to pick up the right tones

Artist Spotlight: Edward Ruscha

Edward Ruscha is an **American artist** who is linked to the Pop Art movement. He worked with **paint, printmaking, drawing, photography and film.** Ruscha is well-known for his **text pieces**, using **typography** to capture words and quotes.



Keyword	Definition
Formal Elements	Key words that can be applied and used to describe 2D and 3D art.
Colour	Is an element made up of different hues. These can be bold and vibrant or pale and soft.
Shape	A shape is an area enclosed by a line. It could be just an outline or shade in. Shapes can be geometric or organic.
Pattern	An arrangement of repeating shapes. A decorative design.
Texture	The surface quality of a work of art. Can be rough, smooth, shiny etc.
Tone	This refers to the lightness or darkness of something. It could also be a shade or how dark or light a colour appears.
Blend/Layer	Mix together – put on top of each other
Skilful	Apply materials with a high level of understanding, skill and control.
Collage	Paper or other materials glued onto a surface.
Investigate	Test the qualities of materials and techniques through practical work.
Response	An artist response shows your own work and ideas inspired by the artist's work.

Year 7 – Computing - DIGITAL LITERACY

Understanding the use of Digital applications such as office 365

Hyperlinks

A **hyperlink**, or simply a link, is a link from a document to another document or part of the document that the user can follow by clicking or tapping on.

The Internet

The Internet also known as WWW which stands for **World Wide Web** is a network of online content formatted in a code called HTML. These are interlinked HTML pages that can be accessed over the Internet.

It provides space for a wide range of information like documents, content and videos.

Email

Email is used for many different purposes, including **contacting friends, communicating with professors and supervisors, requesting information, and applying for jobs.** Depending on your purposes, the messages you send will differ in its

- Formality
- intended audience
- desired outcomes

OneDrive

OneDrive is the Microsoft cloud service that **connects you to all your files**. It lets you store and protect your files, share them with others, and get to them from anywhere on all your devices.

Benefits - OneDrive allows you to sync and store your personal files in a single place and share them with your contacts.

Keywords	Definition
Presentation	Useful document for entertaining, informing or persuading people
Word processor	software that allows users to create, edit, and print documents. Word processors, allow you to add formatting to text
Animation	is a form of animation which uses Microsoft PowerPoint and similar programs to create a game or movie
Transitions	are motion effects that when in Slide Show view add movement to your slides as you advance from one slide to another.
Alignment	When you move objects in a presentation, alignment guide s to where the text and images are positioned.
Formatting slide	Means to change the size, font, and text style in your presentation to add emphasis and to highlight content.
Text manipulation	**Text** can be automatically checked for spelling and grammar

Year 7 – Computing – Business skills...

Presentations

Presentations - the purpose of a presentation is to entertain, persuade or inform a person/s. It is a great visual aid.

A good presentation is memorable and contains images, , videos and facts in a way easy to remember.

Microsoft PowerPoint -

The purpose of **PowerPoint** is to act as a visual aid so a presenter can present their ideas

Word processing

Documents –

The main purpose of **Word** is to create text documents that can be saved electronically, printed on paper or saved as PDF files.

Spreadsheets

Spreadsheets are an essential business and accounting tool. They can vary in complexity and can be used for various reasons, but their main purpose is to organise and categorise data into a logical format.

Once this data is entered into the spreadsheet, you can use it to

- create budgets
- produce graphs and charts
- storing and sorting data

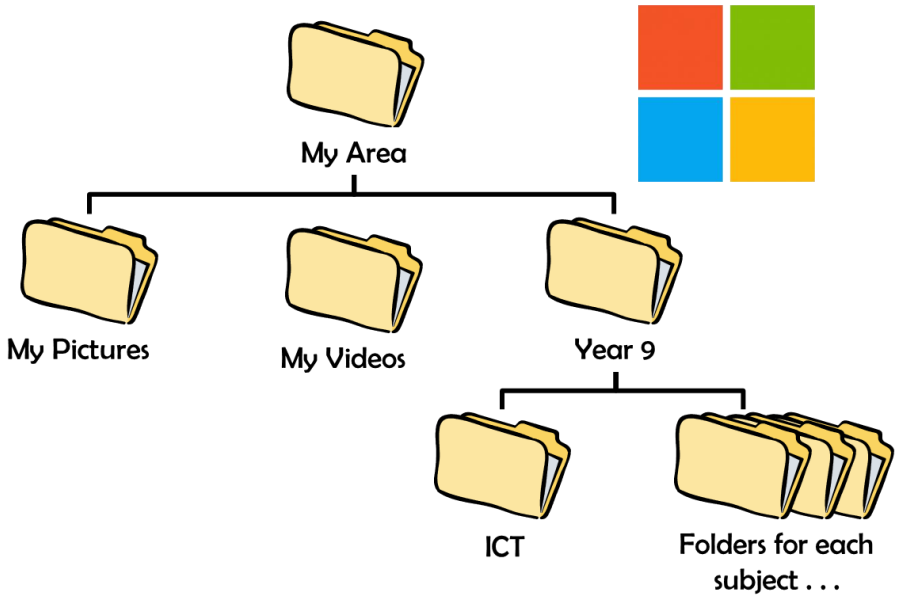
Advantages

Spreadsheets are an excellent tool that allows us to carry out analysis of data.

Keywords	Definition
Spreadsheet	an electronic document which data is arranged in a grid of rows and columns
Worksheet	is a single page in **spreadsheet**
Cell	is a collection of one or more **worksheets**
Row	A row is a series of data banks laid out horizontally in a table or **spreadsheet**
Column	is a vertical series of **cells** in a spreadsheet
Workbook	is a collection of one or more spreadsheets
Function	is a predefined **formula** that performs calculations in a particular order
Formula	is an expression which calculates the value of a **cell**
Conditional formatting	is a feature which allows you to apply a format to a cell or a range of cells based on certain criteria

Year 7 – Computing - DIGITAL LITERACY

SENSIBLE FILE ORGANISATION



OFFICE PROGRAMS

Used to create business documents such as letters, flyers and CVs

A spreadsheet program is used for expenditures and income, to plan budgets and represent chart data.

Used to present data and information by using text, images, diagrams with animations and transitional effects

Used to create business documents such as letters, flyers and CVs

Used to read, write emails and calendars.

Keep projects organised, share notes and provide an internal Wiki to store projects.

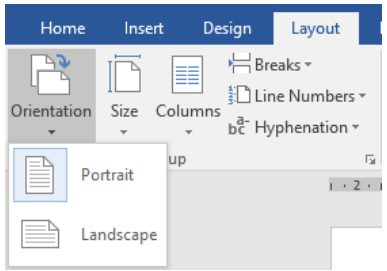
SAVE VS SAVE AS

When you click save you are saving a document for the first time. You should name the document and save it in a sensible location.

When you click save as you can change the name of the document, location and keep a back up.

PAGE LAYOUT

In most Office packages you can change the layout of the page. This is called its orientation.



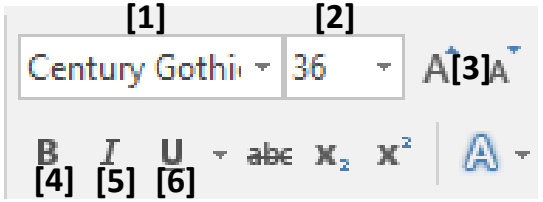
You can select portrait or landscape

Keyword	Definition
File	A file is an object on a computer that stores data, information, settings, or commands.
Filename	A name given to a computer file.
Folder	Used to store and organise individual files.
Table	A table is a grid of rows and columns that cross to form cells.
Attachment	An attachment is a computer file sent along with an email message. One or more files can be attached to any email message
OneNote	It gathers users' notes, drawings, screen clippings, and audio commentaries
Spreadsheet	A document in which data is arranged in the rows and columns of a grid and can be manipulated and used in calculations

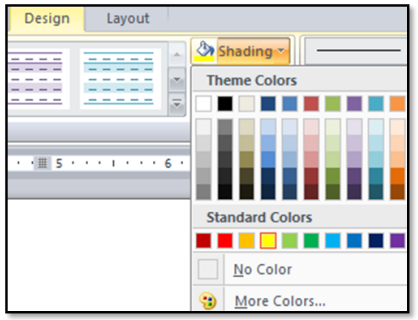
Year 7 – Computing - DIGITAL LITERACY

FORMATTING

Click on the ribbon and select change the font style [1] font size [2] increase/decrease font size [3] bold [4], italic [5] underline [6]



