The Trafalgar School at Downton

Knowledge Organiser

Year 7

2026/2027

Name …….. Tutor……..

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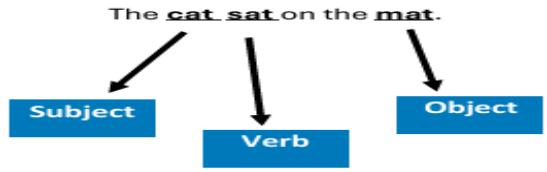
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Sentence Construction	
Capital letters	Used at the beginning of sentences and for proper nouns.
Main clause	A clause that makes sense on its own.
Subordinate clause	A clause that does not make sense on its own.
Subordinating conjunction **(I SAW A WUBUB)**	Introduces a subordinate clause e.g. If, since, as, when, although, while, after, before, until, because (not an exhaustive list).
Coordinating Conjunctions **(FANBOYS)**	A word that connects mains clauses or phrases e.g. for, and, nor, but, or, yet, so.
Declarative sentence	Makes a statement.
Imperative sentence	A command or an instruction.
Interrogative sentence	Asks a question.
Exclamatory sentence	Expresses strong emotion and ends with an exclamation mark.
Fragment	A 'sentence' that does not contain a verb and/or subject.
Simple sentence	A sentence consisting of only one main clause.
Compound sentence	A sentence which includes two main clauses joined by a semi-colon or coordinating conjunction.
Complex sentence	A sentence which includes a main clause and one or more subordinate clauses.

Simple Sentence

A sentence consisting of only 1 main clause. EXAMPLE:



Compound sentence

A sentence consisting of two main clauses joined by a coordinating conjunction or semi colon. Example:

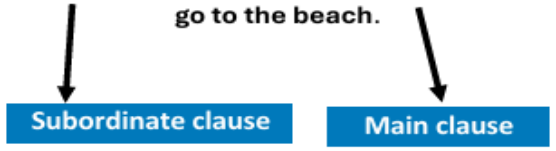
The cat sat on the mat and it fell asleep.



Complex sentence

A sentence which includes a main clause and one or more subordinate clauses. EXAMPLE:

Although it was raining, **the family decided to go to the beach.**



Punctuation	
Full stops	Used to mark the end of a sentence.
Commas	• To separate main and subordinate clauses • To separate items in a list. • After introductory clauses, phrases, discourse markers.
Apostrophes	Used to show omission or possession.
Semi-colon	• Used between two main clauses that are closely related. • Used in-between item of a list that are already complex due to the inclusion of extra detail.
Colon	• To introduce a list, information, ideas and explanation. • To introduce quoted information.
Dash	• To add extra information. • To signal a change in tone.
Hyphen	Used to combine words into a compound word e.g. well-being
Brackets	• Separates extra information in an informal style (round) • Gives alternatives (round) • Around an ellipsis where words have been omitted from a quotation [square]
Ellipsis	Used to create suspense, show words are missing or show a trailing off thought.

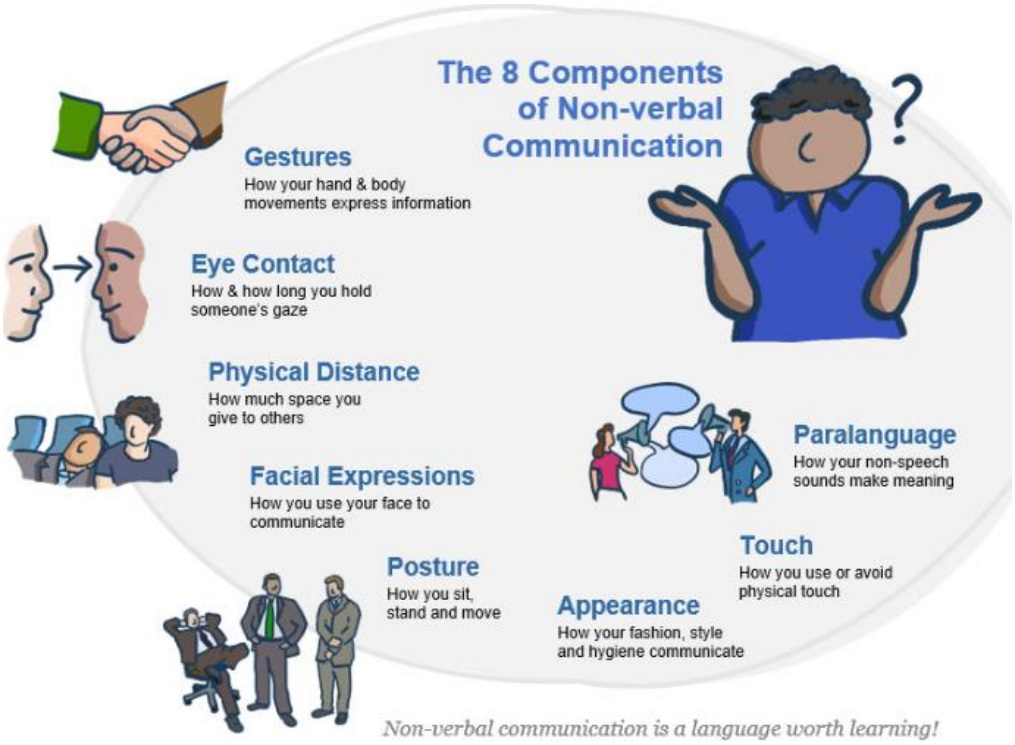
Word Types	
Abstract Noun	An idea or a concept.
Noun	A name, place or thing.
Proper Noun	Names of people and places which need a capital letter.
Adjective	A word that describes a noun.
Verb	An action word (doing word) or a state (be, have)
Adverb	A word that describes a verb. An adverb often ends with –ly.
Modal Verb	A verb that shows necessity, possibility or certainty. e.g. should, could, will, must.
Preposition	Indicates position, time or place.
Personal Pronoun	Used instead of the name for a person/thing. e.g. you, he, I, she
Collective pronoun	Singular – someone, somebody, something etc Plural – they, we, them etc

Key Vocabulary- Methods	Definitions
ALLEGORY	A story, poem or picture that can have a hidden meaning- typically to promote political causes.
ALLITERATION	The repetition of consonant sounds at the start of words in close proximity.
ANECDOTE	A short amusing or interesting story about a real incident or person.
ASSERTION	A confident and forceful statement of belief that sounds true.
CONNOTATION	The deeper meaning a word may suggest or imply.
EMOTIVE LANGUAGE	The deliberate use of words and phrases to evoke emotional response.
EXPERT OPINION	The judgement or assessment made by someone who is a specialist of a topic.
FACT	Information that can be proven as true.
FORESHADOWING	A narrative device in which a hint of what is to come later in the story is given.
HYPERBOLE	Exaggerated statements or claims not meant to be taken literally.
OPINION	A personal view or judgement formed about something.
PRONOUNS	Inclusive terms such as ‘we’, ‘us’ and ‘our’ to involve an audience.
PROPAGANDA	The spreading of information, often biased or misleading, to promote political cause.

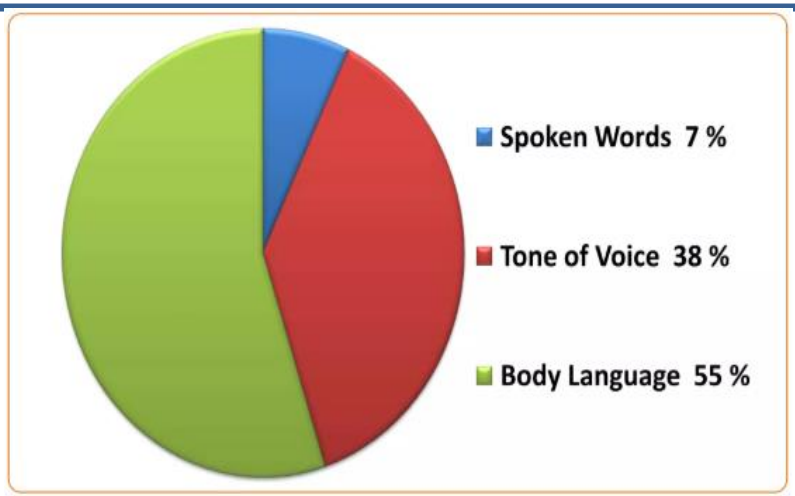
Key Vocabulary	Definitions
REPETITION	The deliberate use of the same word or phrase.
RHETORICAL QUESTION	A question asked in order to cause one to think not to get an answer.
STATISTICS	The use of numerical data, such as percentages, to prove an idea.
SYMBOLISM	Use of objects or people to represent ideas beyond literal meaning.
TRIPLE	Using three adjectives to describe for effect.

Key Vocabulary	Definitions
COMMUNISM	A system where businesses are owned by the state & profits shared by all.
DEMOCRACY	A system which is governed for the people, by the people (through voting)
DICTATORISHIP	A government where a ruler has total power over a country.
EQUALITY	The state of fairness in status, rights and opportunity.
OPPRESSION	Prolonged cruel or unjust treatment or exercise of authority.
REBELLION	An act of resistance to an established government or leader.
TYRANT	A cruel or oppressive leader with unlimited power over the people.
UTOPIA	An imagined society that possesses perfect qualities.

Key Vocabulary	Definitions
Anecdote	A short, personal story to emphasise a point.
Pronouns (personal and collective)	Words that are used to address the audience directly and to encourage ideas of togetherness.
Emotive Language	Language used deliberately to gain an emotional response.
Fact	A true statement.
Opinion	Someone's personal beliefs or thoughts.
Repetition	Where something is repeated for impact.
Rhetorical Questions	A question asked by the speaker which does not require an answer. It helps to make the audience think.
Experts	Using a figure of authority/specialist who can support your idea/point.
Statistics	Numerical data that can be used to reinforce your point.
Triple	A group of three words, in a list, used to describe something.
SPIVS	Speed, Pitch, Intonation, Volume, Structure



Is how you say something important?



ENGLISH - AN INTRODUCTION TO SHAKESPEARE

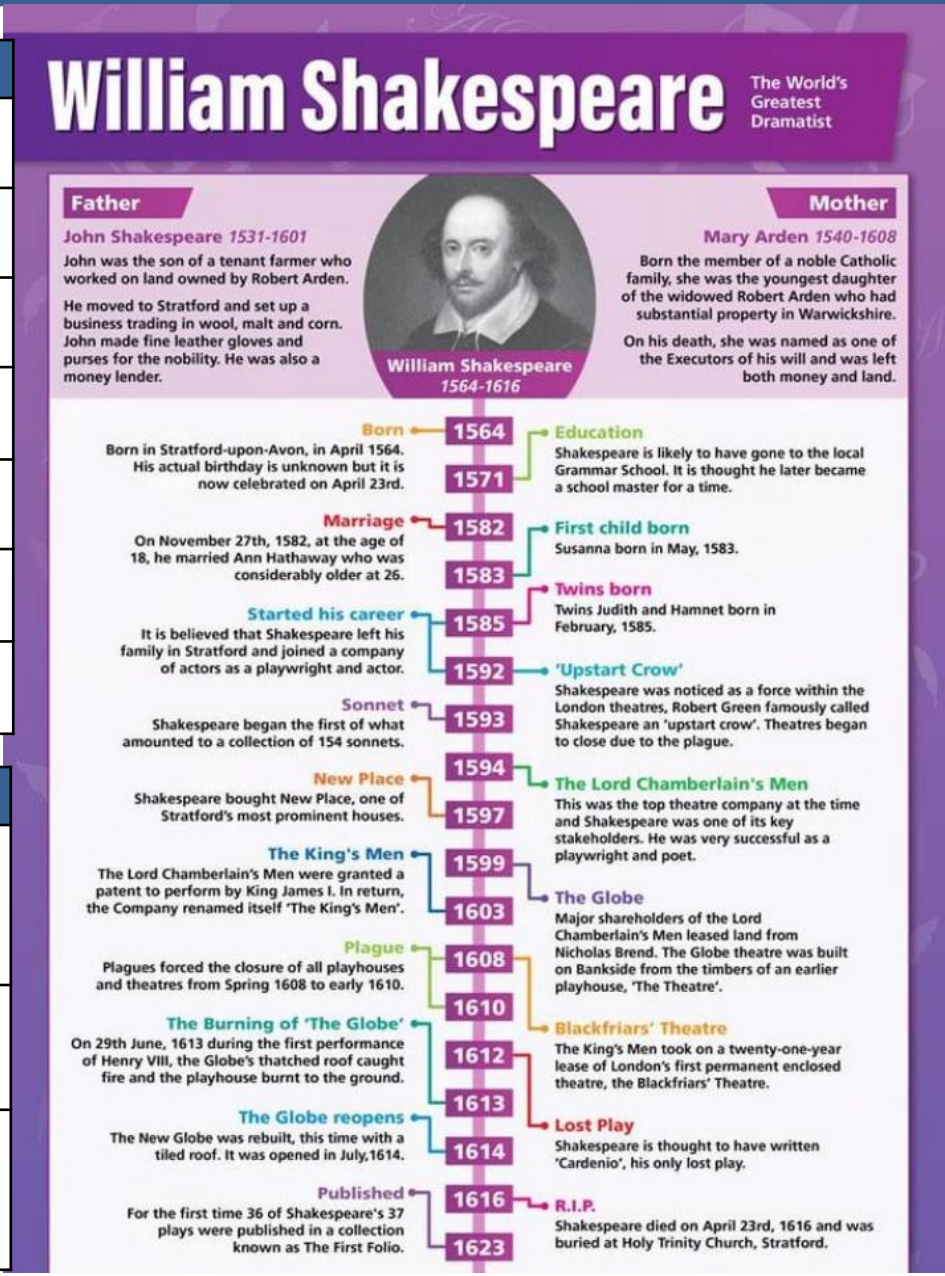
Key Vocabulary	Definitions
Act	A major division of the overall story, grouping several smaller parts called scenes and marking significant shifts in the plot.
Scene	A dramatic part of a story, at a specific time and place, between specific characters.
Character	A person or being in a play, film or story.
Protagonist	The main character of a story who makes key decisions that affect the plot.
Antagonist	The character, group, or force that directly opposes the protagonist and creates the central conflict.
Soliloquy	A dramatic device where a character speaks their innermost thoughts and feelings aloud, usually while alone on stage, revealing information directly to the audience that other characters aren't privy to.
Monologue	A long speech delivered by a single character, used to express their inner thoughts, feelings, or to convey important information to other characters or the audience.
Aside	A brief comment or remark made by a character, spoken directly to the audience (or to themselves), which other characters on stage are not meant to hear.
Stage directions	Written instructions in a script (usually in italics, parentheses, or indented) that guide actors instructions.
Foreshadowing	A literary device where authors provide hints, clues, or warnings about future plot developments, building suspense and guiding reader expectations.

Use this QR code to take you to the Globe Theatre website where you can find out more about Shakespeare and his life and work. Choose from 'That is the Question', 'William Shakespeare', 'Shakespeare's Plays' and 'Shakespeare's World' and click on 'Discover more'.

Use this QR code to take you to the Royal Shakespeare Company website. Select 'About Shakespeare' and choose from the drop down menu.

Key Vocabulary	Definitions
Simile	A comparison between two things using the words 'like' or 'as'.
Metaphor	A comparison where something is described as something else.
Personification	Describing a non-living things as though it has human qualities/characteristics.
Dramatic Irony	When the audience knows something that the characters do not.
Context	The situation surrounding an event that helps it to be understood.
Dramatic Foil	A character who is the opposite of another character in order to emphasise their differences.
Pathetic Fallacy	When the weather or nature reflects the feelings of the character and/or mood of the text.

Shakespeare's plays - categories	
Comedy	Shakespeare comedies are generally identifiable as plays full of fun and wordplay. They often have disguises and mistaken identities, with complicated plots that are sometimes difficult to follow.
History	Shakespeare's history plays dramatise England's most turbulent political period turning real kings, wars and power struggles into compelling drama.
Tragedy	Shakespearean tragedy centres on a noble tragic hero whose fatal flaw (hamartia), combined with forces of fate, leads to a catastrophic downfall that causes widespread suffering and evokes pity and fear.