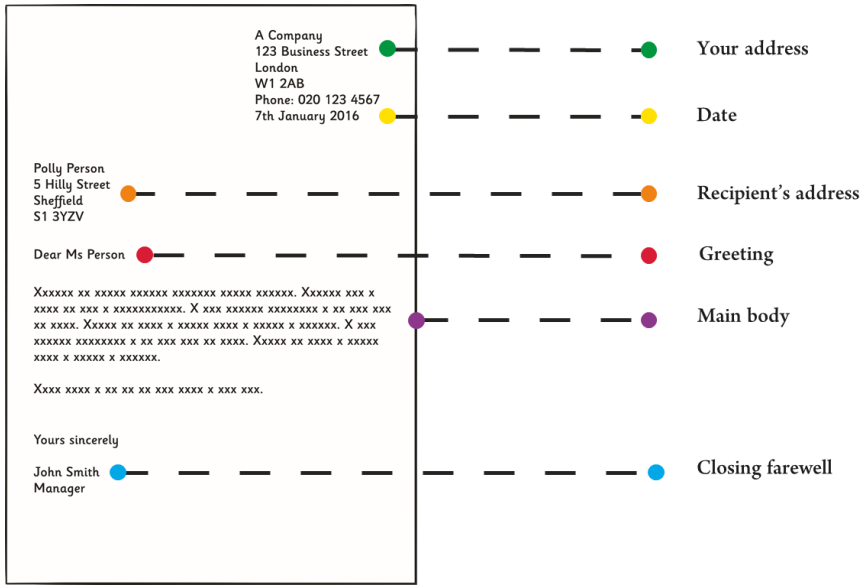
Click design and shading to fill in a shape any colour.



DESIGN LAYOUT

Click on the ribbon and select design. This allows you to change the design of your document using a template.

LETTER LAYOUT



A **Transition Effect** is the way a slide appears onto the screen (like you just saw).
Custom animation is the way you make text and pictures move in a PowerPoint slide like this:

Laying out a table in excel

Question 3 - Favourite colour

	Male	Female	Total
Red	2	1	3
Orange	0	0	0
Yellow	0	0	0
Green	1	0	1
Blue	2	0	2
Purple	0	2	2
Pink	0	2	2
Black	0	0	0
Other	0	0	0

Keyword	Definition
Target audience	A particular group at which a product such as a poster or advertisement is aimed.
Hyperlinks	A link from a hypertext document to another location, activated by clicking on a highlighted word or image
Transition effects	Motion effects that occur in Slide Show view when you move from one slide to the next during a presentation
Animations	A way of making a movie from many still images. The images are put together one after another, and then played at a fast speed to give the illusion of movement.
Formula	An expression which calculates the value of a cell.
Data	data is any set of characters that is gathered and translated for some purpose, usually analysis

Year 7 What is Design Technology?

Design and technology gives young people the skills and abilities to engage positively with the designed and made world and to harness the benefits of technology.

10mm = 1cm
1cm = 10mm

40mm = 4cm
78mm=7.8cm

To convert from centimeters to millimeters we multiply by 10
To convert from millimeters to centimeters we divide by 10

Manufacturing Processes	
Wasting Wastage is the process of cutting away material with tools and equipment	**Shaping** This is where material is removed from the original structure to change the dimensions of the original.
Drilling A process of cutting away material to create a hole	**Sanding** Removing saw lines to improve the surface texture

Standard components and fixings	
Knockdowns (KD) fittings are used to assemble 'flat packed' furniture	**Wood Screws** Used to join or hold timbers together securely
Nuts and Bolts A semi-permanent fixing to hold to parts together.	**Nails** Produced in a range of sizes, used to hold material together.

3,6,9,12,15,18,& 25mm thick sheets

Rough sawn has a poor finish

PAR has a smooth finish

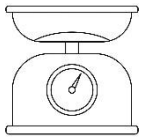
In our DT Workshop we use the following PPE:

- Apron
- Goggles
- Ear Defenders
- Heat Proof Gloves

Year 7 – Food Technology

Equipment:

Weighing Scale



Each line represents 20g.

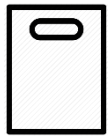
Oven Gloves

Personal safety, to protect our hands from heat.

Cooker

Hob
Grill
Oven

Chopping Board



Used for different foods to prevent spread of bacteria.

Chef's Knife

Used to prepare a range of ingredients

Knife Techniques:

Bridge Hold

An arch of a thumb and fingers.

Claw Grip

Tuck in fingers, use knuckles as a guide.

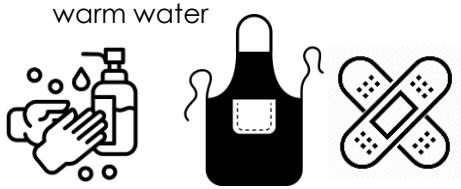
These knife techniques are used to keep us safe and to prevent cuts.

Knife Safety Rules:

1. Store knives in a knife block
2. Keep knives sharp, not blunt
3. Slice away from your hand and keep for your fingers clear of the blade
4. Carry a knife with the blade pointing downwards
5. Put knives on the draining board, not in the sink
6. Handle knives carefully when washing up
7. Use the bridge hold and claw grip when preparing ingredients

Personal Hygiene and Safety:

1. Wear an apron
2. Tie hair back
3. Remove jewellery
4. Cover cuts with a blue waterproof plaster
5. Wash hands with soap and warm water



Kitchen Hygiene and Safety:

1. Stack stools and remove hazards
2. Turn saucepan handles facing outwards
3. Use a damp dish cloth and anti-bacterial spray to wipe surface
4. Wear oven gloves

Food Hygiene and Safety:

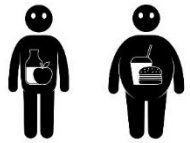
1. Wash fruit and vegetables with cold water
2. Check best before and use by dates
3. In a fridge, store raw meat on bottom shelf, cooked meats and ready-to-eat foods.

Keyword	Definition
Personal hygiene and Safety	Maintenance of ourselves to prevent cross-contamination
Kitchen hygiene and Safety	Maintenance of high standards of cleanliness and sanitation to prevent food contamination
Food hygiene and safety	Handling, preparation, and storage of food in ways that prevent food-borne illnesses
Hazard	A danger or risk
Control Measure	An action to prevent a hazard
Utensils	Tools we use commonly in a kitchen like a knife and fork
Bacteria	Organisms that are microscopic which can be harmful
Enzymic browning	Oxidation reactions that causes food to turn brown
Dextrinizarion	Starch is broken down into sugars, causing a brown colour when heated

Year 7 – Food Technology

Why do we need to eat a **balanced diet**?

1. To achieve and maintain a healthy body weight.

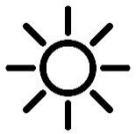


2. For growth and repair

3. To build a strong immune system, prevent disease and infection.

4. To provide energy.

5. To keep us warm.



How do we achieve a balanced diet?
Eight Healthy Tips:

1. Base your meals on starchy foods.

2. Eat lots of fruit and vegetables.

3. Eat more fish – including a portion of oily fish each week.

4. Cut down on saturated fat and sugar.

5. Eat less salt – no more than 4g a day for children.

6. Get active and try to be a healthy weight.

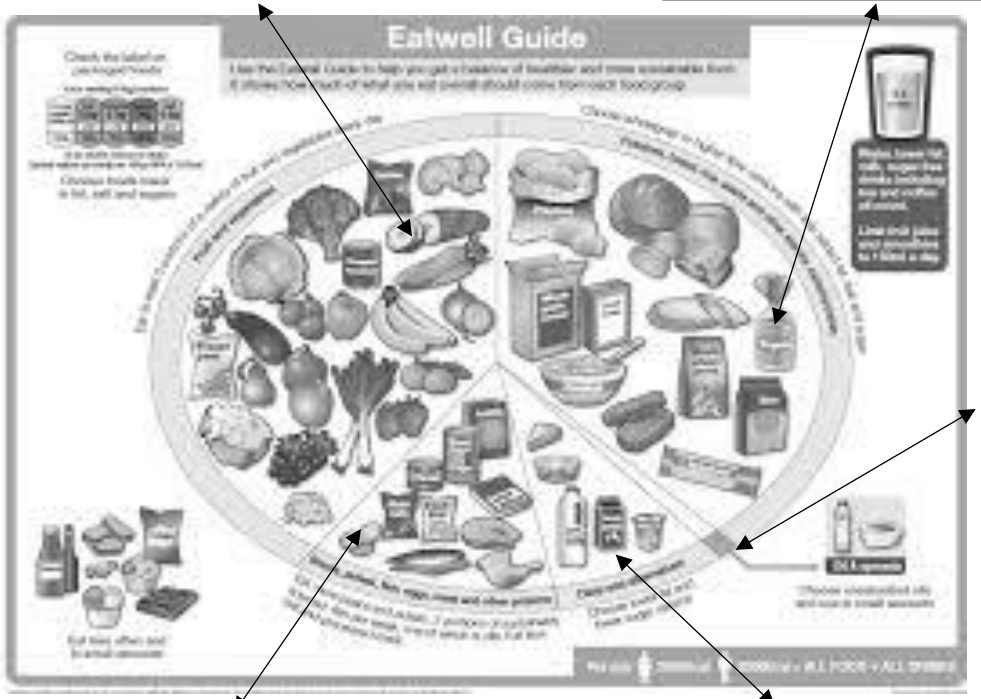
7. Drink plenty of water.

8. Do not skip breakfast.

Eatwell Guide: The Eatwell Guide outlines the recommendations for eating a healthy balanced diet. The guide shows the different types of foods and drinks you should consume – and in what proportions – every day or over a week. The Eatwell Guide shows how much of what you eat overall should come from each food group

Green Section:
Fruit and vegetables are a good source of vitamins, minerals and fibre, needed to build a strong immune system.

Yellow Section:
Starchy foods are a good source of energy. Choose wholegrains for increased fibre, needed to prevent constipation



Purple Section:
Fats, oils and spreads should be eaten sparingly. These do provide energy.

Pink Section:
Beans, pulses, eggs, meat and fish are a good source of protein needed for growth, repair.

Blue Section:
Dairy foods provide a good source of calcium and vitamin D needed for strong bones and teeth.

Year 7 – Geography – Introduction to the UK

What is geography?

Geography comes from two greek words. 'Geo' means earth and 'graph' means to write. Geography means writing about the earth.

Thinking like a geographer involves investigating both the human and physical features of all landscapes.

Urban areas

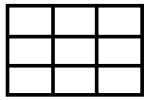
An urban area is a town or city.

Bilston is an urban area presented on an OS map.

Rural areas

Some rural areas are made up of fields and have low relief. On an OS map these areas will have contour lines that are further apart.

Some rural areas have mountains and how high relief. On an OS map these areas will have contour lines that are close together.



Our Capital City

The capital city of the UK is London. There are a lot of landmarks in this city which can be located on OS maps using symbols.

Maps are used a lot by tourists in the city, they are very helpful when navigating the underground too.

The London underground map shows different lines in different colours, you then need to decide if you need to travel northbound, southbound, eastbound, or westbound. This is one reason why knowing compass directions is so important.

UK Population

Population characteristics (age and sex) can be shown using population pyramids.

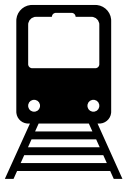
A population pyramid can show how many dependent people are in a country, what the life expectancy is and how many working age people there are.

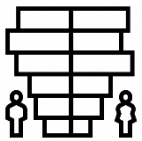
The shape of a population pyramid can also tell us a lot about a population. They can show birth rates and death rates.

Rural areas often have a sparse population density where there are not many people in an area.

Urban areas have a high population density where lots of people live within an area.

The UK population is growing due to migration. This can be presented on a graph.





Keyword	Definition
Aging population	A population with a high percentage of retired people
Choropleth	Data presented with colour
Continent	A large land mass (piece of land) that is broken down into individual countries.
Contour line	A line on a map joining points of equal height
Country	A nation with its own government
Densely populated	A large number of people in an area
Grid References	A set of either 4 or 6 numbers that show the location of something on a map.
Human geography	Relating to people
Landscape	All the visible features of an area of land – can be urban or rural.
Latitude	The distance a place is north or south of the equator
Longitude	The distance a place east or west of prime meridian
Ordnance Survey	The company that creates maps in the UK
Physical geography	Relating to the natural environment
Population density	The number of people per square kilometre
Pull factor	Something that makes someone want to move to an area
Push factor	Something that makes someone want to move away from an area
Relief	The height of the land
Rural	Countryside
Sparsely populated	A small number of people in an area
Urban	Town or city

Year 7 – Geography – Introduction to the UK

Types of map

Data can be presented on maps in many different ways.

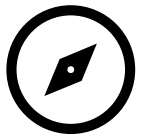
A choropleth map shows data with different colours.

GIS stands for geographical information system. Google maps is a form of this. It can be used for driving, walking or public transport to get to different places.

Compass Directions

The four main points of a compass are north, east, south and west.

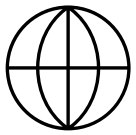
Half-way between each of these are four other points: north-east, south-east, south-west and north-west.



Latitude and Longitude

Latitude starts at 0 degrees and moves north and south from the Equator.

Longitude starts at 0 degrees and moves east and west from the Prime Meridian.



Lines of latitude and longitude allow us to pinpoint our exact location on earth.

Lines of longitude also help us identify different time zones. There are 24 lines of longitude, therefore there are 24 different time zones.

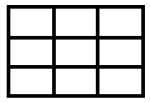
Ordnance Survey Maps

Ordnance Survey maps are detailed maps produced by the British or Irish government map-making organisation.

OS show physical and human features as symbols making theme easier to read.

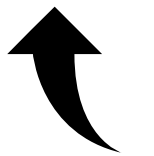
Grid References

Four and six figure grid references can be used to locate a particular area on a map.



Numbers on the X axis are called Eastings and numbers on the Y axis are called Northings.

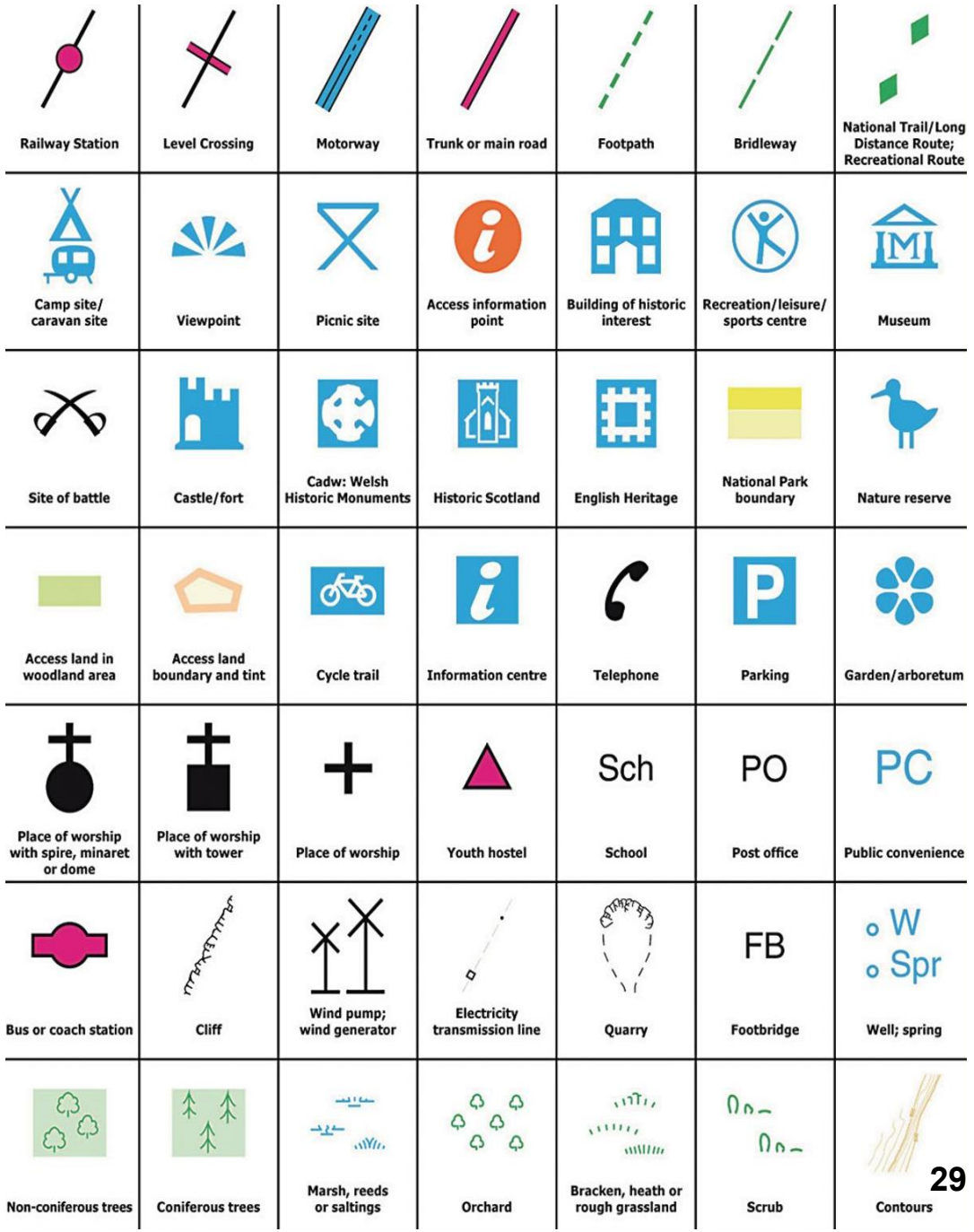
Grid references should be read from the bottom left corner, the X axis should be read first, then the Y.