Poetic terminology- structure	Definitions
1. Alternative Rhyme	When the last words on every other line of poetry rhymes.
2. Caesura	Pause in a line indicated by a punctuation mark.
3. End- stopped line	Line ending in a punctuation mark.
4. Enjambment	No punctuation at the end of a line in poetry causing a run-on line.
5. Quatrain	A stanza of four lines.
6. Rhyming Couplet	When the words at the end of two consecutive lines of poetry rhyme.
7. Rhyme Scheme	Fixed pattern of organising rhyme e.g. abab, aabb, abba
8. Stanza	A group of lines in a poem; a verse
9. Volta	Turning point in a poem; shift in tone
Form	**Definitions**
10. Free Verse	No rhyme scheme or regular metre.
11. Metre	The rhythmic structure of lines in a poem.
12. Sonnet	A poem that contains 14 lines. Typically about love.
13. Syllable	A single unbroken sound within a word.

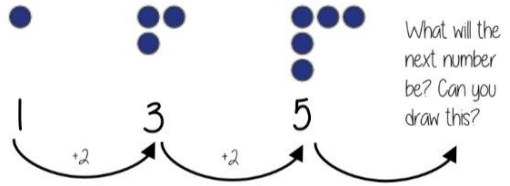
Perspective	Definitions
14. Speaker	The person speaking in the poem
15. Tone	The choice of writing style the writer employs to convey the specific feelings, emotions or attitudes.
Language	**Definitions**
16. Cliché	An idea that has been used too often and therefore lost its original meaning and impact.
17. Emotive Language	Language used to get an emotional
18. Extended Metaphor	A metaphor that continues throughout a text or piece of writing.
19. Imagery	Where the writer uses words or phrases that create a certain image in the reader's mind.
20. Juxtaposition	The placement of two contrasting elements close together to emphasize their differences.
21. Metaphor	When one thing is directly compared to another. E.g. the tank is a monster.
22. Onomatopoeia	A word that sounds like what it means e.g. crash, splash.

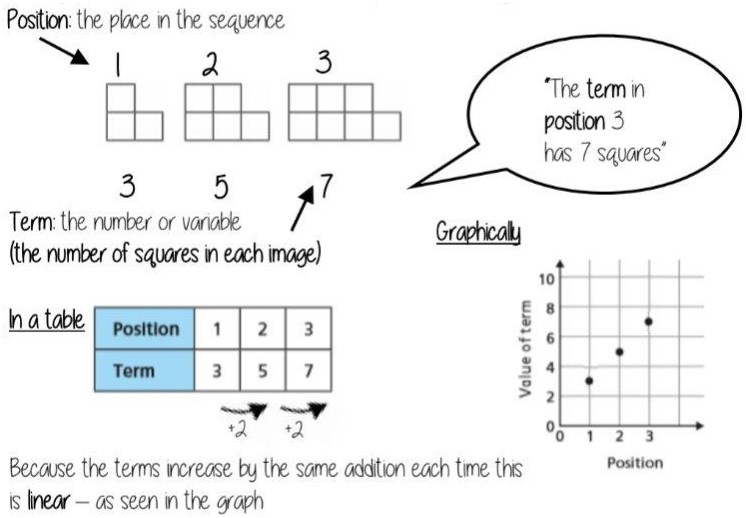
Key vocabulary	Definition
23. Symbolism	Using objects or characters to represent an important idea or concept.
24. Repetition	When the same line, word or phrase is written more than once.
25. Rhetorical questions	A question that does not require an answer.
26. Alliteration	The repetition of consonant sounds at the beginning of words close to each other.
27. Assonance	The repetition of a vowel sound/blends within words close to each other e.g. loud crowd
28. Personification	Giving human qualities to an object. E.g. the bullets screamed.
29. Semantic Field	Where a group of words all link together to form a similar idea or concept.
30. Sibilance	Repetition of the 's' sound
31. Simile	When one thing is compared to another using like or as.

Maths - Sequences

Key Vocabulary	Definitions
Sequence	Numbers or objects written in order following a mathematical rule (a pattern).
Term	One of the separate numbers or objects in the sequence.
Position	The location in the sequence of a term.
Term-to-term rule	A description of how a term is obtained from the previous term.
Linear	A sequence with a constant difference.
Non-Linear	The difference between the term increases or decreases by a different amount.
Arithmetic sequence	Same as "linear sequence“.
Constant difference / Common difference	Where the pattern in the sequence is adding or subtracting the same number each time.
Ascending	Rising in value.
Descending	Falling in value.
Fibonacci sequence	Where the next term is the sum of the previous two terms.
Geometric sequence	Where each term is being multiplied by the same amount.

Use term to term rule of a sequences to predict





Use key maths language e.g. doubles, halves, multiply by two, add four to the previous term etc.
To explain a whole sequence you need to include a term to begin at.

non-linear Sequences 1, 2, 4, 8, 16...

How do I know this is a non-linear sequence?
It increases by multiplying the previous term by 2. This is **a geometric** sequence because the constant is multiply by 2

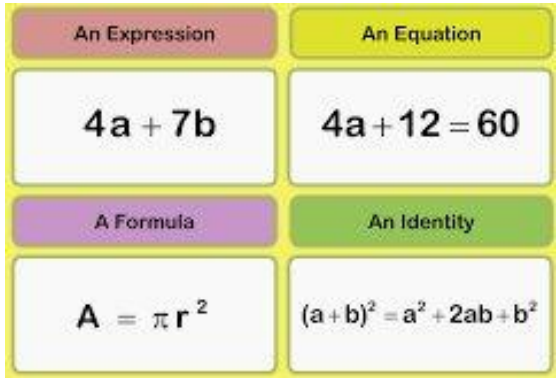
Example of Fibonacci 0 1 1 2 3 5 8 ...

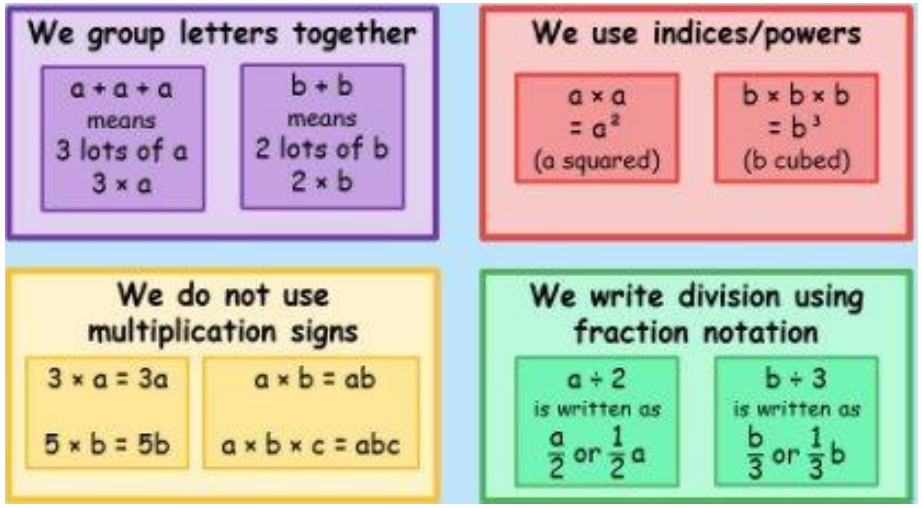
Each term is the sum of the previous two terms.

Maths - Algebraic Notation

Key Vocabulary	Definitions
Function	A rule that takes a number and does one or more operations on it.
Input	The number that goes into the function.
Output	The number that comes out of the function.
Estimate	An approximate answer that will be close to the exact answer.
Square	The result of multiplying a number by itself.
Operation	A mathematical process applied to a number, such as add, subtract, multiply, divide, and so on.
Inverse	The "opposite" operation that "undoes" the original, eg, subtracting is the inverse of adding.
Term	A constant, variable or coefficient and one or more variables together.
Variable	A letter or symbol used to represent a number that is either not known yet or which may change.
Coefficient	A number placed directly inn front of a variable to show by how much it is to be multiplied.
Commutative	Where you can change the order of the numbers and still get the same answer, e.g. 5 x 2 is commutative but 5 – 2 is not.
Expression	A group of numbers, variables, coefficients and operations (must not have an equal sign)
Substitute	Replace a variable with an actual number.

Key Vocabulary	Definitions
Evaluate	"work out" the answer
Constant	A fixed value that never changes
Function Machine	A representation showing one or more operations that transform an input into an output.

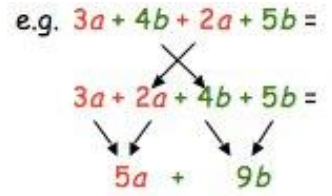


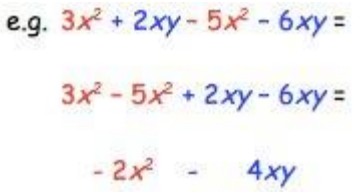


Maths - Equality and Equivalence

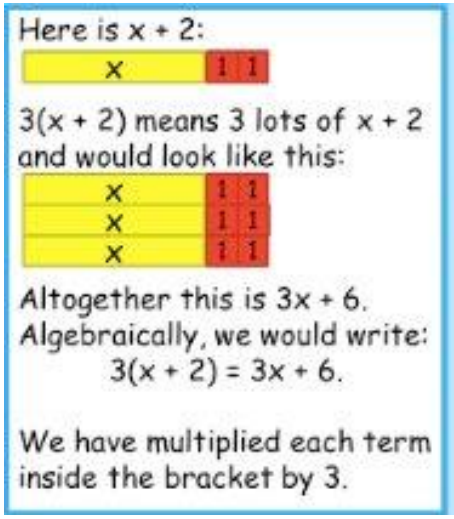
Key Vocabulary	Definitions
Equality	Two mathematical expressions with the same answer.
Equation	A mathematical sentence that joins two expressions with an equals sign to show they are the same.
Solve	To find the value of the unknown that would make the equation equal.
Unknown	A missing number whose value we do not yet know.
Like terms	Terms where the variables and the indices are the same.
Index	The power of a number.
Indices	The plural of index.
Simplify	To rewrite an expression in the most efficient , e.g. 3a + 4a is simplified to 7a.
Identity	An equation that is true for all values.
Subject	The dependant variable in a formula or equation, identifiable by being on its own on one side of the equals sign.
Expand	To remove the brackets from an expression by multiplying terms.
Factorise	To rewrite an expression in brackets. Completed by finding the highest common factor, placing this outside the bracket and dividing by this to get an expression for inside the bracket.
Solution	A value that makes an equation true.
Collect like Terms	To combine **like** terms into a simpler expression.

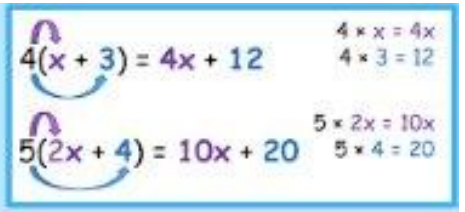
Simplifying Expressions

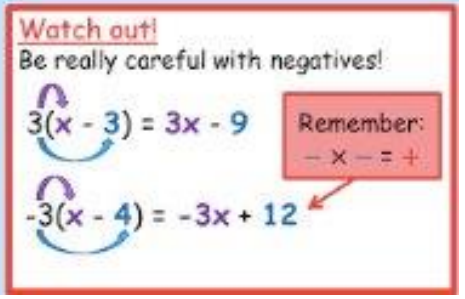


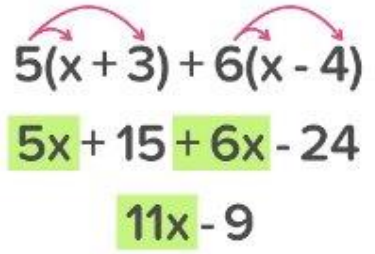


Expanding





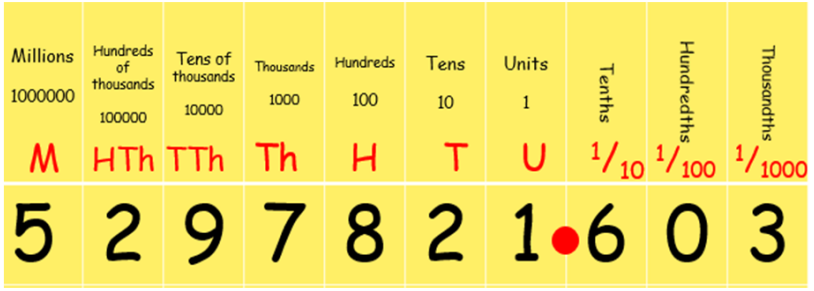




Maths - Place Value, Ordering Integers and Decimals

Key Vocabulary.	Definitions
Digit	A single number, from 0, 1, ,2, 3, 4, 5, 6, 7, 8, 9.
Integer	A whole number, including 0 and negatives.
Decimal	A number that uses a decial point to show a whole combined with a part of that whole.
Place value	The value of a digit based on its position or column in a number.
Positive	Greater than zero.
Negative	Less than zero.
Interval	The space or gap between adjacent numbers on a number line.
Million	A thousand thousand (6 zeros).
Billion	A thousand million (9 zeros).
Tenths	Parts produced when one whole is divided into ten equal parts.
Hundredths	Parts produced when one whole is divided into one hundred equal parts.
Difference / Range	The set or span of values being considered. largest value subtract smallest value.
Median	The middle of a list of ordered numbers
Power / index	Tells you how many times to multiply a number by itself.
Standard form / scientific notation	A way of writing very large or very small numbers.
Significant figure	An important in a number that tells us its size
Ascending	Arranged from smallest to largest.
Descending	Arranged from largest to smallest.

Place Value System



Five million, two hundred and ninety seven thousand, eight hundred and twenty one point six zero three.

Inequalities

- $>$ is more than ...
- $<$ is less than ...
- $\geq$ is more than or equal to...
- $\leq$ is less than or equal to...

Standard Form

Standard form is a system of writing numbers which can be particularly useful when working with very large numbers or very small numbers. Standard from is written in the form

$$a \times 10^n \text{ (where } 1 < a \leq 10)$$

Example

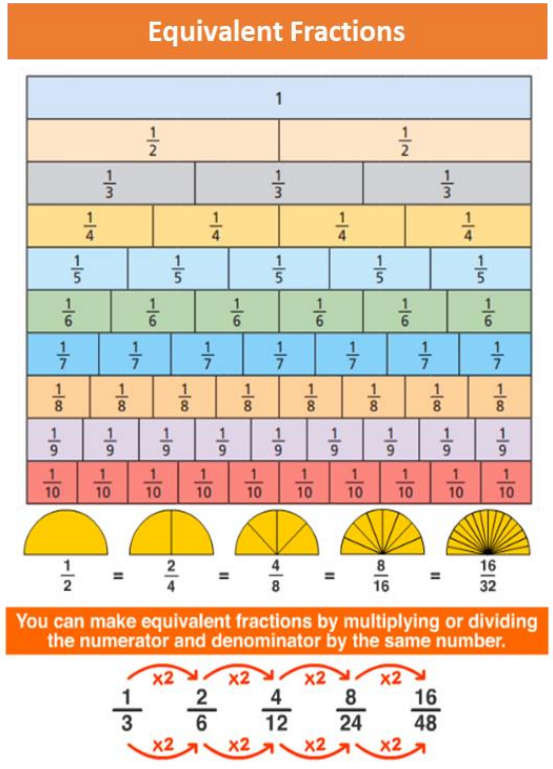
What is 86 000 in standard form?
86 000 can be written 8.6 x 10 000
10 000 = 10 x 10 x 10 x 10 = 10^4
So 86 000 = 8.6 x 10^4
(You would have to move 8.6 four place values larger to get back to 86000)

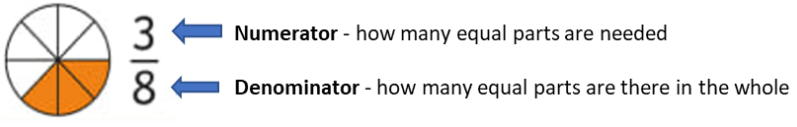
Example

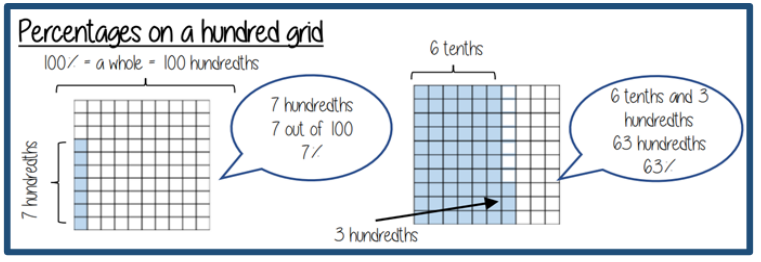
What is 0.005 in standard form?
0.005 can be written 5 x 0.001
$0.001 = \frac{1}{1000} = 10^{-3}$
So 0.005 = 5 x 10^{-3}
(You would have to move the 5 three place values smaller to get back to 0.005)

Maths - Fraction, Decimal and Percentages Equivalence

Key Vocabulary	Definitions
Fraction	From "fractured" (broken). A number which shows the relationship between the part to whole number.
Numerator	The top part of a fraction.
Denominator	The bottom part of a fraction.
Mixed number	A combination of a whole number and a fraction.
Common denominator	A denominator that is common to two or more fractions.
Improper fraction	A fraction where the numerator is greater than the denominator.
Recurring decimal	A decimal number that has one or more digits that repeat without stopping, e.g. 2.33333....
Percentage	A fraction where the deniminator is 100 ("out of 100").
Pie chart	A circular graph showing proportions.
Sector	The "slice" in a pie chart / circle.
Quotient	The answer you get when you divide one number by another.
Equivalent Fraction	Fractions that have the same value despite having different numerators and denominators.
Simplify a Fraction	To write a fraction in an equivalent form using smaller whole-number numerator and denominator.
Convert	To change a value from one representation to another e.g. from a percentage to a fraction.