Contour lines

Contour lines are orange lines on an Ordnance Survey map that show the height of the land.

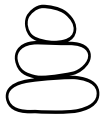
Contour lines allow us to see where has mountains and where has flat land across the UK.



Year 7 – Geography – Physical Landscapes of the UK

Geology

Sedimentary rocks are a soft rock and are formed in layers. Sandstone is a sedimentary rock.



Igneous rocks are made from cooled down volcanic lava and are a hard rock. Granite is an igneous rock.

Metamorphic rocks are formed under intense heat and pressure and are a hard rock. Slate is a metamorphic rock.

Hard rocks are found in upland areas because they are more resistant.

Engineering geologists carry out investigations and analysis in order to assess the risk of geological hazards

As an engineering geologist, you'll use detailed technical analysis of soil, rock, groundwater and other natural conditions, as well as the risk assessment of geological hazards, to determine the suitability of a site for construction development.

Weathering

Weathering is when natural processes can wear away rock in situ (where they are).

Biological weathering involves rocks being worn away by animals and plants. For example, plant roots can grow into rocks, cause cracks and eventually break the rock.

Chemical weathering involves rocks being worn away by chemicals. For example, acid rain changing the chemical composition of a rock.

Mechanical weathering involves rocks being worn away by physical changes. For example, freeze-thaw weathering is when water falls into the cracks of rocks and freezes. This expands the crack and breaks the rock.

Erosion

Erosion is when rocks are broken down and moved.

There are four types of erosion.

Hydraulic action is when rocks are broken down by the power of water.

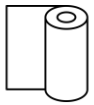
Abrasion is when cliffs or riverbanks are broken down over time when other rocks hit against them.

Attrition is when rocks rub against each other making them smaller and rounder.

Solution is when sediments are dissolved in the water.

Sediment transportation

Sediments are transported in rivers and oceans in four ways.



Traction is when large boulders are rolled along the river or seabed.

Saltation is when pebbles are bounced along the river or seabed.

Suspension is when sediment is carried in the water.

Solution is when dissolved sediments are carried in the water.

Deposition is when the water no longer has enough energy to transport the sediment and drops it.

Keyword	Definition
Biological Weathering	Rocks being worn away by plants and animals.
Constructive wave	Waves that build up beaches by carrying sediment.
Chemical Weathering	Rock being worn away through chemical processes e.g. acid rain.
Confluence	Where two rivers meet.
Deposition	The process where sediment is dropped.
Destructive wave	Waves that erodes beaches by removing sediment.
Drainage basin	The area where the water drains into a single river.
Erosion	The process where rock is broken down and moved.
Evaporation	A liquid turning into a gas – rainwater turning into water vapour.
Geology	Different rock types.
Glacier	A river of ice that moves slowly downhill.
Igneous	Rock type that is formed when volcanic lava cools down.
Infiltration	Water seeping from the grounds surface into the soil.
Interception	Water being caught on the surface of vegetation.
Meander	A bend in a river.
Mechanical weathering	Rocks being worn away causing a physical change.
Metamorphic	Rock type that has been changed from another due to intense heat and pressure.
Mouth	Where the river flows into the sea (the end of a river).
Physical landscapes	Landscapes which have been created or changed naturally, not by human activity.
Plucking	Rocks frozen to the base of the glacier and are plucked from the ground as the glacier moves.
Precipitation	Rain/snow/sleet/hail.
Sedimentary	Rock type that is formed in layers as particles are compressed together.
Sediment transportation	Rocks being moved by a river and sea.
Surface runoff	Water flowing over the surface of earth.
Source	The start of a river.
Tributary	A smaller river flowing into a large river.
Undercutting	Wear away the part below.
Water cycle	The continuous movement of water around earth.
Weathering	The process of rocks being worn away in situ.

Year 7 – Geography – Physical Landscapes of the UK

Water cycle

We never have new water; it is just constantly recycled between the atmosphere and water stores.

Water can be stored in groundwater, the seas, oceans and rivers. From here it is evaporated and goes into the atmosphere.

Water vapour in the atmosphere condenses to form clouds. This produces precipitation.

This precipitation can then fall on the ground as puddles, in seas and oceans, rivers, or caught on the surface of vegetation (interception). Here it can evaporate off the surface (transpiration).

Water that lands on the surface can flow into rivers (surface run off) or infiltrate into the soil where throughflow will take it to the river.

Drainage basins

A drainage basin is an area where water drains into a river.

The line between two drainage basins is called the water shed.

The river starts at the source as a stream and ends at the mouth where the river meets the sea.

As a river goes downstream there will be more water in it as it is added by tributaries which are smaller rivers that join a larger river.

The river channel carries the water.

A confluence is where two rivers meet.

A drainage basin is made up of inputs, outputs, stores and flows. This is how a drainage basin is connected to the water cycle.

Waterfalls

Waterfalls are formed through the process of erosion. They are found in the upper course of a river. High Force waterfall in the UK is the country's largest waterfall by volume.

1. Hard, more resistant rock is on top of softer, less resistant rock.
2. The river erodes the soft rock quicker leaving an overhang of hard rock (this process is called undercutting). Hydraulic action will be eroding the soft rock.
3. The hard rock overhang collapses due to no support.
4. The sediment falls into a plunge pool and this speeds up erosion. Both abrasion and attrition.
5. Over time, the waterfall retreats (moves back) leaving a steep-sided gorge.

Meanders

Meanders are formed through the processes of erosion and deposition. They are found in the middle course of a river. As the River Tees erodes laterally (sideways) meanders can be identified near Barnard Castle.

1. The water in a river will need to travel around obstacles (large rocks). This will cause it to bend.
2. Erosion (hydraulic action and abrasion) will occur on the outside of a bend. The water here will have more energy here as it is travelling faster.
3. A river cliff will form on the outside of a bend.
4. Deposition will occur on the inside of a bend. The water will have less energy here as it is travelling slower.
5. A slip off slope will form on the inside if a bend.

Waves

There are two types of waves, constructive and destructive.

Constructive waves build beaches by depositing sediment. This is because they have a strong swash and a weak backwash.

Destructive waves erode beaches as they have a strong backwash and a weak swash.

Caves, arches, stacks and stumps

Caves, arches, stacks and stumps are erosional landforms found in coastal landscapes. An example of a stack is Old Harry in Dorset, south England.

1. A crack is eroded by hydraulic action and abrasion and it expands.
2. The crack erodes further to form a cave.
3. The cave erodes all the way through to form an arch.
4. The arch will eventually collapse as it will be weathered and have nothing to support it.
5. A stack will be left which will eventually break down and form a stump.

Spits

A spit is a depositional landform found at the coast.

Spurn Head, found along the Holderness coast (east of England) is an example of a spit.

Sediment is transported along a beach due to the process of longshore drift. This is where waves move onto the beach at an angle (swash) and off the beach straight due to gravity (backwash).

As sediment is deposited off the beach it forms a spit.

Glaciers

Glaciers are made up of fallen snow that, over many years, compresses into large thickened ice masses.

The last glacial period, known in Britain as the Late Devensian glaciation, began about 33,000 years ago and ended around 12,000 years ago.

At the peak of the last glacial period a large ice sheet covered all of Scotland and went as far south as England's Midlands area.

Snowdonia is a well known glacial landscape in the UK with aretes (a narrow ridge which separates two valleys) and Roches moutonnees (bedrock eroded by a glacier).

Year 7 – History – Invaders

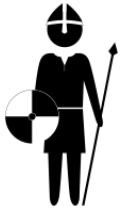
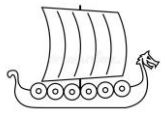
Celtic and Roman Britain BC 54 - AD 410

- Around **2,000 years** ago, Britain was ruled by tribes of people called the **Celts**. They were the original inhabitants of Britain before the Romans. They were great metal workers and builders.
- The **Roman invasion of Britain** could be the most significant event ever to happen to the **British Isles**. In **54-55BC** Julius Caesar from **Rome** in **Italy** tried to invade but failed. In **AD43**, ordered by **Emperor Claudius**, a big Roman army landed on the **beaches in Kent**.
- For around **100 years (a century)**, the Roman **army** had been building an **empire** across Europe. The Romans wanted Britain's precious metals **gold, tin** and **iron** – and its **cattle**. The Empire expanded across England and Wales, but stopped at Scotland.
- New cities, **roads**, villas and **baths** were built. Many Celts became **Roman citizens** and **spoke Latin**. However, the Romans faced serious challenges to their rule such as the rebellion from Boudicca, a Celtic queen who refused to accept Roman rule. The rebellion was crushed brutally.
- Over time the Roman Empire began to decline, and Britain faced invasion from foreign raiders like the Saxons.



Anglo Saxon Britain AD 410 – 1066

- People known as the **Angles** and the **Saxons** were people who migrated to Britain around the **4th and 5th centuries.**
- They travelled from areas of **Europe** that would now identify as **northern Germany, France and Scandinavia**.
- **Anglo-Saxons** was the name given to this group of people who formed together in England. "Angleland" became "England".
- There was good **farmland** in England, which could provide food and resources for people to live off. The homeland of the Saxons was cold and harsh land to farm.
- **The Roman Empire had collapsed**, so some Angles and Saxons believed they could win power and control over areas of Britain that previously wouldn't have been possible.
- Most Anglo-Saxons were **farmers** and lived off the land. They were able to make equipment such as **ploughs** and **tools** to help them in their work
- Some Anglo-Saxons were **skilled craftsmen** who made **decorative jewellery** such as **brooches** and necklaces.

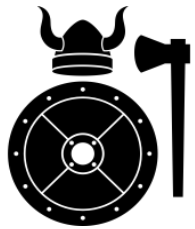




Viking Britain AD793 -1066

- The Viking age was from about **AD793 to 1066** .
- Many Vikings left their homes in **Scandinavia** and travelled by **longboat** to other countries, like Britain and Ireland.
- The people of Britain called the invaders **'Danes'**, but they came from **Norway** and **Sweden** as well as **Denmark**.
- Vikings sailed the seas **trading goods**. They bought silver, silks, spices, wine, jewellery, glass and pottery to bring back home.

What kind of people were the Vikings?

- The name **'Viking**' comes from a language called **'Old Norse'**. It means **'a pirate raid'**. People who went off raiding in ships were said to be 'going Viking'. But not all the Vikings were bloodthirsty warriors.
- They were **farmers and** kept animals and grew crops. They were skilful at **crafting and** made beautiful metalwork and wooden carvings.
- The first Viking raid recorded in the **Anglo-Saxon Chronicle** was around AD787. It was the start of a fierce struggle between the **Anglo-Saxons** and the **Vikings**.
- The Vikings were **pagans**, not Christians like most people living in Britain at the time but converted to Christianity in order to settle in Britain peacefully.



Vikings AD793 - 1066

Key Words

Keyword	Definition
Roman Empire	A group of countries across the Mediterranean, Europe, Asia and Africa ruled by Rome.
Emperor	The leader of an Empire
Legacy	The long-lasting impact of an event that took place in the past
Boudicca	A Celtic leader who led a rebellion against the Roman army
Rebellion	A situation in which people fight against the government in their country
Slaves	People who are legally owned by others as property, usually for labour
Anglo-Saxons	People who ruled the Kingdom of England from AD410-1066 from Germany, Denmark and the Netherlands
Anglo-Saxon Chronicle	A document from the 9th century showing Anglo-Saxons history.
Alfred the Great	An Anglo-Saxon leader who defeated the Vikings
Viking	People who arrived to the Kingdom of England from Scandinavia in 800AD for a raiding and settlement
Scandinavia	The name given to Norway. Sweden and Denmark, where Vikings came from
Pagans	Belief in more than one God
Danelaw	The area Viking leaders ruled, and Viking law applied (mainly the north)
Dark Ages	The name given to life in Britain after the Romans when life generally worsened
Wessex	The most powerful and important Anglo-Saxon area out of Viking control.
Sagas	Viking stories often inspired by history
Edward the Confessor	The last Anglo-Saxon king of England
Invaders	People who take over another country/area of land
Settlers	People who come to another country to stay and live
Raid	A surprise attack with the intention of stealing valuables

Year 7 – History – The Norman Conquest

Potential claimants to the English throne in 1066: Who should become king?

Harald Hardrada
Viking King of Norway
Vikings had ruled Britain before. Most feared warrior in Europe –Hardrada means 'hard ruler'.

VS

Harold Godwinson
Anglo-Saxon. One of the most powerful men in England.
Harold was a brave and respected solder with a tough streak.

VS

William of Normandy
Duke of Normandy, France.
Edward had supposedly promised that William should become King of England

1. The Battle of Stamford Bridge September 1066

King Harold **Godwinson** fought King Harald **Hardrada** and Godwinson's brother Tostig for the throne.

2. The Battle Hastings

King Harold Godwinson fought William at Hastings on the 14th October **1066**

Why did William win the Battle of Hastings?

Harold's army
Harold's army was made up of professional soldiers and conscripts, peasant farmers who were forced to join the army and fight.

Strategy
William had well trained and professional soldiers.
Harold's army was tired and reduced in size following the Battle of Stanford Bridge.
William showed his face on the battlefield.
The Saxons broke their shield wall.

What changes did William make to England?

The Feudal System

William also set up the **Feudal System** as a form of controlling the population through land and money.

William is at the top of the system, as he holds all the land and money, which he gives to the Barons.
This forced the Barons to give William their taxes, soldiers and promises of loyalty. They promise William their money, soldiers and loyalty.
They give the land to the Knights in return for loyalty and military service.

Finally the knights give the land to the peasants. The peasants farm the land and give food, money and services back to the knights.

Terror- The harrying of the north

William crushed rebellions against his rule by destroying villages, towns and farms in the North of England.

The Domesday Book

In 1086, it recorded information about each person who lived in England.
They wanted to know:

- How many people there was
- How much land they owned
- How many animals they had

From this information William could charge people taxes.

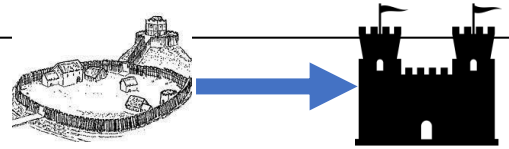
Castles

William also kept control by building castles.

Motte and Bailey – The first castles were built to help fight against rebellions. They were built quickly and made out of wood, meaning that they were not very strong, and could be easily destroyed.

Castles

Stone Keep – This castle was now made out of stone and had towers as a form of defence. The main part of the castle was the Keep, a large square tower, used as the main defence.



Year 7 – History – The Norman Conquest

Key Words

Keyword	Definition
Anglo-Saxons	People that lived in England before the Norman Conquest
Conquest	Taking an area by using force
Medieval	The period between 1066-1500
Cavalry	William's soldiers that fought on horses
Harrying	To completely destroy
Chronology	Putting events in the order that they happened
Claimant	a person who claims to have a right to something.
The Witan	The advisors or council to the King (Anglo Saxon)
Contender	a person or group competing with others to achieve something.
Normans	People from the Normandy region of France, led by King William
Bayeux Tapestry	An embroidery telling the story of the Norman Conquest
Hierarchy	Where people are ranked by their wealth and power
Noble	A person in the nobility who has a title and owns land
Peasant	The poorest person in society

Keyword	Definition
Heir	A person next in the line for the throne through bloodline
Rebellion	An act of armed resistance to an established government or leader.
Taxes	The government demand money from the people.
Harrying	Persistently carry out attacks on (an enemy or an enemy's territory.
Monarch	A royal head of state such as a King or Queen.
Oath	To swear a promise, often said to be witnessed by God
Feudal system	The structure of Medieval society
Confiscated	to take off or seize for themselves
Invasion	When an army or country uses force to enter and control another country.
Knight	Men who promise to fight for the their lord
Baron	A member of the nobility who owned land
Villein	Peasant, someone who worked on the land
The Domesday Book	A survey of English lands and ownership completed in 1086 by Williams men.
Motte and Bailey	An early castle that featured a fort on a hill surrounded by a fence.