Maths - Using Operations on Number

Key Vocabulary	Definitions
Estimate	To find an approximate answer based on suitable approximations.
Approximate	Close to the exact value but not necessarily exactly equal to it.
Round	To replace a number with a nearby value at a specified degree of accuracy.
Significant figure	A digit that contributes to the accuracy of a number, starting from its first non-zero digit.
Order of magnitude	An indication of the approximate size or scale of a number.
Mental calculation	Performing a calculation without writing down a formal method or using a calculator.
Inverse operation	An operation that reverses another operation.
Commutative	A property where changing the order of values does not affect the result.
Addition	Combining quantities to find their total.
Sum	The result of adding quantities.
Addend	A number or quantity being added.
Associative	A property, where changing how the numbers are grouped does not change the result.
Directed number	A number with a positive or negative sign indicating its position relative to zero.
Difference	The result of subtracting one number from another, or the numerical distance between two values.
Additive inverse	A number that when added to another number gives zero. For example, 4 and -4 are additive inverses.

Key Vocabulary	Definitions
Simplest form	A fraction where the numerator and denominator have no common factor greater than 1.
Multiplication	An operation used to calculate the result of scaling one quantity by another.
Multiplier	A number by which another quantity is multiplied.
Product	The result of multiplying quantities together.
Factor	A whole number that divides exactly into another whole number.
Division	An operation used to split a quantity into equal groups or determine how many groups there are.
Dividend	The number being divided.
Divisor	The number by which another number is divided.
Quotient	The result of a division.
Remainder	The amount left over when one whole number cannot be divided exactly by another.
Mean	A measure of average found by dividing the total of a set of values by the number of values.
Order of operations	The agreed order in which operations in a calculation are carried out. Mnemonic giving the order - BIDMAS

B • Do brackets first

I • Then indices or square roots

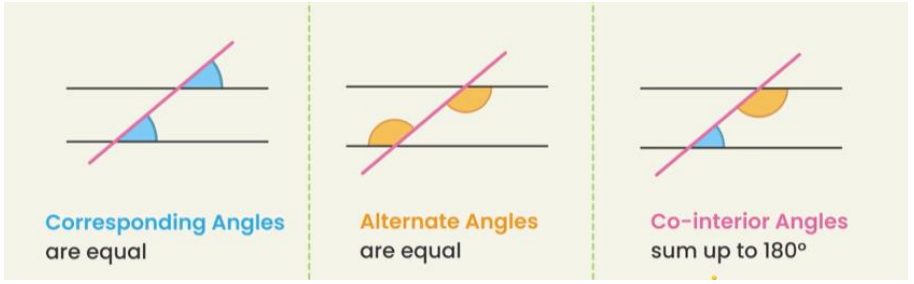
D M • Then division and multiplication, reading from left to right

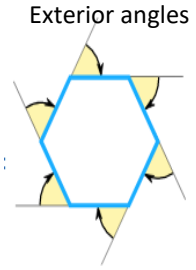
A S • Then add and subtract, reading from left to right

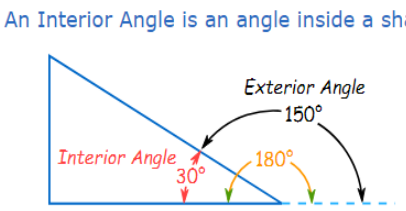
Maths - Geometric Reasoning

Key Vocabulary	Definitions
Point	An exact position in space.
Line	A straight path extending indefinitely in both directions.
Line segment	Part of a line between two endpoints.
Parallel	Lines in the same plane that remain the same distance apart and never meet.
Perpendicular	Lines that meet at a right angle.
Angle	A measure of turn between two lines or line segments meeting at a point.
Vertex	A point at which two or more lines or edges meet.
Acute angle	An angle greater than 0° but less than 90°.
Right angle	An angle of exactly 90°.
Obtuse angle	An angle greater than 90° but less than 180°.
Reflex angle	An angle greater than 180° but less than 360°.
Protractor	An instrument used to measure or construct angles.
Compass	A mathematical instrument used for drawing circles and arcs.
Geometric notation	Symbols and conventions used to communicate geometrical relationships precisely.
Vertically opposite angles	Opposite angles formed when two straight lines cross. They are equal.
Adjacent angles	Angles next to each other that share a vertex and a side.
Angles on a straight line	Angles forming a straight line; their sum is 180°.
Angles around a point	Angles meeting around one point; their sum is 360°.

Key Vocabulary	Definitions
Parallel lines	Lines that remain the same distance apart and do not meet.
Transversal	A line that crosses two or more other lines.
Corresponding angles	Angles in matching positions when a transversal crosses parallel lines; they are equal.
Alternate angles	Angles on opposite sides of a transversal and between parallel lines; they are equal.
Interior angles	Angles lying inside a shape or between a pair of lines.
Triangle	A polygon with three sides.
Quadrilateral	A polygon with four sides.
Polygon	A closed 2D shape formed using straight line segments.



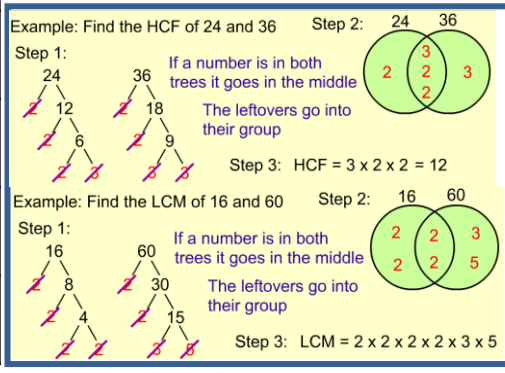




Maths - Numerical Reasoning, Sets and Probability

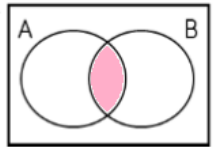
Key Vocabulary	Definitions
Factor	A whole number that divides exactly into another whole number.
Multiple	A number obtained by multiplying a given number by an integer.
Prime number	A positive integer greater than 1 that has exactly two positive factors: 1 and itself.
Composite number	A positive integer greater than 1 that has more than two positive factors.
Prime factor	A factor that is also a prime number.
Prime Factor Decomposition	Writing a number as a product of its prime factors.
Common factor	A factor shared by two or more numbers.
Highest common factor (HCF)	The greatest factor shared by two or more numbers.
Common multiple	A number that is a multiple of two or more given numbers.
Lowest common multiple (LCM)	The smallest positive number that is a multiple of two or more given numbers.
Square number	A number that can be written as an integer multiplied by itself.
Triangular number	A number that can be represented by dots arranged in an equilateral triangular pattern.
Conjecture	A mathematical statement believed to be true based on observations but not yet proved.
Counterexample	An example that demonstrates that a mathematical statement or conjecture is false.
Proof	A logical mathematical argument that demonstrates that a statement must be true/

Key Vocabulary	Definitions
Set	A clearly defined collection of objects or values.
Element	An individual object or value belonging to a set.
Venn diagram	A diagram using regions, usually circles, to show sets and their relationships.
Intersection	The elements that belong to two or more specified sets.
Union	All elements belonging to at least one of the specified sets.
Probability	A numerical measure of how likely an event is to happen.
Outcome	A possible result of an experiment or trial.
Event	One or more outcomes of a probability experiment.
Certain	An event that must happen. Its probability is 1.
Impossible	An event that cannot happen. Its probability is 0.
Equally likely	Outcomes that have the same probability of occurring.
Sample space	The set of all possible outcomes of an experiment.
Probability scale	A scale from 0 to 1 used to represent how likely an event is.



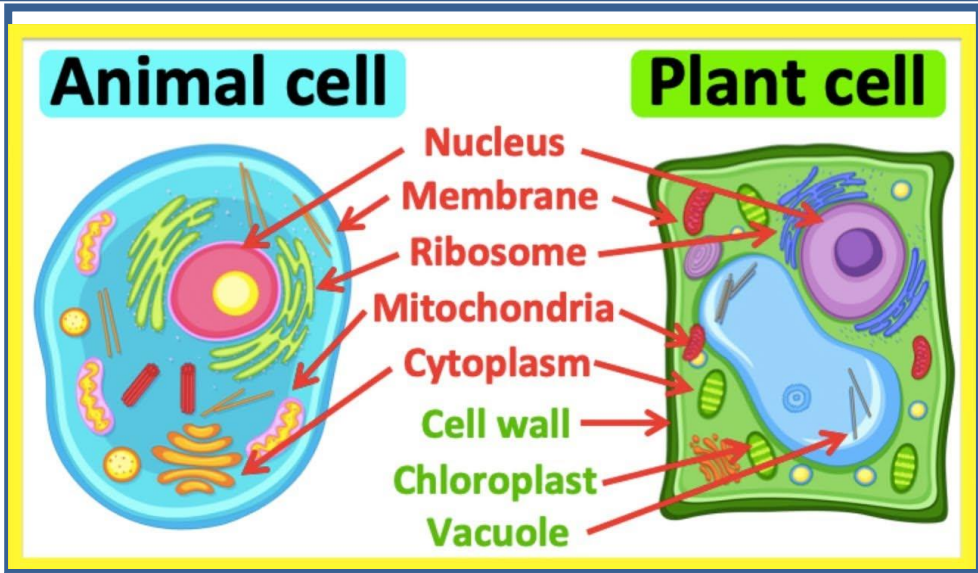
Intersection

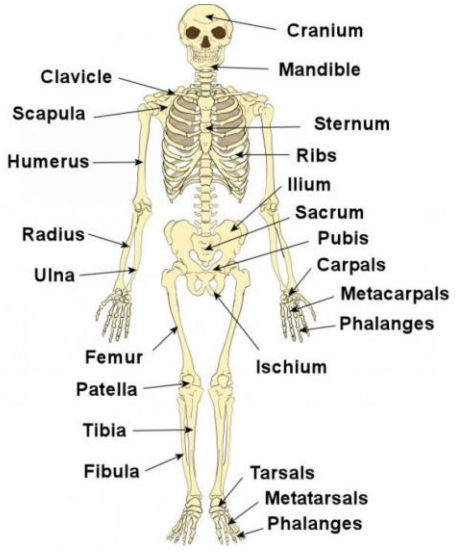
The notation for this is $A \cap B$

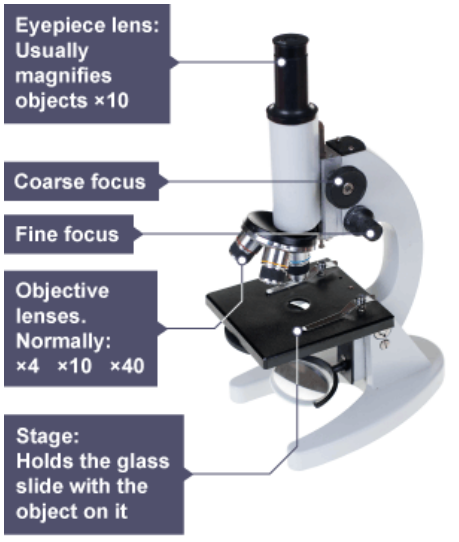


Probability = $\frac{\text{number of times event happens}}{\text{total number of possible outcomes}}$

Key Vocabulary	Definitions
Antagonistic muscles	Pairs of muscles that contract and relax in opposition to each other allowing movement
Diffusion	The passive movement of particles from an area of high concentration to an area of low concentration
Ligament	Short band of tough, flexible fibrous connective tissue which connects bone to bone
Tendon	Flexible but inelastic cord of strong fibrous collagen connecting muscle to bone
Tissue	Group of similar cells working together for a particular function
Cell Membrane	Controls what enters and leaves the cell
Cytoplasm	Jelly like substance where most chemical reactions occur
Mitochondria	Where aerobic respiration takes place
Nucleus	Contains DNA, controls activities of cell
Ribosome	Where proteins are made
Cell Wall	Made of cellulose strengthens and supports the cell
Chloroplast	Where photosynthesis occurs
Permanent Vacuole	Contains cell sap, plant store of starch

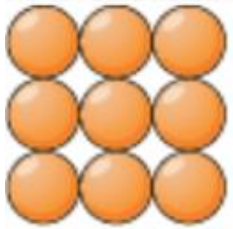




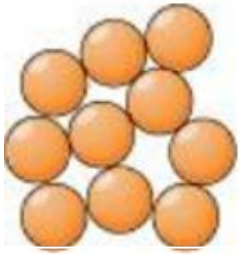


Science – Matter, Atoms and Elements

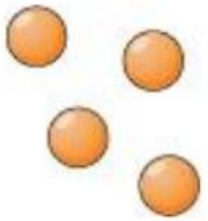
Key Vocabulary	Definitions
Particle	A single piece of matter – an atom, element, molecule, compound or ion
Atom	The smallest particle of an element
Element	A pure substance, made of only one type of atom
Molecule	Made when two or more atoms chemically bond together
Compound	Made from two of more different elements chemically bonded together
Mixture	Two or more elements or compounds, not chemically bonded together
Melting	A solid is heated and turns in to a liquid
Boiling	A liquid is heated and turns into a gas
Condensing	A gas is cooled and turns into a liquid
Freezing	A liquid is cooled and turns into a solid
Pressure	The force exerted by gas particles colliding with the wall of their container
Proton	A subatomic particle in the nucleus of the atom, it has a positive charge
Neutron	A subatomic particle in the nucleus of the atom, it has no charge (neutral)
Electron	A subatomic particle orbiting around the nucleus, it has a negative charge



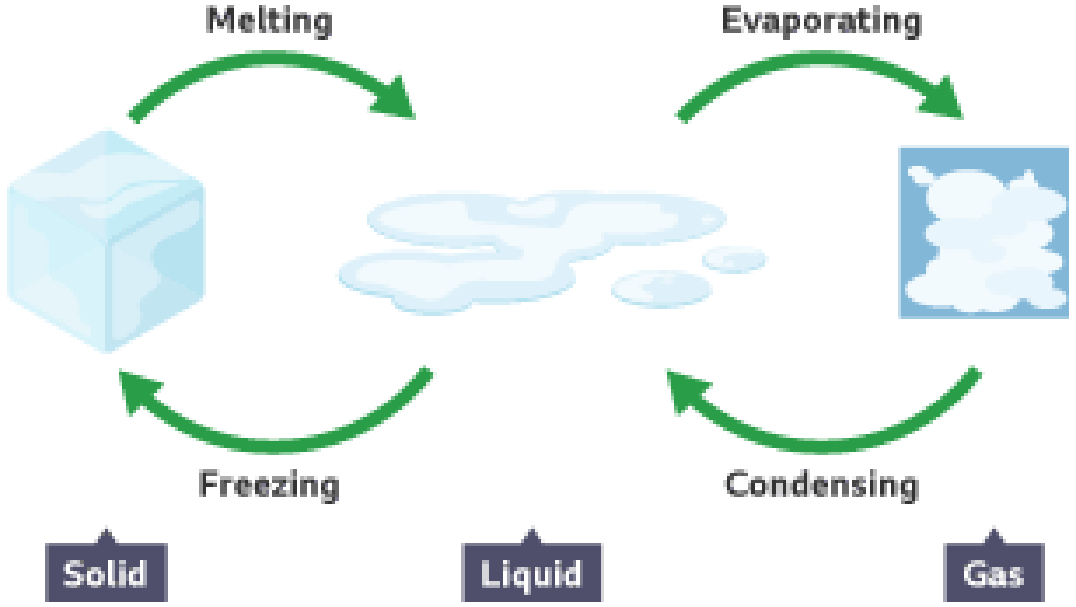
Solids
Have strong forces between particles so keep their shape.
Particles are tightly packed together so cannot be compressed.



Liquids
Particles can move so they flow and take the shape of the container.
Particles are still tightly packed together so they cannot be compressed.



Gases
Almost no forces between particles so they can spread out and fill the space.
Particles are far apart so can easily be compressed.



Key Vocabulary	Definitions
Air resistance force	Friction between air particles and the object moving through the air
Contact force	A push or a pull on one object by another that is touching it
Electrostatic force	Forces between electrically charged particles
Frictional force	Force acting in opposite direction to the movement of an object
Magnetic force	A repulsive or attractive force between tow magnetic materials
Non-contact force	A force that pushes or pulls an object without touching it
Normal contact force	Force exerted from a surface on an object
Resultant force	Overall force acting on an object
Tension force	Forces pulling apart a rope, string or wire
Thrust force	Act of pushing with force
Upthrust force	Upwards force exerted on an object in a fluid
Weight force	The downwards force due to gravity

Moment = Force × Distance from pivot

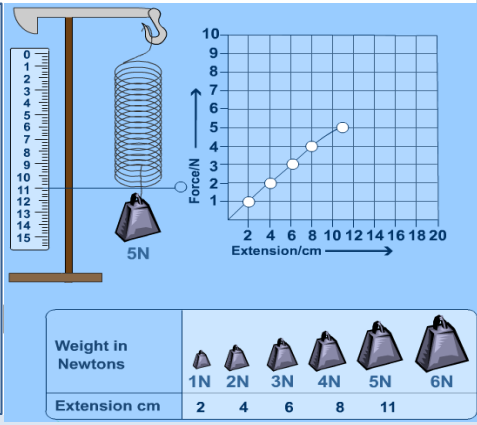
(Nm or Ncm) (N) (cm or m)

Hooke's Law

The gradient of the graph is what we call the spring constant, k.

The spring constant is a measure of the stiffness of a spring

K = spring constant
F = force
e = extension



$$\text{Pressure} = \frac{\text{Force}}{\text{Area}}$$

Pressure: (N/m or Pascals)
Area: (m^2 or cm^2)
Force: Newtons, N)



High pressure



Decreasing the surface area, increases the pressure



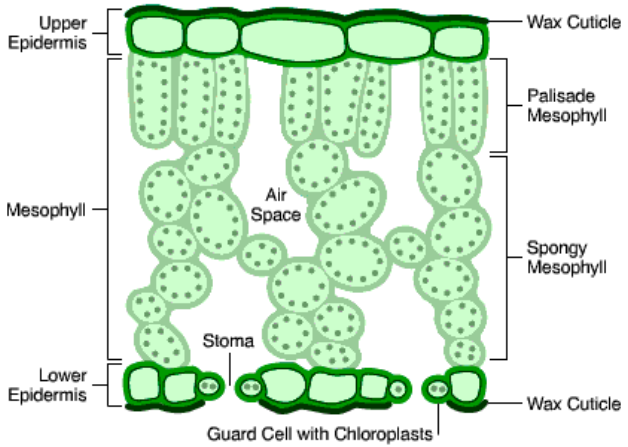
Low pressure

Resultant force = 0N → **Balanced forces** → **Stationary** or **Constant speed**

A Resultant force → **Unbalanced forces** → **Accelerating** or **Decelerating** *or Changing direction* *or Changing shape*

Leaf Function and Structure

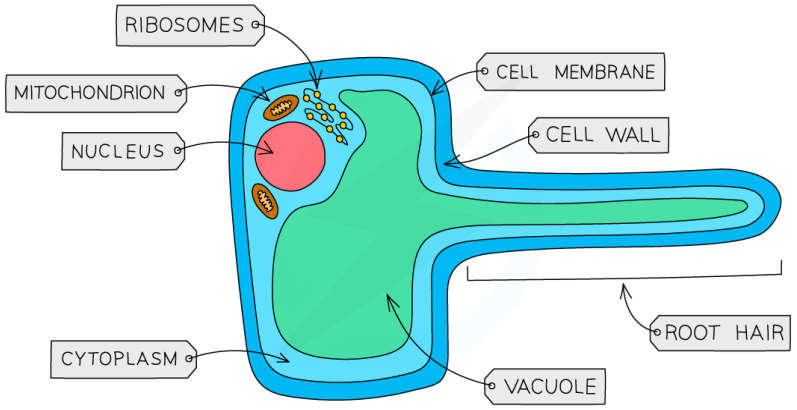
- Absorb sunlight
- Where photosynthesis takes place
- To store glucose as starch
- To absorb carbon dioxide into the
- plant and let oxygen out.



Root Function and Structure

- Absorb water
- Absorb minerals
- Anchorage (hold the plant to the ground)

- The roots are covered with millions of tiny **root hair cells.**
- These have a **very large surface area**, allowing the roots to absorb large amounts of water and minerals.
- Thin cell walls for short diffusion distance.
- Lots of mitochondria to release energy for active transport



- Photosynthesis takes place inside chloroplasts, found within certain plant cells.
- Photosynthesis needs light energy

$$\text{carbon dioxide + water} \xrightarrow[\text{chlorophyll}]{\text{light}} \text{glucose + oxygen}$$

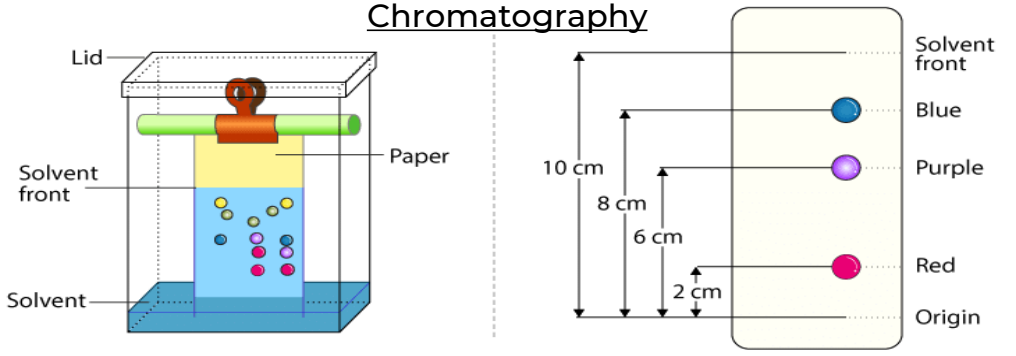
$$6CO_2 + 6H_2O \longrightarrow C_6H_{12}O_6 + 6O_2$$

Key Vocabulary	Definitions
Bioaccumulation	The build up of toxins in a food chain, increasing in concentration at higher energy levels
Chlorophyll	Green pigment in the chloroplasts of plant cells. Allows photosynthesis to take place
Chloroplasts	Organelles found in plant cells, the site of photosynthesis
Interdependence	Two or more living organism that rely on each other for survival
Lower epidermis	Contains stomata to regulate the loss of water vapour (transpiration)
Photosynthesis	Process carried out by plants to make their own glucose
Producer	Living organisms that make their own food (glucose)
Stomata	Hole on the leaf that is surrounded by a pair of guard cells that control the opening / closing of the hole

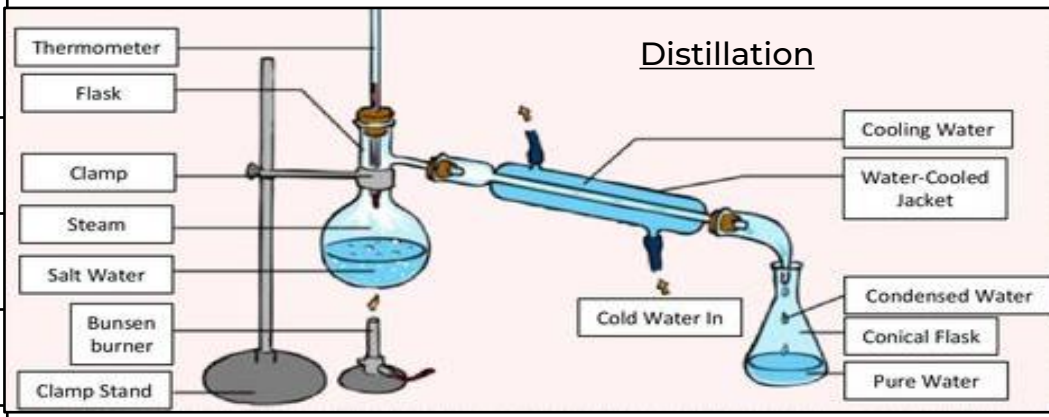
Science – Pure and Impure Substances

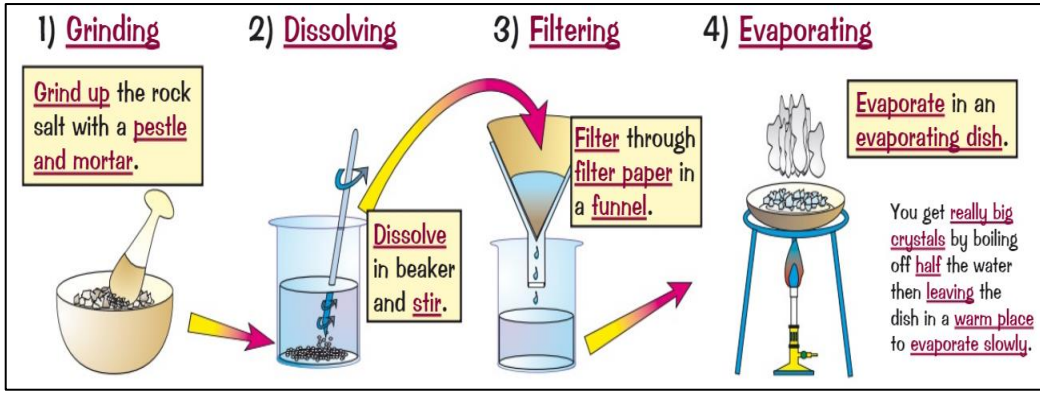
Key Vocabulary	Definitions
Compound	Substance made of atoms of at least two different elements chemically joined together.
Mixture	Substance made from two or more elements or compounds, not chemically bonded together.
Diffusion	Passive movement of particles from high low concentration.
Chromatography	Separating substances in a mixture which often involves coloured substances e.g. inks, food dyes
Distillation	Separating liquids with different boiling points.
Evaporation	A liquid changes into a gas, also a way of separating a solid from a liquid.
Filtering	Method used to separate an insoluble solid from a liquid.
Insoluble	Substance does not dissolve in a solvent
Soluble	Substance that does dissolve in a solvent.
Solute	A substance dissolved in a solvent to make a solution.
Solution	A mixture made up of one substance dissolved in another.
Solvent	A liquid in which another substance can be dissolved.

Chromatography



Distillation





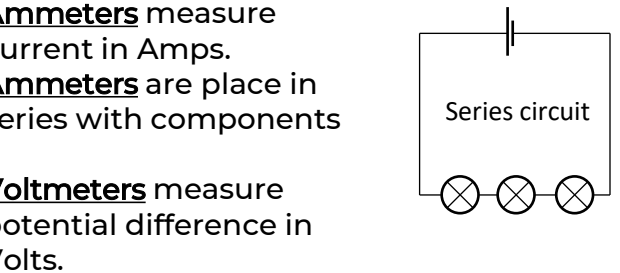
Science - Electricity and Magnetism

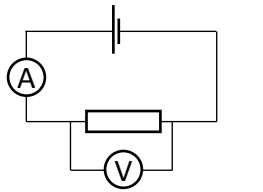
Key Vocabulary	Definitions - Electricity
Current	The rate of flow of electrical charge. Measured in Amps, A.
Potential difference	The amount of energy transferred by each unit of charge between to places in a circuit. Also referred to as Voltage. Measured in Volts, V
Resistance	Resistance is a measure of how difficult it is for current to flow. Measured in Ohms, Ω.
Series circuit	A circuit with only one loop in the circuit. • Current is the same through each component • Potential difference is shared between each component
Parallel circuit	A circuit with multiple branches in the circuit • The potential difference across each component is the same. • The total current through the whole circuit is the sum of the currents through each branch.
Conductor	Conductors are materials which allow electrical current to flow through them easily. Metals are generally good electrical conductors.
Insulator	Insulators are materials which are poor conductors and do not allow electrical current to flow through them easily.
Electric Field	The region around a charged object, whereby another charged object will experience of force. Like charges repel, opposite charges attract.

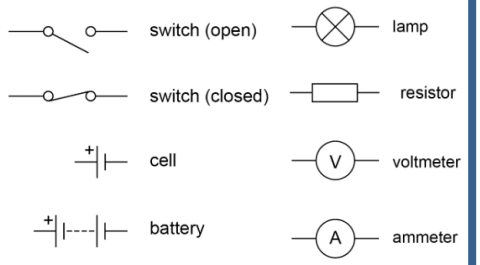
Key Vocabulary	Definitions - Magnetism
Magnetic Field	A magnetic field is the region around a magnet where a force acts on another magnet or on a magnetic material.
Electromagnet	An electromagnet is made by rapping coils of wire a current carrying wire around an iron

- **Ammeters** measure current in Amps.
- **Ammeters** are place in series with components

- **Voltmeters** measure potential difference in Volts.
- **Voltmeters** are placed in parallel with components

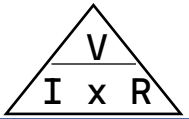




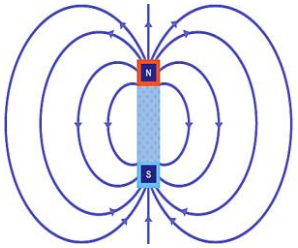


Potential difference = current x resistance

$$V = I \times R$$



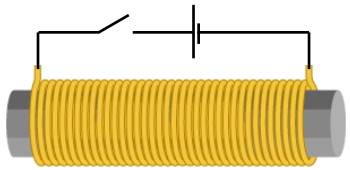
The magnetic field around a bar magnet



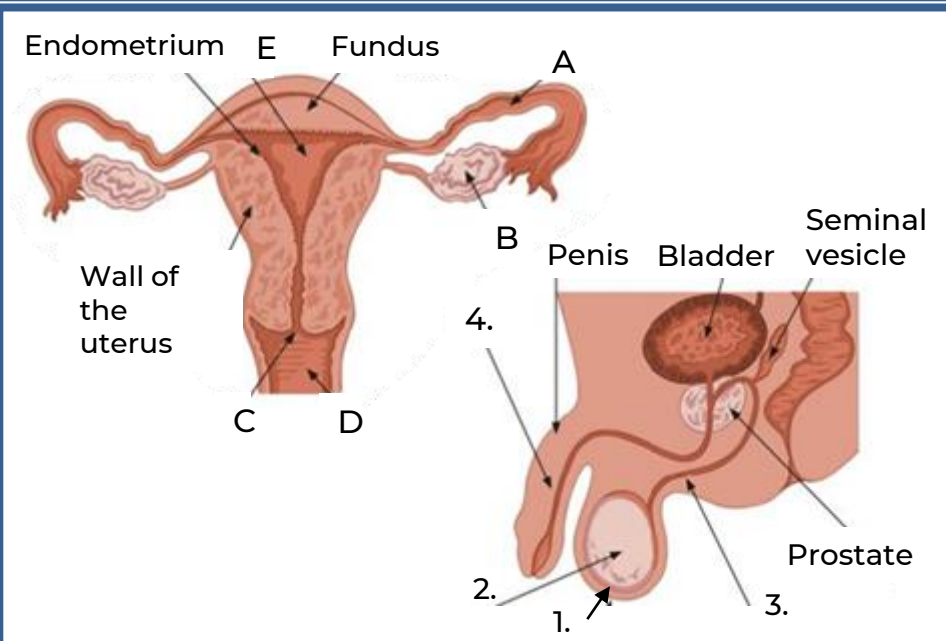
- Like poles repel
- Opposite poles attract
- Either pole will always attract a magnetic material like Iron, Steel, Cobalt or Nickel