Enquiry Question - How did we end up with a French King?

Alterative provision work

1. Read through your keywords on your knowledge organiser. In your History books, create a glossary of the key terms and draw an image to help you remember them.

2. Create a poster showing which men thought that they should be King of England in 1066. Who do you think should have been king?

3. Using your knowledge organiser, answer the following questions in your books using full sentences. Can yu create your own questions and answers?

- Which claimant came from Norway?
- Which claimant believed he was promised the throne by Edward the Confessor?
- Which two men fought at the Battle of Stamford Bridge and who won?
- Where was the Battle of Hastings?
- Why do you think William Duke of Normandy won?

4. Read the main arguments for Williams victory at Hastings. Match the arguments to the statements. Which reason do you think was the most important? Explain why.

5. Create your own diagram alone with images of the Feudal System. Why do you think this helped William and the Normans control England?

6. Divide a page of your book into four with a pencil and a ruler. Write a description of the three main ways that the Normans controlled England. Explain which one you think would have been the most effective.

Thinking hard challenge Task- Answer the enquiry question: How did we end up with a French King?

Year 7 – History – What was it like to live in Medieval England?

- Monasteries and nunneries looked after the old and sick, provided somewhere for travelers to stay, gave alms to the poor and sometimes looked after people's money for them.
- Monks could often read and write when many other people could not, so they copied books and documents and taught children.
- Monasteries often had libraries.

How religious were the medieval people?

- In the Middle Ages, almost everyone in Britain believed in God.
- People believed that heaven and hell were real places.
- People in medieval Britain followed **Roman Catholic Christianity**.
- They believed that the Pope, who lived in Rome had been given authority by God.
- The Pope led all the people who worked for the Church – including bishops, priests and monks.
- In the Middle Ages, the Church provided for the religious aspects of people's lives – baptism of babies, marriages, confession, the last rites for the dying and burying the dead.
- The church was the **heart of the community** - as a meeting place, ceremonies, prayer, festivals and fairs.
- The Church played a big part in government: Bishops sat in the House of Lords. They could raise an army for the king in times of war.

What was life like in a medieval village?

- In the Middle Ages nearly everyone lived in a village.
- There were no shops in these villages and **villeins** (the people who lived in the village) could only go to the nearest town if the lord of the manor let them.
- Appearance of the Village: Each village was surrounded by 3 open fields.
- They had no fences or hedges in them. Instead, these fields were divided into strips and separated by earth banks.
- Everyone got a share of the land in the village.
- Each year one of the fields was left fallow. This meant that no crops were grown in it to help the soli recover. Animals would be allowed to graze there, the droppings acting as fertilizer.
- A peasant's hut was made of **wattle** and **daub**, with a thatch roof but no windows.
- Women in the village worked as hard as the men. They cook, clean and look after the children, fetch water, make clothes and help in the fields when needed.

Living in a medieval town:

•A medieval town would seek a **charter** giving it the right to become a borough. The rich **merchants** would then be allowed to choose a mayor and hold a market.

•Houses were made of a wooden frame, with the gaps filled with woven strips of wood, known as 'wattle', and 'daubed', with clay and horse-dung. Most ro ofs were thatch.

•Medieval shops were workshops, open to the street for customers, with the craftsman's house above. Because few people could read, shops signs were a huge model showing the craftsman's trade. People of the same trade often worked in the same street.

•The streets of a medieval town were narrow and busy. They were noisy, with the town crier, church bells, and traders calling out their wares. There were ma ny fast food sellers, selling such things as hot sheep's feet and beef-ribs.

Year 7 – History – What was it like to live in Medieval England?

Women in the Middle Ages

- The law, set by men, greatly limited the freedom of women.
- Men held all the top jobs in the Middle ages – kings, knights, lawyers, bishops and even town and village officials.
- Women were not allowed to: marry without their parents' consent, could not own business without special permission, divorce their husbands or own property of any kind unless they were widows.
- A lot of the evidence from Middle Ages is from **monks** - Monks had no contact with women so they were hardly mentioned.

How deadly was the Black death?

The Black Death was an infamous **plague** causing an estimated 20 million deaths in Europe.

What were the causes of the Black Death?

We know today that the Black Death was caused by fleas that lived on black rats. However, in the Middle Ages there was no scientific understanding of illness and disease.

They used several different ways of explaining the cause of the Black Death: • Caused by a miasma – an 'evil air'. • a punishment by God for the sins of the people. There were 3 different types of plague : **Bubonic, Pneumonic and Septicemic**

How would you be punished in Medieval England?

- Criminals were put in the stocks or the pillory.
- These were wooden boards with holes for feet, hands or head.
- Medieval punishments were cruel, and crimes such as theft were punished by hanging.

How smelly was medieval England?

- Medieval towns did not have systems of **sewers or water pipes** like Rome had.
- Medieval towns were probably **filthy**.

- Garbage and human waste was thrown into the streets. Houses were made of wood, mud and dung. Rats, lice and fleas flourished in the rushes strewn over the clay floors of people's houses, often changed only once a year.

Definition	Keyword
Confession	Acknowledging and telling a priests of one's sins or bad deeds to try and get to Heavan.
Baptism	The act of bringing people into the Christian religion through sprinkling water on their heads.
Manor house	A landowner (a knight for example) lived there with his family; all the peasants worked on his land and paid taxes. The manor house was strong, secure and comfortable.
Tithe barn	Peasants had to give 10 per cent of what they grew to the priest; this was called a tithe and the produce was kept here.
Doom paintings	A painting that represented heaven and hell and were used in churches for people who could not understand Latin.
Catholic	A Christian who follows the teachings of the Roman Catholic Church
The Pope	Head of the Roman Catholic Church
Charter	An official document given by a ruler or government which sets out a town's or business's rights.
Monks and Nuns	Religious people who took vows in order to lead a religious life.
Monastery	A building or buildings occupied by a community of monks living under religious vows.
Chronicles	A written account of important historical events, usually written by monks
Buboes	A swollen, puss-filled lump in the armpit or groin. They could fill with a deadly, smelly black goo. If they burst inside you, the toxin would kill you
Deterrence	To prevent an action or event through fear of the consequences.
Peasant	A poor person of low social status who works on the land.
Church	A church: a building used for public Christian worship, The Church: official Christian religious organization that meet as a group

Time Keeping

1. Key Words

Tempo – How fast or slow the music is
Timbre – The type/colour of sound (instrumentation)
Texture – How thick or thin the music is
Ostinato – Short repeated rhythm
Polyrhythm – Layering of rhythms
Ensemble – Group of performers
Duration – Length of a note or piece of music
Dynamics – How loud or quiet the music is
Structure – How the sections of music fit together
Rhythm – A pattern of note lengths in time

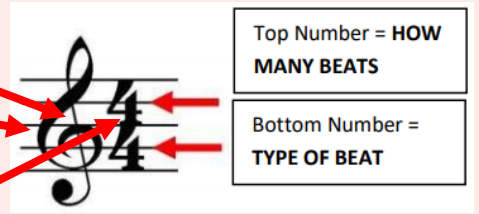
2. Signs and Symbols

Note Name	Note Symbol	Note Value
Semibreve	𝅝	4 beats
Minim	𝅗𝅥	2 beats
Crotchet	♩	1 beat
Quaver	♪	½ of a beat
Pair of Quavers	♫	2 x ½ beats = 1

Treble Clef

Stave

Time Signature



Top Number = **HOW MANY BEATS**

Bottom Number = **TYPE OF BEAT**

3. Tempo Markings

Vivace – *Lively and fast*
Largo – *Broad and slow*
Allegro – *Quick and bright*
Presto – *Sudden and very fast*
Andante – *Steady and at walking pace*
Lento - *Slowly*
Adagio – *Slow and stately*

4. Instruments

Year 7 Term 1A – PRE – What do different religions believe about God and the afterlife?