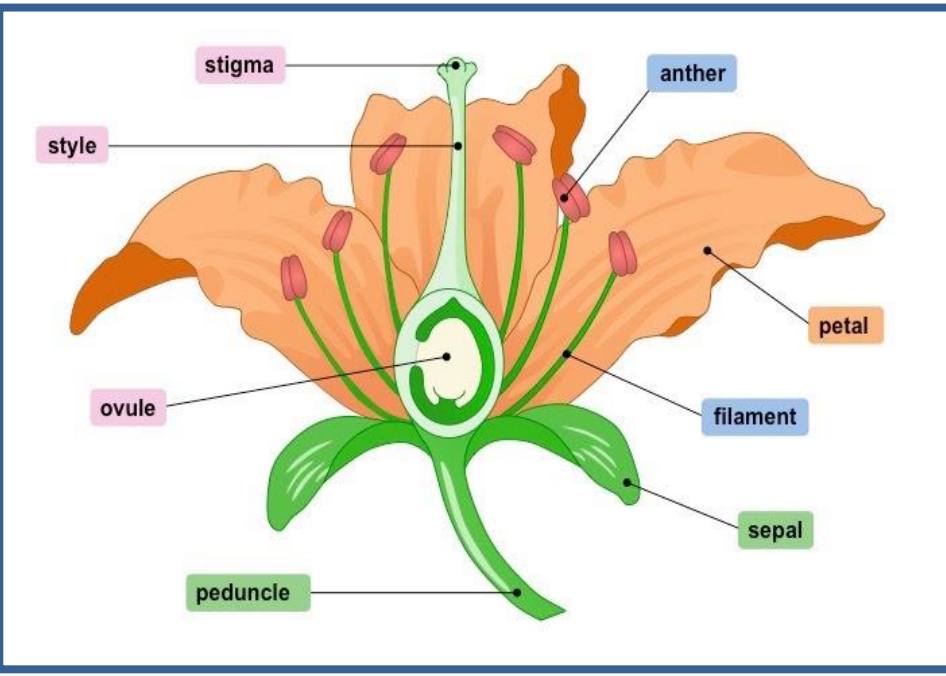
Electromagnets can be made stronger by:

- Having an iron core
- increasing the number of urns on the coil
- Increasing the current in the wire



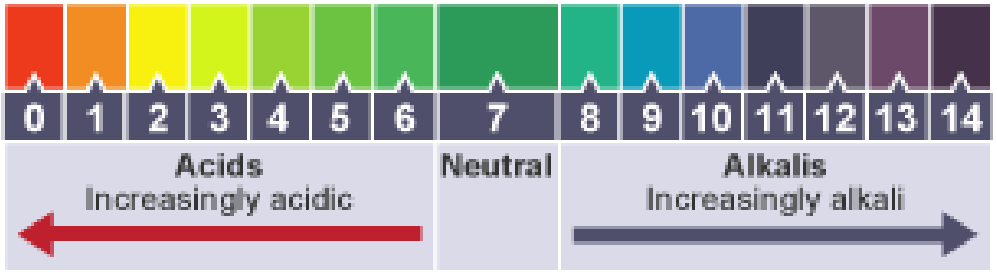
Key Vocabulary	Definitions
Cervix	(C) Ring of muscle at bottom of the uterus.
Gametes	The sex cells: sperm in males, pollen in plants, egg in females, ovum in plants.
Fertilisation	The fusing of gametes to form a zygote.
Gestation	The period of development where the embryo is carried in the uterus between conception and birth.
Menstruation	When lining of uterus passes out of the vagina, also called period.
Ovary	(B) Organ where egg cells develop in females.
Oviduct	(A) Egg tube connecting ovary to uterus.
Sperm duct	(3) Tube that carries sperm from the testes to the urethra.
Ovulation	Release of an egg from an ovary.
Scrotum	(1) Bag of skin containing testes in males.
Testes	(2) Organ producing sperm in males.
Vagina	(D) Tube going from outside to the uterus.
Uterus	(E) Organ where baby develops (also called the womb).
Urethra	(4) Where urine is expelled from the body.
Zygote	A fertilised egg.





Science - Acid and Alkalis

Key Vocabulary	Definitions
Neutral	A substance with a pH of 7, e.g. water
Acid	A substance with a pH value of less than 7
Alkali	A substance with a pH value of 8 or higher, that dissolves in water
Base	A substance that neutralises an acid but does not dissolve in water
Concentrated	A substance with a large number of particles in a litre of water
Dilute	A substance with a small number of particles in a litre of water
Corrosive	A substance that causes damage
Irritant	A substance that is not corrosive but could cause itching or discomfort to the skin, eyes or lungs
Indicator	A substance that changes colour in acid or alkali
Litmus paper	There is red and blue litmus paper, they are indicators
Universal indicator	An indicator that changes colour to show the pH
Neutralisation	Adding an alkali to an acid to make a neutral solution
pH scale	The pH scale shows whether a substance is an acid or alkali



Substance	pH
Battery acid	pH1
Lemon juice	pH2
Vinegar	pH2
Orange juice	pH3
Acid rain	pH4
Black coffee	pH5

Substance	pH
Urine (wee)	pH6
Water	pH7
Eggs	pH8
Very soapy water	pH12
bleach	pH13
Drain cleaner	pH14

Reactants	Products
Acid + Alkali	salt + water
Acid + metal	salt + hydrogen
Acid + metal carbonate	salt + water + carbon dioxide

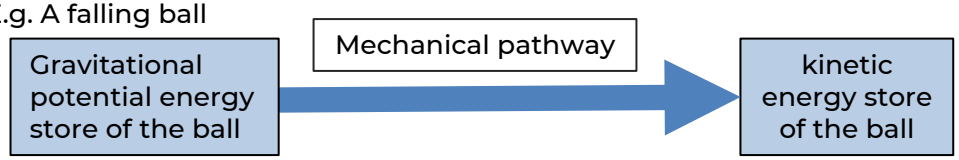
Acid / Alkali	Formula	Salt that is made
Hydrochloric acid	HCl	Chloride
Sulphuric acid	H_2SO_4	Sulphate
Nitric acid	HNO_3	Nitrate
Sodium hydroxide	NaOH	N/A

Science - Energy Stores and Pathways

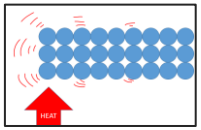
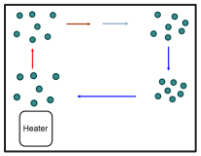
Key Vocabulary	Definitions – Energy stores
Chemical energy store	Energy stored in the chemical bonds of materials Examples: coal, gas, food, petrol.
Gravitational potential energy store	The energy stored by objects raised above the Earths surface. Examples: roller coasters, skaters on ramps, a cricket ball in the air
Kinetic energy store	Energy stored by moving objects Examples: A car, plane, human running, tennis ball after it is hit.
Thermal energy store	The heat energy stored by objects Examples: a mug of tea, a human, a radiator (but really all matter stores thermal energy).
Elastic potential energy store	The energy stored by materials when they are stretched or compressed. Examples: Bow and arrow, springs, elastic bands.
Nuclear energy store	The energy stored within the nucleus of atoms Examples: Nuclear power stations.
Magnetic energy store	The energy stored between to magnetic objects.
Electrostatic energy store	The energy stored between two charged objects.

Key Vocabulary	Definitions – Energy pathways
Mechanical	When a force makes something move, eg pushed, pulled, stretched or squashed.
Electric current	When an electric current moves around an electric circuit.
Heating	When energy is transferred from a hotter object to a colder object.
Radiation	Waves such as light and sound.
Chemical	When a chemical reaction occurs.

- Energy can not be created or destroyed. Only transferred from one store to another.
- We describe the energy transfer in terms of the energy stores and the pathway by which that energy was transferred.
- E.g. A falling ball



- The Gravitational potential energy store of the ball is **decreasing** as the kinetic energy store of the ball is **increases**.

Key Vocabulary	Definitions – Thermal Energy transfer
Conduction 	Conduction transfers heat through a solids: Particles gain kinetic energy when heated causing them to vibrate faster. This energy is then transferred to neighbouring particles causing thermal energy to transfer through the object.
Convection 	Convection transfers heat in fluids (gases and liquids. Heating a fluid causes it to expand and become less dense. This area rises and subsequently moves away from the heat source. The fluid will then cool and contract, becoming more dense which causes it to fall. This sets up convection currents in the fluid which transfer thermal energy throughout the fluid.
Radiation  	Heat can be transferred by waves. This is known as infrared radiation. Infrared radiation (IR radiation) can travel through a vacuum (Doesn't require particles to transfer energy) The best surfaces at **emitting** IR radiation are matte dark surfaces – **Matte Black** The worst surfaces at **emitting** IR radiation are light shiny surfaces – **shiny silver** The best surfaces at **absorbing** IR radiation are also matte dark surfaces – **Matte Black** The worst surfaces at **absorbing** IR radiation are also are light shiny surfaces – **shiny silver**

1. SCHOOL SYSTEMS INDUCTION

Digital Literacy	The ability to **effectively** and **safely** use digital technologies, including understanding how to **find**, **evaluate**, and **communicate** information.
Cybersecurity	The practice of **protecting computers**, **networks**, and **data** from **unauthorised access**, **attacks**, or **damage**.
Ergonomics	The study of designing **equipment** and **devices** that **fit** the **human body**, its **movements**, and **cognitive abilities**, applied to ensure **safety** and **comfort** in computer use.
Username	Your **username** is the **year you started** (*yy*) followed by your **surname** followed by your **first initial**. For example: *26potterh*.
Email address	Your email address is your **username** followed by **@trafalgar.wilts.sch.uk**. For example: 26potterh@trafalgar.wilts.sch.uk

2. STAYING SAFE ... →

File Extension	A **suffix** at the **end of a filename**, typically following a **period** (e.g., .docx, .jpg), indicating the file's **format** and the **application** used to open it.
Camel Caps	A **naming convention** in which the **first letter** of each word within a compound word is **capitalised, except for the first word** (e.g., *fileNameExample*).
Folder	A **virtual container** within a computer's **file system** used to **organise files** and other **folders**.
Subfolder	A **folder** contained within **another folder**, used to further **organise files**.
Root Folder (Directory)	The **top-level directory** in a file system from which all other directories **branch**.
Backup	A **copy of data** stored **separately** from the **original**, used to **restore** the **original** in case of **data loss**.

→ ... 2. STAYING SAFE (contd.)

Social Networking	**Online platforms** that facilitate building **social relationships** among people with **shared interests**, **activities**, or **real-life** connections.
Cyberbullying	The use of **electronic communication** to **bully** or **harass** an **individual**, typically by sending **messages** of an **intimidating** or **threatening** nature.
Phishing	A **fraudulent attempt** to obtain **sensitive information** by **disguising** oneself as a **trustworthy** entity in **electronic communications**.
Hacking	The act of gaining **unauthorised access** to data in a system or computer.
Biometrics	The **measurement** and **analysis** of **unique physical** or **behavioural** characteristics (e.g., fingerprints, facial recognition) for **identity verification**.
Salutation	A **greeting** used at the **beginning** of an email or letter (e.g., "Dear Mr. Smith").
CC (Carbon Copy)	A feature that allows the sender to **send a copy** of an email to **additional recipients**, with all recipients **visible**.
BCC (Blind Carbon Copy)	A feature that allows the sender to **send a copy** of an **email** to **additional recipients without revealing** their **addresses** to **other recipients**.
Server	A **computer** or **system** that provides **resources**, **data**, **services**, or **programs** to other **computers**, known as **clients**, over a **network**.
Encryption	The process of **converting information** or **data** into a **code** to prevent **unauthorised access**.
Virus	A **malicious program** designed to **replicate itself** and **spread** to other **computers**, often **disrupting operations**.

COMPUTER SCIENCE - 3. HOW COMPUTERS WORK & 4. COMPUTATIONAL THINKING

3. HOW COMPUTERS WORK

Hardware	The **physical components** of a computer system, like the **keyboard**, **monitor**, and **motherboard**.
Software	**Programs** and **applications** that instruct hardware on how to perform **tasks**.
Fetch	The **process** where the computer's **CPU** retrieves an **instruction** from **memory** to execute.
Decode	The step in which the **CPU** interprets the **fetched instruction** to understand what **action** is required.
Execute	The **action** where the **CPU** carries out the **decoded instruction**.
Binary	A **base-2** number system using only **0s** and **1s**, fundamental to how computers **represent data**.
Denary	Also known as **decimal**; a **base-10** number system using digits **0** through **9**.
RAM	(**Random Access Memory**) Temporary memory that stores **data** and **instructions** while the computer is **running**; it is **volatile**, meaning it **loses its data** when power is **off**.
ROM	(**Read-Only Memory**) **Permanent memory** that contains **essential instructions** for the computer; it is **non-volatile**, retaining data even when the power is **off**.
ASCII	(**American Standard Code for Information Interchange**) a **character encoding standard** that assigns **letters**, **numbers**, and **symbols** to **numerical codes**, allowing text to be represented in computers.
Code	A **set of instructions** written in a **programming language** that a computer can **execute**.
Read	**Accessing** and **retrieving data** from a **storage device** or **memory**.
Write	**Saving** or **recording data** onto a **storage device** or **memory**.

4. COMPUTATIONAL THINKING

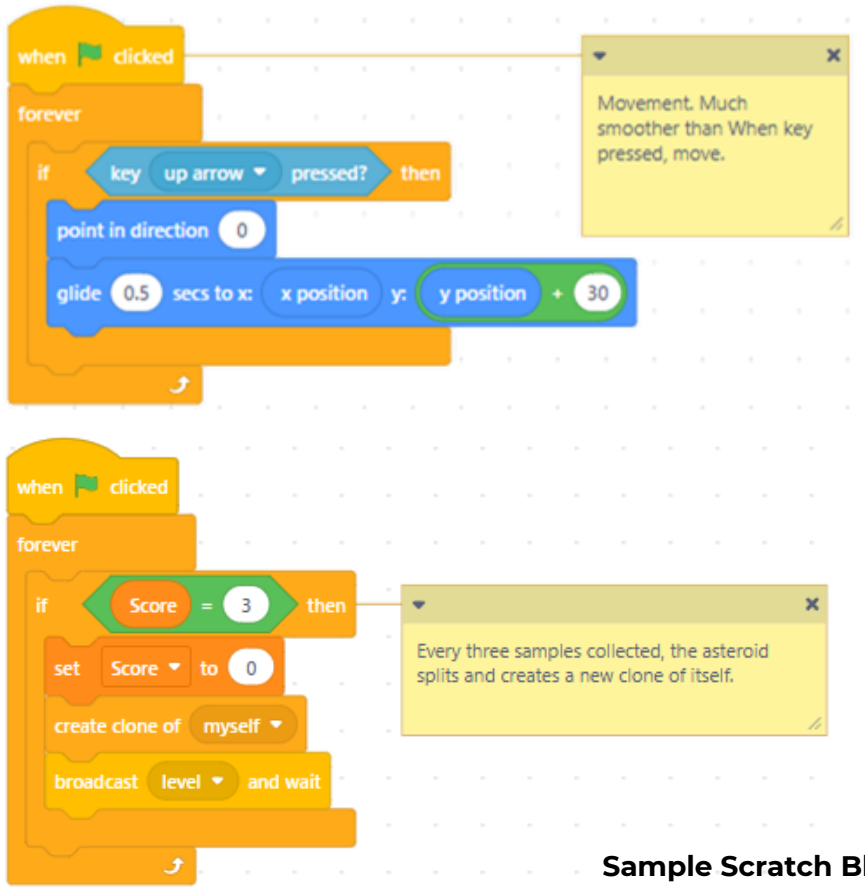
Logical Thinking	The process of using **structured reasoning** to **analyse situations** and **solve problems systematically**.
Boolean Operators	**Logical connectors** used in **search queries** and **programming** to **refine results** or **control flow**. The primary Boolean operators are: **AND** (Both **TRUE**), **OR** (at least one **TRUE**), **NOT** (invert from **FALSE** to **TRUE** and vice versa)
Logic Gates	**Electronic circuits** that perform **logical operations** on **one** or **more input signals** to produce a **single output signal**. Common types include: **AND** Gate (Outputs to **TRUE** if both inputs are **TRUE**), **OR** Gate (Outputs **TRUE** if at least one input is **TRUE**), and **NOT** Gate (Inverts the input signal; outputs **TRUE** if input is **FALSE**, and vice versa).
Algorithm	A **finite** set of **well-defined instructions** or **rules** designed to perform a **specific task** or **solve a problem**.
Sequence	An **ordered set** of **instructions** or **steps** that are **executed** in a **specific order** to achieve a **particular outcome**.
Venn Diagram	A **diagram** consisting of **overlapping circles** used to **visually represent** the **relationships** between **different sets**, often illustrating **commonalities** and **differences**.
Truth Table	A table that lists **all possible input values** to a **logical operation** or **circuit** and the **corresponding output** values, used to illustrate how the **operation** or **circuit** behaves.
Circuit	A **closed path** through which an **electric current flows** or **may flow**. In computing, it often refers to a **combination** of **interconnected electronic components** that perform a **specific function**.
Loop	A **programming construct** that **repeats a set of instructions** until a **specified condition** is **met**.