Key Words:

Philosophy: A way of thinking about & questioning the world such as human existence
Religion: The belief in and worship of a superhuman controlling power.
Ethics: The study of right & wrong concerning human behaviour.
Theist: A person who believes in the existence of a God or gods.
Atheist: A person who disbelieves in the existence of God or gods.
Agnostic: A person who neither believes or disbelieves in God.
Monotheism: A belief that there is only one God
Abrahamic Religions: Islam, Christianity & Judaism who have a shared worship in the God who is believed to have revealed himself to Abraham.
Dharmic Religion: Religions that originated in India
Logic: Using reason to describe something.
Faith: A complete trust or confidence in someone or something.
Proof: Evidence or argument establishing a fact or the truth of a statement.
Spirituality: The quality of being concerned with the human spirit or soul.
Soul: The spiritual or immaterial part of a human being or animal.
Heaven: A state of being eternally in the presence of God after death.
Hell: A situation, experience, or place of great suffering (usually after death).
Reincarnation: The rebirth of a soul in another body after death.
Enlightenment: The action or state of gaining spiritual knowledge.
Omnibenevolent: All loving/good
Omnipotent: All powerful
Omniscient: All knowing
Omnipresent: God is always there

Religious beliefs about God & the afterlife

Buddhism

- Buddhists do not believe in God
- Siddhartha Gautama is their founder & is now known as the Buddha - he is not a God
- A Buddha is someone who has reached enlightenment
- Buddhists believe that when we die we are reborn into something else based on our karma
- Karma is a sum of a persons actions e.g. if they have committed several bad actions, bad things will come to them
- We can escape the wheel of life, death & rebirth if we reach enlightenment
- Enlightenment can be achieved through meditation

Christianity

- Christians believe in one God who has three parts (God the Father, God the Son (Jesus) & the Holy Spirit) this is called the **Holy Trinity**
- ***"In the beginning was the word and the word was with God and the word was God"*** This Biblical quote suggests that Jesus has always been a part of God.
- They believe Jesus was the messenger of God
- Christians believe that all humans have a soul which was given by God
- Christians believe that after death a person's soul will live in either heaven or hell based on their actions. Christians believe in Salvation which is the belief that people can be saved and enter heaven via belief in Jesus the saviour.
- Christians also believe that God is everywhere & his spirit is within us and around us at the same time

Islam

- Muslims believe in one God (Allah)
- Muslims believe that Muhammad was the messenger of Allah
- Muhammad was believed to have been visited by an Angel
- It is forbidden in Islam to draw Allah & Muhammad
- Muslims believe that Allah is everywhere & have 5 set prayer times a day to show their dedication to him
- Muslims believe in heaven (Janna) & hell (Jahannam)
- Allah has given humans free will to choose how they act in this life which will affect their afterlife

Sikhism

- Sikhs believe in one God whom they call Waheguru
- The founder of Sikhism is Guru Nanak
- Guru Nanak had an experience with Waheguru & taught others that there is only one God (Ik Onkar)
- Sikhs believe in karma & that good actions bring about rewards
- Sikhs believe that our actions in this life affect the next
- Sikhs believe in reincarnation after death

Hinduism

- Hindu's believe in one God whom they call Brahman
- Hindu's do not have a specific founder
- Brahman is believed to take various forms including that of the tri-murti
- The **tri-murti** is three main forms of God; Braham, Shiva & Vishnu
- Brahma is the creator, Shiva is the destroyer & Vishnu is the protector
- Most Hindus believe that humans are in a cycle of death and rebirth called samsara
- Hindu's believe in reincarnation after death

Other worldly views on this life

Atheism	• God does not exist • There is no reliable proof for the existence of God • The meaning of life is self-produced
Agnostic	• Neither believes or disbelieves in God • Needs more proof to confirm the existence of God.
Spirituality	• Spiritualists are concerned with the essence of a human; their spirit • A sense of connection to something bigger than ourselves • Spirits of the dead exist & have the ability to communicate with the living • The afterlife is an opportunity to evolve & not to face reward or punishment like many religions believe

Empirical knowledge	Knowledge is gained from our senses.
Rational Knowledge	Knowledge is gained from our reason

Eastern (Dharmic religions) and Abrahamic religions

Eastern (Dharmic)	Abrahamic
Hinduism	**Judaism**
Buddhism	**Christianity**
Sikhism	**Islam**

Year 7 Term 1B – PRE – Do the teachings of Jesus stand the test of time?

Key Words:

Analogy: a comparison between one thing and another.
Jesus: believed to be the Son of God and the founder of Christianity
Sermon: a talk on a religious or moral subject.
Enemy: a person who is actively opposed or hostile to someone or something.
Parable: a story, poem or picture with a hidden moral or meaning.
Analogy:
Miracles: An extraordinary event that cannot be explained by natural or scientific laws and therefore often assumed to be linked to God.
Trinity: the concept of God in three parts, God the Father, the Son and The Holy Spirit.
Heaven: A state of being eternally in the presence of God.
Commandment: a rule given by God or other deity.
Samaritan A charitable or helpful person.
Prodigal: spending money or using resources freely and recklessly

Who was Jesus?

Jesus is the **founder** of Christianity.

He was born into the **Jewish faith** to the **Virgin Mary**.

His birth was considered to be a miracle, as he was thought to be the person who was going to be the **saviour of the world**.

Throughout his life, Jesus performed many **miracles**. For example, he fed 5000 people with 5 loaves and 2 fish.

Christians believe that Jesus is the **Son of God**. Christians believe that there is one God, but that God has 3 parts: the Father, the Son and the Holy Spirit. The Son refers to Jesus.

What is the most important rule to follow?

'Love the Lord your God with all your heart and with all your soul and with all your mind. And 'Love your neighbour as yourself.'

This is known as the **golden rule** meaning everybody should follow this.

It simply means to treat others as you wish to be treated.

Jesus used the ***parable of the Good Samaritan*** to demonstrate this and highlight that our 'neighbour' is anyone within humanity.

In this story, a man was badly beaten up, yet a Priest and a Levite (a highly religious person) walked past and ignored him. A Samaritan (someone who would have been hated at the time) came past and helped the man.

Do people always deserve a second chance?

Jesus told the ***Parable of the Lost Son*** to show why he still showed kindness to sinners.

In the parable, a man has two sons. One son stays loyal to this father and works with him for many years. The younger son wanted his inheritance (money) from his father, so he took the money and went away, wasting it on a wild lifestyle.
When the son ran out of money, he realised his mistake and went back to his father and begged for his forgiveness.

The older brother was angry, but the father was filled with love for his son and welcomed him back with open arms.

Jesus taught, through this parable, that God will forgive any sinner who comes back to him, and so we should do the same.

Is it always right to forgive?

One of Jesus' most important teachings was about **forgiveness** **(an intentional decision to let go of resentment and anger)**

Jesus was once asked how many times we should forgive. One of his disciples, Peter, suggested 7 times. Jesus responded: ***'I tell you, not seven times, but seventy-seven times'.***

Jesus' most important lesson on forgiveness actually came at the time of his death.

Christians believe that the reason why Jesus came to earth was to be a ***sacrifice*** for the sins of the world. Through his ***crucifixion*** (death on the cross), Christians people that all people are able to be forgiven for their sins.

Jesus, as he died, said: ***'Father, forgive them, for they do not know what they are doing'.***
Christians understand that they have been forgiven for their sins, but they must also then forgive other people too.

Do our actions matter in this life?

According to Christianity, YES

Christians believe in an afterlife; heaven and hell. Some Christians also believe in Purgatory (where souls can be cleansed before going to heaven)

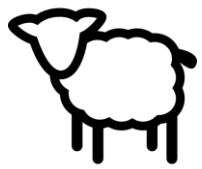
Heaven and Hell are permanent and so **Christians will avoid sinful behaviour** so they can have an eternal life with God in heaven.

Jesus taught how people could act in this life to gain a place in heaven.

The ***Parable of the Sheep and the Goats*** teaches people that to act like a sheep you must;

Feed the hungry
Give water to the thirsty
Look after the sick
Visit those in prison

Christians might give to charity, feed the homeless, or take care of family members who are ill to ensure they are acting righteously and can gain a place in heaven in God's presence.