5. GAMES PROGRAMMING IN SCRATCH

Sprite	A two-dimensional **image** or **animation** that is integrated into a larger **scene**, often used in computer graphics and games. In Scratch, a sprite is an **object** that performs **actions** based on **scripts**.
Cursor	A **movable indicator** on a computer **screen** that shows a user's **position** within **text**, **graphics**, or other **elements**.
Block	A visual **programming element** in Scratch that represents a **command** or **function**. Blocks can be snapped together to create **scripts**.
Script	A **set of instructions** written in a programming language that is **executed** by a **computer**. In Scratch, a script is a **sequence** of **blocks** that control a **sprite's behaviour**.
Broadcast	A **message** sent through a program to **trigger scripts** in **other sprites or the same sprite**. In Scratch, broadcasting is used to **coordinate actions** between **sprites**.
Timer	A **function** or **device** that measures and **records** the **amount** of **time** that has **elapsed**. In Scratch, the **timer block** can be used to **control events** based on **time**.
Operator	A **symbol** or **function** that performs a **specific operation** on **one** or **more operands**. In Scratch, operators are used for **arithmetic**, **comparison**, and **logical operations**.
Boolean	A data type that has two possible values: **TRUE** or **FALSE**. Named after mathematician George Boole, it is fundamental in **logic** and **computer science**.
Variable	A **storage location** identified by a **name** that holds **data** which can be **changed** during **program execution**.
Debug	The process of **identifying** and **removing errors** or **bugs** from a computer program to ensure it **runs** as **intended**.
Repeat ... until	A **control structure** that **repeats** a **block** of **instructions** until a **specified condition** becomes **True**.

5. GAMES PROGRAMMING IN SCRATCH

If ... else	A **conditional statement** that **executes one block** of **instructions** if a **condition** is **True**, and another block if the condition is **False**.
When ...	An **event-driven control structure** that triggers a block of **instructions** when a **specified event** occurs.
Forever	A **loop** that **continuously repeats** a block of instructions **indefinitely**.



Sample Scratch Blocks

History – Anglo-Saxons and Normans

History Skills	
History Skills: Historians are like **detectives.** We must use **evidence** to explain the past. There are two types of evidence historians use: sources & interpretations. We can use evidence to make **inferences** (explain what we can learn). We must consider how **reliable** evidence is.	
Sources	Evidence produced **at the time** you are studying (diary, newspaper, artefacts, official records, …)
Interpretations	Evidence produced in the **modern period** using sources. (historian's books, documentaries, TV, …)

1066 Succession Crisis: Timeline	
5th January	King **Edward the Confessor dies** with no heir
6th January	Harold **Godwinson** crowns himself **King** of England
20 September	**Battle of Gate Fulford**: Harald Hardrada invades England with more than 10,000 men in 300 longships.
25 September	**Battle of Stamford Bridge:** Godwinson, defeats and kills Harald Hardrada
27th September	William **arrives** in England and begins to pillage and burn the south
14 October	**The Battle of Hastings**. Harold killed, William victorious
25th December	**William the Conqueror** is crowned **king** of England.

Battle of Hastings: William vs Harold

William's army is larger and made up of experienced soldiers. Harold's army is mostly peasants (fyrd). However, Harold has the better position on top of hill and only needs to hold his defensive line to win.

William wins the battle of Hastings due to his skill and tactics (such as feigned retreat), Harold's mistakes (such as standing in the front lines) and a bit of luck. Harold is killed in battle.

Key Vocabulary	
Anglo-Saxon	The Anglo-Saxon age in Britain was from around 410AD to 1066.
Vikings	People from Scandinavia who were fighters, sea-travellers, and traders
Norman	Normandy was a region of France, ruled by a Duke
Witan	Anglo-Saxon noblemen who advised the king and chose the successor
Earldoms	England was divided into 6 areas of land, each controlled by an Earl.
Succession	When a title (such as king) changes from one person to another
Heir	The person who will inherit a title or rank after someone death
Invasion	Attacking by force to take land or power
Claimant	Someone who thinks they deserve to be the king.
Danelaw	Area in the North of England with Viking laws and customs.
Conquer	Someone who takes over land, using force.
Fyrd	English army made up of peasants (untrained and unexperienced).
Thegns	Noblemen who had some experience fighting for the English Army.
Housecarl	Professional, full-trained, experienced Anglo-Saxon soldiers.
Archers	Soldiers who used a bow and arrow
Cavalry	Soldiers who fought on horseback.

History – The Norman Conquest

After the Battle of Hastings, William had to assert his power over the rest of England.

There were three main ways he consolidated his control of the country: the building of **castles**, the establishment of the **feudal system**, and the creation of the **Domesday book**.

William I in Power: Timeline

1068	William begins the building of his first **castles**. A Motte and Bailey castle is built in Warwick to keep control of the Midlands.
1069 -70	**Harrying of the North** where William devastates the north to stop the rebellions. He burns fields, cattle and destroyed villages leading to the death of 100,000 people die.
1085	William orders the **Domesday Book**, a survey of England
1087	William I of England dies. England goes to his son, William II.

Castles

To keep control and prevent rebelling William I built 700 castles in England. Castles were built in all major cities to control the populations and protect the Norman soldiers

Motte & Bailey	Type of Castles which William build all over England. Consisting of a manmade hill (motte) and area for soldiers to live (bailey)
Palisade	Protective wooden fence around the bailey
Keep	Safest part of the castle, where soldiers go during attacks, located on high ground
Draw bridge	Moveable bridge which can be lifted to prevent entrance under attack
Ditch or Moat	Surrounds castle and makes it harder to gain access for attack.

Domesday Book

In 1085 William I created a record of all the land and wealth in England in the **Domesday Survey.**

This allowed William to increase control with knowledge of the people, and ensure taxes were correct and gain more money, know where potential soldiers lived if the country was invaded.

Feudal System

William replaced the social system with the **feudal system:**

- **King** :had ultimate power and owned all the land. Gifted lands to Barons in exchange for loyalty.
- **Barons:** had to fight for the king and provide knights. replaced the Earls, they had much less power and were easier for the King to control.
- **Knights:** They had to fight 40 day a year in the army in exchange for lands to control. Replaced Thegns.
- **Villeins:** worked on the land for the knights and barons. Paid taxes and gave them some of their crops. Tied to their feudal lord and had limited rights and freedoms.

Key Vocabulary

Rebellion	Acts of resistance against a leader.
Homage or Oath	To promise to give allegiance to someone (e.g. King) publically.
Villein	Peasants at the bottom of the Feudal System
Knight	A soldier who serves a noble, they usually ride horses and wear amour. Ruled over the villeins
Tax	Compulsory money paid to the king or government.
Archbishop of Canterbury	Most important member of the Church in England. Pope's representative in the country. Performed coronation ceremony of the new king.

History – Medieval Monarchs

Medieval Monarchs	
William I	**William I** is considered the first King of England. He was the first person to gain total control of the land and people. **William** gained control through: the feudal system, castles and the Domesday book.
William II	**William II** (Rufus) was king from 1087 until he died in a hunting accident in the New Forest in 1100. The Throne passed to his brother, Henry.
Henry I	**Henry I's** only son, William, was killed in the **White ship Disaster.** Henry named his daughter **Matilda** to be his heir.
Anarchy 1138-1153 **Stephen vs Matilda**	There is a Civil War in England as **Matilda** and **Stephen** fight for the throne. **Matilda** was named heir, but many believed a **woman** could not rule. Stephen rules until his death, Matilda's son, Henry, takes the throne.
Henry II	**Henry II** is known for being responsible for the **murder** of his **Archbishop, Thomas Becket** after falling out. The king was angry about the **power** of the **church** in his country.
John I	**John I** was unpopular with the **barons.** He lost **wars** and land in France, charged high **taxes** and argued with the **church.** King John signed the **Magna Carta** in 1215.

Key Vocabulary	
Medieval	Period of history from in 1066 until 1500. This period is sometimes known as a the **'Dark Ages'** or **'Middle Ages'** as some Historians argue that little change took place and there was little knowledge and understanding.
Monarch	The King/Queen. Born into this role as are head of the country.
Power	Control of something or someone
Political	Parts of history associated with power and government.

Stephen and Matilda	
White Ship Disaster	1120 Shipwreck which killed William Adelin, the only son of Henry I and heir to the English throne.
Anarchy	Civil war in England between Stephen and Matilda
Civil War	When a country goes to war with itself
Legitimacy	How far someone's position is rightful and deserved

Henry II and Thomas Beckett	
Thomas Becket	Henry II's friend who is appointed Archbishop of Canterbury in 1161. Argues with Henry and is murdered.
Archbishop of Canterbury	Highest ranking member of the Church in England. Usually chosen by the king, but often more loyal to the Pope.

John I and the Magna Carta	
John's Problems	**Money**: Increased taxes to pay for wars. Increased **relief money** (tax to inherit land). S**cutage** (tax to avoid war). **Religion:** Argument with the pope, leading to excommunication and 7 year interdict on England. **Power:** Failure in wars with France, arguments with Barons, unpopular king.
Interdict	Ban on a country from using the church. This meant no weddings, funerals, or celebrations could take place
Tyrant	A cruel, oppressive ruler
Magna Carta	Agreement signed in 1215 which limited the King's power and gave basic rights to the Barons.

History – Medieval Life

Society	
Social	Parts of history related to everyday life for ordinary people
Status	Position in society. In Medieval times, people had a fixed status (low, medium or high).
Peasants	Ordinary people, at the bottom of the feudal system. They farmed
Black Death	Highly infectious disease. (**bubonic plague)** carried by fleas that came to England in 1348. At the time thought it was caused by God or Miasma.
Revolt	Violent resistance against leaders
Feudalism	Social system where people were given land in exchange for service. Peasants were controlled by their feudal lord and had very little freedoms.

Villages	
Villein	They were Medieval peasants who were 'tied' to the Lord's land. They had to farm their own land and the land of the Lord, and they had to get the Lord's permission to do things like get married or leave the village.
Freeman	These people paid rent to the lord to farm their land, but they weren't 'owned' by the Lord, and could come and go as they pleased.
Tithe	10% of all income (money, produce) to be given to the Church.
Manor House	Largest home in a village where the feudal lord lived.

Towns	
Charter	A documents towns could buy to become independent from the feudal system
Guilds	Groups of traders that formed to ensure high standards of goods
Public Health	The overall cleanliness and health of the population in one place. Cities had very poor public health and lots of disease.
Muckrakers	These were people employed to clean up the waste in the streets of London.
Gong farmers	These were people who cleaned out cesspits and toilets. Paid 18p per tonne of waste. Earned 60 times more than the average labourer. London produced 50 tonnes of waste per day!
Dick Whittington	Mayor of London three times. Supported charities to improve the city. Built free toilets and hospitals.
Markets	Places to buy luxury goods.
Trades	People could learn a trade in a town and sell products for profit. For example, blacksmith, baker, butcher, ...
Major	Townspeople could vote for their own leader, this would be the mayor.
Barber Surgeons	Main medieval medical aid. Would provide basic treatments like blood letting with leeches, pulling teeth or amputations.
Town Walls	Towns had greater protection due to surrounding walls. Gates stopped criminals and outsiders getting in
Thames	Main river in London. Used for dumping waster, bathing, drinking, ... Boats had to pay taxes to help clean the Thames but it was still filth and spread lots of disease.
Pattens	Special shoes developed to walk through the filthy streets, filled with human and animal waste, without ruining leather shoes.
Miasma	Belief that disease was caused and spread by smells in the air.
Westminster	Centre of government in Medieval England.

History – Castle Development

Types of Castles	
Motte and Bailey	First castles built in England by William. Quick to build using wood and manmade Mottes.
Stone Keep	First castles built out of stone. Better for defence as hard to break through walls.
Round Towers	Development to protect castles from attacks by mining
Shell Keep	Circular castles featuring totally round walls. Required large flat areas.
Concentric	Castles with several layers of defence. Most effective, but also very expensive.
Manor Houses	After the medieval period, castles changes to be used for luxury living not warfare.
Why did castles change?	Nature of warfare. When William I came to power he initially faced lots of rebellions and needed castles to control populations. By the Tudor period, conflicts were external reducing the need for highly defensive castles in England

Defending Castles	
Embrasures	Small windows that allowed arrows to be fired out at enemy but were hard to attack into
Battlements	Shape at the top of castle walls (Crenals and Merlons) with raised and lowered sections
Curtain Wall	Outer walls built as the first line of defence
Machicolations	Projecting stonework on walls, with holes in floor for dropping things on enemy
Murder Holes	Holes in the roof to pour hot water or oil on the enemy trying to enter the castle
Portcullis	Spiked metal or wooden gate that would block entrance to the castle
Wolf Holes	Traps in the area surrounding the castle to injure the enemy.

Attacking Castles	
Trebuchet	Medieval catapult. Could fire 300m, boulders of 50-100kg at enemy (Max. 1500 kg!)
Battering Ram	Used to break down wooden defences and thinner stone walls
Sappers	Specialist soldiers. Could fill in a moat with logs, stones or soil. Or act as miners who would tunnel under the castle to gain entry or cause walls to fall down.
Archers and Crossbows	Experienced archers could fire 10-15 times a minute. Could fire from a safe distance. Arrows were cheap to produce.
Fire Arrows	Experienced archers could fire from 200m, fire used to increase destruction
Greek Fire	Petrol based fire that was very hard for the enemy to put out, forcing them out the castle. Only urine could put this fire out!
Scaling Ladders	Ladders used to gain access to the castle by climbing up the walls
Siege Towers	Wooden towers used to protect soldiers and give entry to the castle
Siege	Prolonged attack where castle is blockaded and wait for them to run out of supplies
Latrine Shaft	The attackers might crawl up the shaft used for the castle occupants to dump their toilet waste. Although there was a risk of getting stuck!
Mangonel	Another machine used to fire rocks at the castle.

History - African Kingdoms

Medieval Mali	
Empire of **Mali,** 1230 CE – 1460's CE	Greatest trading empire in Africa, provided half of the world's gold. 1,600km, ruled over 400 cities. Effective administration and semi-professional army.

How did Mansa Musa become so wealthy?	
Mansa Musa was the wealthiest individual in human history.	
Salt Mining	Mali also controlled significant salt mines. One of the most valuable resources in the Medieval World
Agriculture	Farmers, ranchers and fishermen all became increasingly productive and diversified under Mansa Musa's leadership. This provided a large supply of food, cotton and leather.
Gold Mining	Mines under Mali's control produced large quantities of high-quality gold and copper. Mansa Musa increased the Empire's mining efforts.

How did Mansa Musa become so successful?	
Mansa Musa was the 10th Mansa of the **Mali Empire.** He ruled from 1312-1337. During his rule Malian Empire experienced it's 'Golden Age', reaching it's peak of success.	
Banishing Bandits	Mansa Musa focused on banishing bandits from the countryside. By removing the threat of attack traders were able to extend their routes and began to carry more goods, resulting in larger profits.
Expansion	During his reign Mansa Musa conquered 24 cities. This increased access to resources, slaves to work in mines and taxes to be collected.
Mansa Musa's Control	The Mansa maintained direct communication with foreign traders throughout his empire
Timbuktu	Mansa Musa acquired this city in the 1320's. This was an important commercial centre due to it's ports and location near the River Niger.

Did Mali have a 'Golden Age' Under Mansa Musa?	
Education	By the end of Mansa Musa's reign Timbuktu had become a **centre** of **learning** and **knowledge**. The **Mosque** Mansa Musa built became a **university**. There were also 180 **schools**. In Timbuktu many **books** were **produced**. **Scholars** from across Africa and the Arab world often met here to discuss ideas.
Law Documents	Large collection of documents from the Mali Empire have been found by historians, stored at Timbuktu. They show a **complex legal system** with written **laws** and carefully **documented administration**. This shows the Mali government was **sophisticated** for its time.
Timbuktu	*The atmosphere in Timbuktu must have been reminiscent of the gatherings of intellectuals that transfixed Mansa Musa at Mecca- polishing this jewel on the most easterly tip of his empire would be his great legacy. Even though it was many months' travel from his capital in Niani, and many months travel from his empire's western border, Timbuktu would be Mansa Musa's Florence. It would be the place where he would invest his love- as close to Mecca as his kingdom allowed. Here, in this multi-ethnic city of Songhai, Arabic and Tamashagh cultures, he would deposit his extensive collection of valuable documents.* ***Historian*** **Casely-Hayford**
Daily Life	**Medieval traveller and writer, Ibn Battuta, who visited the Mali Empire records: "**Life in Mali was generally peaceful. He reported that there was very little crime and that the people were always friendly and welcoming"

Mansa Musa's Pilgrimage
Mansa Musa was a Muslim. During his reign he travelled 9000 miles on a **pilgrimage** to Mecca. Crossing the Sahara dessert demonstrates his huge wealth. His travels spread knowledge of Mansa Musa's wealth, increasing their trade with other nations and making him even more powerful. When Mansa Musa passed through Cairo (Egypt) he gave away so much gold that it caused the value to drop, affecting the local economy!

Features of a world map

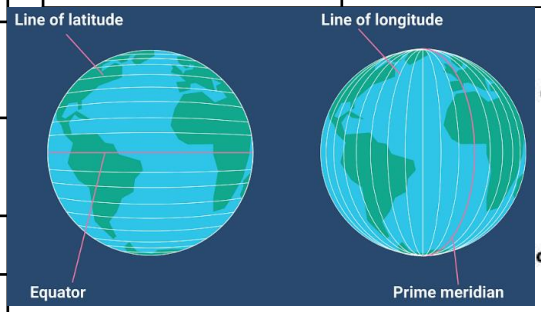
Country	Land that is controlled by a single government (e.g. UK).
Continent	Large solid area of land (Africa, Asia, Europe, South America, North America, Antarctica, Oceania).
Latitude	How far north or south of the Equator. (Horizontal lines)
Longitude	How far east or west of the Prime Meridian. (Vertical lines)
Equator	An imaginary line at 0° latitude.
Tropics of Cancer and Capricorn	Imaginary lines at: •23.5° North (Tropic of Cancer), •23.5° South (Tropic of Capricorn).

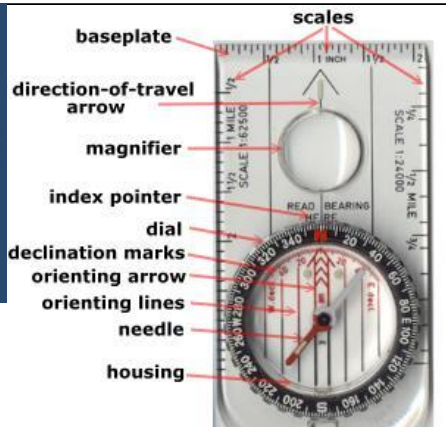
Parts of the compass

Bezel/dial	The round part of a compass that turns.
Orientation Lines	Lines inside the bezel that line up with the map.
“Shed”	The bit where the red compass needle sits when it’s lined up with the housing).
Direction of Travel	The arrow showing which way to walk.
Base Plate	The flat base with measuring scales.
Index pointer	Line that shows the number of degrees.

Using OS maps

“Rule of L”	A way to remember to read grid references: Go vertical lines, then horizontal lines.
North/South/ East/West and Sub-Sets	The main compass directions, plus in-betweens like NE (northeast) or SW (southwest).
‘As the Crow Flies’	The straight-line distance between two places (not following bends in roads or paths).
Scale	Shows how map distance relates to real life (e.g., 1 cm on the map = 1 km in real life).
Contour Line	A line on a map that joins points of the same height above sea level.
Topography	The shape of the land (like hills, valleys, and flat areas).
Gradient	How steep something is (like a hill).





Geography - Africa

Key Vocabulary	Definitions
Perceptions	The way in which something is regarded, understood, or interpreted based on secondary sources e.g. the media.
Stereotype	An often unfair and untrue belief that many people have based on a particular characteristic.
Cultural Bias	Based on stereotypes, the notion that a group of people/countries have the same characteristics
Rural	An area of low population density e.g. the countryside
Urban	An area of high population density such as a city.
Population density	Number of people per kilometre squared.
Natural Resources	Useful materials found in or under a country which can be used to develop, sell, or 'used'.
Slave trade	The movement of slaves from one part of the world to another against their will.
Physical/Human Geography	Physical= natural Human = man-made
Relief	The shape and height of the land (e.g. Ethiopian Highlands)
Depression	A low lying area of land.

Key Idea	Key Knowledge
Geography of Africa	Africa is second-largest continent, comprising 54 countries. It's highest point is Mt. Kilimanjaro (5895m), while the Danakil Depression is actually 125m below sea level!
Cradle of Mankind	Widely believed to be the "cradle of humankind," Africa is the only continent with fossil evidence of human beings and their ancestors through each key stage of their evolution.
Colonialism and the 'Age of Empire'	Colonialism forced environmental, political, social, and religious change to Africa. Natural resources, including diamonds and gold, were over-exploited. European business owners benefitted from trade in these natural resources, while Africans laboured in poor conditions without adequate pay.
Redrawing the map	European powers drew new political borders that divided established governments and cultural groups. These new boundaries also forced different cultural groups to live together. This restructuring process brought out cultural tensions, causing deep ethnic conflict that continues today.
Slave Trade	Between the 15th and 19th centuries, more than 15 million Africans were transported across the Atlantic Ocean to be sold as slaves in North and South America. Millions of Africans died in the slave trade. While Africans suffered greatly during the slave trade, they made tremendous economic, political, and cultural contributions to societies that enslaved them.
Fair Trade	Fairtrade changes the way trade works, through getting better prices for farmers, helping create decent working conditions and achieve a fairer, more sustainable deal for farmers and workers in developing countries such as Ethiopia.

The Rock Cycle

Rock cycle	The continuous process by which rocks are formed, broken down, and changed over time.
Igneous rock	Rock formed when molten magma or lava cools and solidifies.
Sedimentary rock	Rock formed from layers of sediment that are compacted and cemented together.
Metamorphic rock	Rock that has been changed by heat and/or pressure.
Magma	Molten rock beneath the Earth's surface.
Lava	Molten rock that has reached the Earth's surface.
Sediment	Small pieces of rock produced by weathering and erosion.
Weathering	The breakdown of rock in situ (without movement).
Erosion	The movement of weathered material by water, ice, wind, or gravity.
Deposition	The dropping of sediment when energy decreases.
Compaction	Sediments being pressed together under the weight of layers above.
Heat and pressure	Forces that change rocks into metamorphic rock.

Limestone (Karst scenery)

Limestone	A sedimentary rock mainly made of calcium carbonate.
Calcium carbonate	($CaCO_3$) - The mineral that limestone is made from.
Carbonate rock	Rock containing carbonate minerals, such as limestone and chalk.
Chalk	A soft, white form of limestone made from microscopic shells.
Fossils	Preserved remains or traces of plants and animals found in sedimentary rock.
Limestone landscape	An area shaped by the weathering of limestone.
Karst landscape	A landscape formed by the dissolution of limestone.
Carbonation	Chemical weathering process where acidic rainwater dissolves limestone.
Chemical weathering	Weathering that changes the chemical composition of rock.
Acidic rainwater	Rainwater made slightly acidic by carbon dioxide.
Cracks (joints)	Natural lines of weakness in rock.
Pavement	Flat, exposed limestone surface.
Clints	Blocks of limestone pavement.
Grykes	Deep cracks between clints.
Sinkhole	A depression caused by the collapse of limestone.
Swallow hole	A hole where surface water disappears underground.
Cave	An underground hollow in limestone.
Stalactite	Limestone formation hanging from a cave roof.
Stalagmite	Limestone formation rising from a cave floor.
Column (pillar)	Where a stalactite and stalagmite join.

Geography – Limestone Landscapes

Quarrying

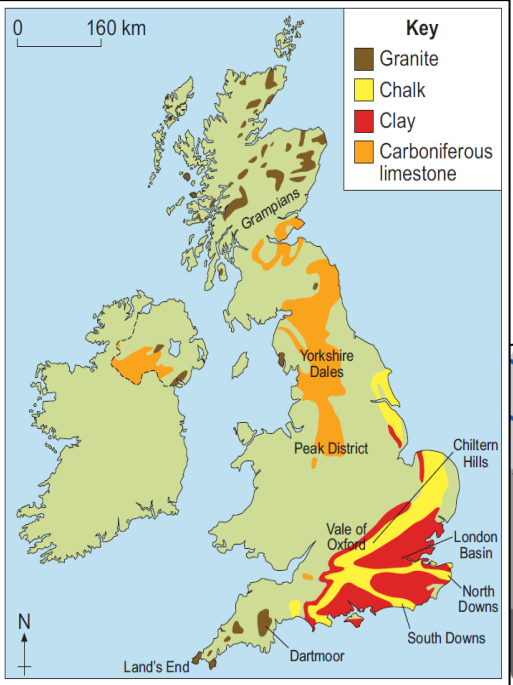
Quarrying	The extraction of rock from the ground.
Quarry	An open pit where stone is extracted.
Raw material	A natural material used to make products.
Aggregate	Crushed stone used in construction.
Cement	A building material made using limestone.
Building stone	Stone used for construction.
Economic activity	An activity that provides jobs and income.
Primary industry	Industry that extracts natural resources.

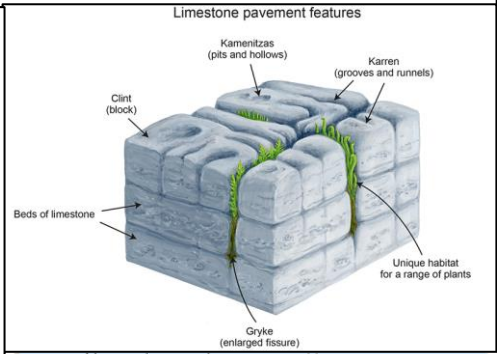
Environmental Impacts of Economic Activity

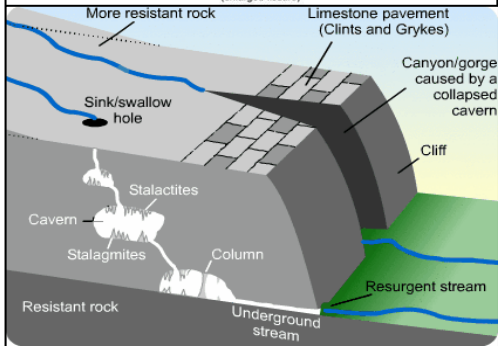
Environmental impact	Effect of human activity on the environment.
Visual pollution	Damage to the appearance of a landscape.
Noise pollution	Unwanted or harmful noise.
Dust pollution	Fine particles in the air caused by quarrying.
Habitat destruction	Loss of plants and animals' homes.
Sustainability	Meeting needs without harming future generations.
Restoration	Returning land to a natural or usable state after quarrying.
Conservation	Protecting natural environments.

Tourism in Limestone Landscapes

Tourism	Travel for leisure and recreation.
Tourist attraction	A place people visit for enjoyment or interest.
Show cave	A cave developed for public visitors.
Infrastructure	Facilities such as roads, paths and visitor centres.
Employment	Jobs provided by an activity.
Economic benefit	Financial gain from an activity.
Sustainable tourism	Tourism that minimises environmental damage.

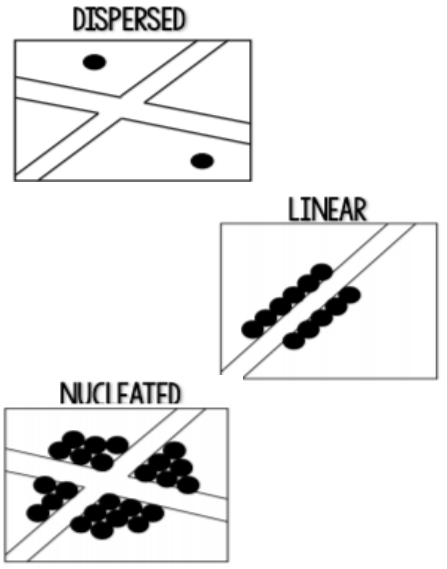


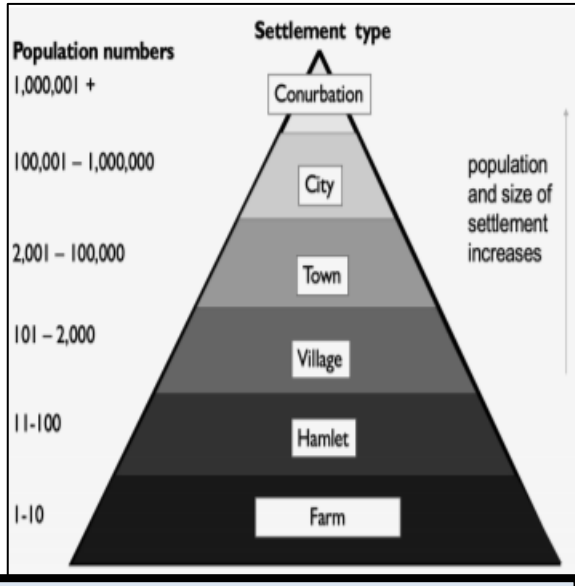




Geography – Settlements

Key word	Definition
Settlement	A place where people live, such as a hamlet, village, town, or city.
Site	The exact location of a settlement and the physical features it is built on (e.g. near a river, on flat land, or on a hill).
Situation	Where a settlement is in relation to other places and features around it (e.g. near another town, on a trade route, close to the coast).
Function	The main purpose of a settlement (e.g. market town, port, industrial centre, tourist resort).
Hierarchy	The way settlements are organised by size and importance, from small hamlets up to large cities and megacities.
Urbanisation	The increase in the number and proportion of people living in towns and cities, often leading to city growth.
Settlement pattern: Nucleated / Linear / Dispersed	Nucleated: Buildings grouped close together, often around a crossroads or central feature. Linear: Buildings arranged in a line, usually along a road, river, or valley. Dispersed: Buildings spread out and scattered across the countryside. This can be because of the function of the settlement, cultures, climate, wealth or history as well as topography (the shape of the land).
Push & Pull Factors	Push factors: Negative reasons that drive people away from an area (e.g. lack of jobs, poor services, conflict). Pull factors: Positive reasons that attract people to a new area (e.g. better jobs, good schools, safety).