Year 7 Spanish – Topic 1 – My identity

A. Me presento Introducing myself
Hola Hi
Buenos días Good morning
Buenas tardes Good afternoon
Adiós Goodbye
Hasta mañana See you tomorrow
Hasta luego See you later

¿Cómo te llamas? What's your name?
Me llamo … My name is …

¿Cómo estás? How are you feeling?
Estoy muy bien I am feeling very well
Estoy bien I am feeling well
Estoy regular I am feeling ok
Estoy mal I am feeling bad

¿Cuántos años tienes? How old are you?		
Tengo I have	1. **un**	**año** year
	2. **dos**	**años** years
	3. **tres**	
	4. **cuatro**	
	5. **cinco**	
	6. **seis**	
	7. **siete**	
	8. **ocho**	
	9. **nueve**	
	10. **diez**	
	11. **once**	
	12. **doce**	

Useful phrases
Por favor please
Gracias thank you
Lo siento sorry
Sí yes
No no

B. ¿Cuándo es tu cumpleaños? When is your birthday?					
Mi cumpleaños es el My birthday is the	1. **uno** 2. **dos** 3. **tres** 4. **cuatro** 5. **cinco** 6. **seis** 7. **siete** 8. **ocho** 9. **nueve**	10. **diez** 11. **once** 12. **doce** 13. **trece** 14. **catorce** 15. **quince** 16. **dieciséis** 17. **diecisiete** 18. **dieciocho** 19. **diecinueve**	20. **veinte** 21. **veintiuno** 22. **veintidós** 23. **veintitrés** 24. **veinticuatro** 25. **veinticinco** 26. **veintiséis** 27. **veintisiete** 28. **veintiocho** 29. **veintinueve** 30. **treinta** 31. **treinta y uno**	**de** of	**enero** January **febrero** February **marzo** March **abril** April **mayo** May **junio** June **julio** July **agosto** August **septiembre** September **octubre** October **noviembre** November **diciembre** December

C. ¿Cómo es tu personalidad? What is your personality like?				
Diría que I would say that **En mi opinión** In my opinion **Pienso que** I think that	**soy** I am **no soy** I am not **mi hermano es** my brother is **mi hermana es** my sister is	**bastante** quite **demasiado** too **muy** very **tan** so **un poco** a bit	**gracioso** funny **independiente** independent **inteligente** intelligent **responsable** responsible **paciente** patient **simpático** friendly **tolerante** tolerant	**arrogante** arrogant **perezoso** lazy **serio** serious **tonto** silly **tímido** shy
			graciosa funny **inteligente** intelligent **independiente** independent **responsable** responsible **paciente** patient **simpática** friendly **tolerante** tolerant	**arrogante** arrogant **perezosa** lazy **seria** serious **tonta** silly **tímida** shy

Key verbs

en el pasado era
in the past I was

me gustaría ser
I would like to be

D. ¿Cómo eres? What are you like?

Tengo I have

No tengo I don't have

Mi padre My dad

Mi hermano My brother

Mi madre My mum

Mi hermana My sister

tiene
has

no tiene
does not have

los ojos azules
blue eyes

los ojos verdes
green eyes

los ojos marrones
brown eyes

y
and

también
also

el pelo castaño light brown hair

el pelo moreno dark brown hair

el pelo pelirrojo red hair

el pelo rubio blonde hair

y corto
and short

y largo
and long

barba a beard

bigote a moustache

gafas glasses

pecas freckles

tatuajes tattoos

Key verbs

en el pasado tenía
in the past I used to have

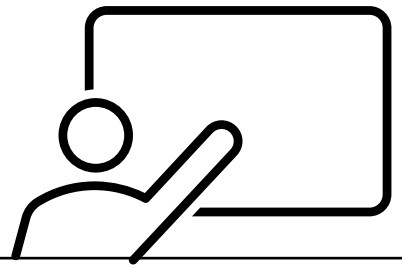
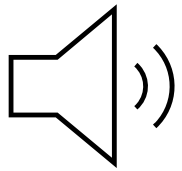
me gustaría tener
I would like to have

E. ¿Dónde vives? Where do you live?				
Vivo I live **Mi hermano vive** My brother lives **Mi hermana vive** My sister lives **Mi familia y yo vivimos** My family and I live	**en un piso** in an apartment/ flat **en una casa** in a house	**en un pueblo** in a village **en la ciudad** in the city **en la costa** on the coast **en el campo** in the countryside **en la montaña** in the mountains	**en el norte de** in the north of **en el este de** in the east of **en el sur de** in the south of **en el oeste de** in the west of	**Inglaterra** England **Gales** Wales **Escocia** Scotland **Irlanda** Ireland **España** Spain **México** Mexico **Colombia** Colombia **Argentina** Argentina **Cuba** Cuba **Costa Rica** Costa Rica

Key verbs

en el pasado vivía
in the past I used to live

me gustaría vivir
I would like to live

LL 'Yuh' **Ll**amo	**Z** 'Th' **Z**umo	**Ge** 'Heh' **Ge**nial	**Ñ** 'Ny' Ma**ñ**ana
CE 'The' Ha**ce**r	**Que** 'Keh' Por**que**	**Gi** 'Hee' '**Gi**mnasio'	**V** 'B' **V**erde
CI 'Thi' **Ci**nco	**Qui** 'Kee' **Qui**en	**J** 'H' Me**j**or	**RR** 'rrrr' Ho**rr**ible
			**H** '-' **H**ola 

KS3 Spanish – Key vocabulary

Connectives

además in addition
también also
o or
pero but
y and
sino if not
porque/ya que because
sin embargo however

Opinions

me encanta I love
me gusta I like
prefiero I prefer
no me gusta I don't like
odio I hate

en mi opinión in my opinión
para mí for me
sin duda without doubt

considero que I consider that
creo que I believe that
diría que I would say that
pienso que I think that

Reasons

es
it is

bastante quite
completamente completely
demasiado too
muy very
tan as
un poco a bit

agradable enjoyable
divertido fun
emocionante exciting
guay cool
maravilloso wonderful
genial great
increíble incredible
relajante relaxing

aburrido boring
decepcionante disappointing
horrible awful
fatal terrible

Present

A veces sometimes
Normalmente normally
Nunca never
Siempre always
Por la mañana in the morning
Por la tarde in the afternoon
Por la noche in the evening

después after
finalmente finally
luego then
primero firstly
segundo secondly

tengo I have
soy I am
hay there is/ there are
juego I play
hago I do
voy I go

bebo I drink
charlo I chat
como as/like
escucho I listen
leo I read
uso I use
visito I visit

tener to have
ser to be
jugar to play
hacer to do
ir to go
beber to drink

charlar to chat
comer to eat
escuchar to listen
leer to read
usar to use
visitar to visit

Future

Esta noche This evening

Mañana Tomorrow

La semana próxima Next week

Este fin de semana This weekend

El año próximo Next year

En el futuro In the future

voy a I am going
va a He/She/It is going
vamos a We are going

voy a comer I am going to eat
voy a escuchar I am going to listen
voy a estudiar I am going to study
voy a hacer I am going to do
voy a ir I am going to go
voy a jugar I am going to play
voy a salir I am going to go out
voy a ver I am going to watch/see

será it will be
sería it would be
me gustaría I would like
si pudiera if I could

Past

Ayer Yesterday
Anoche
Yesterday evening
El fin de semana pasado
Last weekend
El año pasado
Last year
En el pasado
In the past
La semana pasada
Last week
Recientemente
Recently

era I was
tenía I had
había there used to be

fue it was

jugué I played
hice I did
fui I went
bebí I drank
charlé I chatted
comí I ate
escuché I listened
leí I read
usé I used
visité I visted

Master Class Session 1: Maths

Look, Cover, Write, Check

Date:

Look - look at the sentence or word on your knowledge organiser. Read over it twice.	Cover (cover up the sentence or word by putting your hand over it or turning the page)	Write – write the sentence or word here. Spelling and word order both matter!	Self checking (green pen). Check your answer and give yourself a tick or a cross. If you got it wrong, correct your answer.

Master Class Session 2: English

Look, Cover, Write, Check

Date:

Look - look at the sentence or word on your knowledge organiser. Read over it twice.	Cover (cover up the sentence or word by putting your hand over it or turning the page)	Write – write the sentence or word here. Spelling and word order both matter!	Self checking (green pen). Check your answer and give yourself a tick or a cross. If you got it wrong, correct your answer.

Master Class Session 3: Science

Look, Cover, Write, Check

Date:

Look - look at the sentence or word on your knowledge organiser. Read over it twice.	Cover (cover up the sentence or word by putting your hand over it or turning the page)	Write – write the sentence or word here. Spelling and word order both matter!	Self checking (green pen). Check your answer and give yourself a tick or a cross. If you got it wrong, correct your answer.

Master Class Session 4: Geography

Self-Quizzing

Date:

Question Number	Question	Answer	Self checking (green pen). Check your answer and give yourself a tick or a cross. If you got it wrong, correct your answer.
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9			

Master Class Session 5: History

Self-Quizzing

Date:

Question Number	Question	Answer	Self checking (green pen). Check your answer and give yourself a tick or a cross. If you got it wrong, correct your answer.
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9			

Master Class Session 6: MFL

Self-Quizzing

Date:

Question Number	Question	Answer	Self checking (green pen). Check your answer and give yourself a tick or a cross. If you got it wrong, correct your answer.
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9			