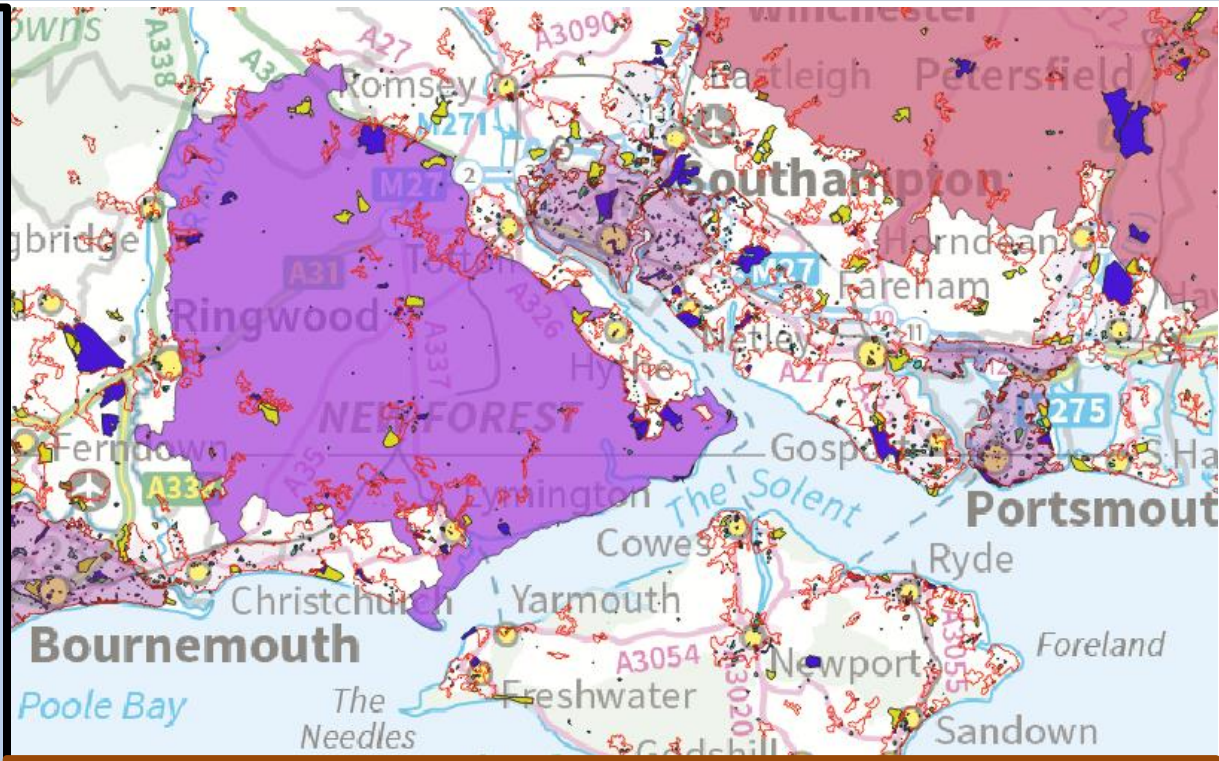
Burgess and Hoyt Models

Many geographers have noticed how towns develop in very specific sections.

- **CBD (Central Business District)** located at the centre of the city where rail and roads meet. Contains many commercial activities, shops, entertainment and business activities.
- **Inner City** mixed land-use containing small industries as well as high-density residential land-use; often characterised by terraced housing.
- **Inner Suburbs** residential areas which developed during the 1920s/30s – often semi-detached houses with bay windows and front/back gardens.
- **Outer Suburbs** residential areas which grew up later as greater public transport and private car ownership allowed people to commute. These houses are often semi-detached/detached with larger gardens.
- **Rural-urban fringe** this is right on the edge of towns and cities and is mainly low density, private housing (often larger detached properties); new industrial estates/business parks and facilities requiring larger open spaces such as golf courses.

Key word	Definition
Honey pot site	An area which attracts significant tourism, with attractions, facilities and overcrowding at peak time.
Conflict	Issues between groups of people.
Urban Sprawl	Cities spreading outwards.
National Park	Land protected by the government for nature and public enjoyment.
Conservation	Protecting natural resources.
Preservation	Keeping nature in its original condition.
Protected Area	Land set aside to prevent damage or development.
Habitat	The natural home of plants and animals.
Ecosystem	Living and non-living things interacting in an area.
Biodiversity	Variety of plants and animals in an area.
Wildlife	Animals living in their natural habitats.

NEW FOREST: National Park Case Study



New Forest National Park: Location

- The **New Forest is** located in southern England.
- It covers south-west Hampshire and extends into south-east Wiltshire and towards east Dorset.
- It is situated between the cities of Southampton, Bournemouth and Salisbury. Protecting this rural space is important.

New Forest: Conservation measures

The New Forest is designated as a

- Site of Special Scientific Interest (SSSI)
- EU Special Area of Conservation (SAC),
- Special Protection Area for birds (SPA),
- Ramsar Site is a **wetland site** (designated to be of international importance)
- it also has its own Biodiversity Action Plan (BAP)

BVT Unit 1: Life of Jesus

Key Vocabulary	Definitions
Ascension	When Jesus finally ascended or rose to heaven 40 days after his resurrection
Atonement	When Jesus 'make up for' mankind's sins; he did this through the sacrifice of his life
Baptism	To show faith and commitment to Jesus and Christianity. Completed using water showing a fresh start to the faith.
Disciple	A believer and follower of Jesus
Garden of Gethsemane	Where Jesus was arrested the night before he was crucified.
Holy Week	The 8 days starting with Palm Sunday, ending with Jesus' death and resurrection
Incarnation	God lives through Jesus. Jesus is in part God and part of the Trinity.
Last Supper	When Jesus had his last meal with his disciples, Thursday night before his arrest and death.
Messiah	Name for Jesus as the saviour
Miracle	An unexplained event
Omnipotent	All powerful
Parable	Stories told by Jesus, that had teachings / messages
Reconciliation	To rebuild a relationship
Resurrection	Rebirth – coming back to life
Salvation	Being accepted into Heaven
Trinity	The 3 parts that make up God in Christianity; the Father, the Son and the Holy Spirit

Beliefs:

- **Parable of Prodigal Son**: Father has 2 sons who he gives their inheritance. One son stays, the other leaves and wastes /spends his money. He returns sorry and his father forgives him.
- **Parable of Widows Offering**: At the temple collection the rich men give lots, but a widow gives only one coin. Jesus tells the disciples she has given all she has.
- **Parable of Lazarus and the Rich man**. Lazarus begs each day, the rich man ignores him. When the rich man dies God sends Lazarus to Heaven and the rich man to Hell. God is just and fair.
- **Miracles**: Some examples are: Calming of the storm, Healing the blind man, Feeding the 5,000

Key Quotes from the Bible

"God loved the world so much he gave his only Son"

"He has risen from the dead" Bible (Matthew)

"The Word became flesh and lived for a while among us"

BVT Unit 2: Christian Practices

Key Vocabulary	Definitions
Altar	The table in the centre at the front of the congregation, used for the Eucharist service.
Believers Baptism	When a person chooses to be baptised, so they are old enough to understand and make this decision.
Communal worship	Worship within a group or community
Discipleship	Continuing the work of Jesus e.g. helping others
Eucharist	Service held to remember Jesus' sacrifice using bread and wine
Font	Basin in church that holds water; used for infant baptisms
Lectern	A stand at the front of the church which holds the Bible. Bible passages are read from here.
Lords Prayer	A set prayer used regularly by Christians
Infant Baptism	When parents choose to baptise their baby / infant.
Pilgrimage	A spiritual journey to somewhere sacred
Private worship	Worship by yourself, often at home
Pulpit	A stand at the front of a church where the preacher gives his teachings / sermon
Sacrament	Important events in Christians lives where Christians receive Gods love.
Santiago de Compostela	A pilgrimage site in Spain. St James (a disciple of Jesus) is buried here.
Sermon	The talk and teachings given by the preacher at worship, from the pulpit.
Worship	To give worth to and praise God

Practices:

- Christians **worship** to praise God and often to join a community. Prayer is also part of worship.
- Christian **prayer** is for forgiveness, thanks, advice & help, for others, to feel close to God.
- A **set prayer** is the **Lord's Prayer**
- The **Eucharist** is to remember Jesus' death and sacrifice / **atonement** for mankind. Bread and wine are given. It follows Jesus' instruction to his disciples at the **Last Supper**.
- A **Catholic** Eucharist happens often. The wine is often blessed at the altar and the Eucharist prayer is read.
- Christians go on **pilgrimage** to take time to reflect on God, visit a **sacred place** and meet other Christians.
- **Church** is about the people; who they are and how they support their **community**. Church support is given to the local community, in areas such as food and clothes banks. The church also play a role nationally and globally too.

Key Quotes from the Bible

"We devote ourselves to prayer"

"Draw near to God and He will draw near to you"

"Let's not love with words or thoughts…but with our actions"

"Do this in remembrance of me"

Key Vocabulary	Definitions
Ark	A cabinet in the Synagogue which holds the Torah
Bar / Bat Mitvah	Ceremony for Jewish children celebrating adulthood
Covenant	An agreement/promise made with God
Hannukah	Jewish Festival also called the Festival of Light, celebrating Jewish freedom
Idols	Gods / Spirits people worshipped instead of One God
Israelites	Jewish people that were enslaved by the Egyptians
Maccabees	Family that fought for Jewish freedom from the Greeks; celebrated at Hannukah
Menorah	8 Candles with one in the centre lit at Hannukah
Passover (or Pesach)	Jewish Festival that celebrates Moses freeing the Israelites
Plagues	10 disasters unleashed by God onto the Egyptians
Promised Land	Land promised /given to the Jews by God (now Israel)
Prophet	Humans chosen to be messengers / teachers of God
Seder Plate and Meal	Special food presented at Passover meal. They have symbolic meaning to the story of Moses.
Shabbat	Weekly worship from Friday night to Saturday night
Synagogue	Place of Jewish worship
Tallit	Prayer shawl worn at worship
Tefillin	Box worn on head with prayers inside for worship
Ten Commandments	List of 10 rules given by God to Moses for the Jews to follow.
Torah	The scrolls of Torah are the Holy book for Jews

Beliefs / Practices:

- **Abraham:** Chosen by God to be a prophet. He made a **covenant** with God. His faith was **tested** by God 10 times. His first test was to move to the **promised Land**. His final test was to sacrifice his son **Isaac**.
- **Moses**: God chose Moses to be a prophet, he spoke to him through a **burning bush**. Moses freed his enslaved people the Israelites, using God's power to unleash **plagues** and part the **Red Sea**. Moses accepted the **10 Commandments** from God.
- **Worship**: Jews worship in a **synagogue** and at **Shabbat** – Friday night to Saturday night. Objects are used in worship such as the **Kippah, Tallit and Tefillin**. Jews pray **3 times** a day and give many blessings or thanks to God.
- **Festival of Passover**: Remembers Moses. The house is cleaned/prepared. The **Seder** Meal with the family has symbolic foods and the story of Moses is read.
- **Festival of Hannukah**: Also called the **Festival of Light**. The **Maccabees** are celebrated for bringing freedom under the Greek invasion. The **Menorah** celebrates the oil that burnt for 8 days.

Key Quotes

God said to Abraham: "Leave your country…. I shall make you a great nation… I shall bless those that bless you".

"Fear not, stand your ground… the Lord himself will fight for you". Moses

Commandment 1: Have no other Gods

Commandment 4: Keep the Sabbath (a holy day).

BVT Unit 4: Who is God?

Key Vocabulary	Definitions
6 Articles of Faith	6 Key beliefs Muslims follow
Day of Judgement	When religious people believe they will face a judgment by God to go to either Heaven or Hell
Eid	Muslim Festival to celebrate Muhammad
Free Will	The belief that God gave us the ability to make our own choices
Just	God is fair; he treats everyone equally for their actions
Monotheism	Belief in ONE God
Mosque	Place of worship for Muslims
Muhammad	Main prophet in Islam
Omnibenevolent	God is all loving
Omnipotent	God is all powerful
Omniscient	God is all knowing
Prophets	Humans chosen to be messengers and teachers of God
Qur'an	Holy book for Muslims
Story of Job	Story of how Job was tested with suffering from God, but he remained loyal and faithful throughout.
Tawhid	God is ONE and absolute / almighty in Islam
Temptation	Belief that the devil influences people to make the wrong choices and sin
Test of Faith	When God tests a persons devotion and loyalty to Him

Beliefs:

- **ALL Monotheist** religions believe in **ONE** and the **SAME God**
- **God is omnipotent or all powerful**: Shown in **creation** and through **Jesus** and **miracles** of prophets.
- **God is omnibenevolent or all loving:** Shown in **parables** of Jesus and through his **atonement**.
- **God is just and fair**: Shown in **Day of judgement** by all monotheist religions, where people are treated fairly for their actions. God also treats everyone equally.
- **Arguments for Suffering**: 1) Punishment from God 2) Test of Faith 3) God gave man free will, they have caused their suffering 4) Temptation to evil causes suffering.
- Prophets and Holy Books spread the teachings of God.

Key Quotes about God:

"Forgive us our trespasses as we forgive those that trespass against us" Lords Prayer
"God is most merciful and forgiving" Qur'an
"In the beginning God made the Heavens and the earth" Bible
"Nothing is impossible with God" Bible
"No vision can grasp him… He is above all comprehension" Qur'an
"I am the Lord, and there is no other. I form the light and darkness" Torah
"Be you neither Jew nor Greek…male nor female, you are all one in Jesus Christ" Bible
"God made man in his image" Bible
"We will show you the truth of what you did" Qur'an

Key Vocabulary	Definitions
Quand	When?
Où	Where?
Comment	How?
Combien	Hom much/many?
Qui	Who?
Pourquoi	Why?
Quoi	What?
Qu'est-ce que	What?
Est-ce que	Do ? (Only for a question)
Le / La / Les	The (m) / The (f) / The (pl)
Un / Une / Des	A (m) / A (f) / Some (pl)

L'alphabet

A ah	H ash	O oh	V vay
B bay	I ee	P pay	W doobla-vay
C say	J shee	Q coo	X ix
D day	K car	R air	Y ee-grek
E er	L ell	S ess	Z zed
F eff	M emm	T tay	
G shay	N enn	U ooo	

Pronunciation

- Silent last consonants –**t/d/s**
- **é** - 'ay' café
- **è/ê** - père, fête
- **ç** - soft 's' - français
- **oi** - 'wah' - noir

Essential numbers that can be used to build others

1- un	2- deux	3- trois	4- quatre	5- cinq
6- six	7- sept	8- huit	9- neuf	10- dix
11- onze	12- douze	13- treize	14- quartorze	15- quinze
16- seize	17- dix-sept	18- dix-huit	19- dix-neuf	20- vingt
30- trente	40- quarante	50- cinquante	60- soixante	70- soixante-dix
80- quatre-vingts	90- quatre-vingt-dix	100- cent	71 = 70+11 91 = 90+11	

French Verb Conjugations – Present Tense

Avoir = to have			
J'ai	I have	**Nous avons**	We have
Tu as	You have	**Vous avez**	You all have
Il/elle/on a	He/she/one has	**Ils/elles ont**	They have

Faire = to do			
Je fais	I do	**Nous faisons**	We do
Tu fais	You do	**Vous faites**	You all do
Il/elle/on fait	He/she/one do	**Ils/elles font**	They do

Aller – to go			
Je vais	I go	**Nous allons**	We go
Tu vas	You go	**Vous allez**	You all go
Il/elle/on va	He/she/one goes	**Ils/elles vont**	They go

Être = to be			
Je suis	I am	**Nous sommes**	We are
Tu es	You are	**Vous êtes**	You all are
Il/elle/on est	He/she/one is	**Ils/elles sont**	They are

Regular Present Tense Verb Endings.
Remove the –er/-ir/-re first and then add the endings

	-ER	-IR	-RE
JE	-E	-IS	-S
TU	-ES	-IS	-S
IL - ELLE - ON	-E	-IT	----------
NOUS	-ONS	-ISSONS	-ONS
VOUS	-EZ	-ISSEZ	-EZ
ILS	-ENT	-ISSENT	-ENT

French Verb Conjugations – Past Tense (Passé Composé)

To make the past tense use the correct part of the verb to have and then add the past participle (verb in the past)

J'ai
Tu as
Il/elle/on a
Nous avons
Vous avez
Ils/elles ont

Remove the –er/ -ir/ -re to create the past participle and add the ending		
Jouer (to play)	jou-	joué
Finir (to finish)	fin-	fini
Vendre (to sell)	end-	vendu

Certain verbs need to use the verb être to create the past tense – add an **e** for feminine and **s** for plural

Je suis	allé(e)
Tu es	allé(e)
Il/elle/on est	allé(e)
Nous sommes	allé(e)s
Vous êtes	allé(e)(s)
Ils/elles sont	allé(e)s

I went

resté - stayed
arrivé - arrived

Past Tense Time Phrases	
hier	yesterday
l'année dernière	last year
L'été dernier	last summer
La semaine dernière	last week
Le weekend dernier	last weekend

French Verb Conjugations – Future

To make the future tense you use the verb aller and add the infinitive (verb ending in –er/-ir/-re)

Je vais
Tu vas
Il/elle/on va
Nous allons
Vous allez
Ils/elles vont



Infinitive
jouer
finir
vendre

Je vais jouer – I am going to play
Tu vas finir – you are going to finish
Elle va vendre – she is going to sell.

To create the simple future (will) you take the verb and add the following endings.
-er verbs remove the final e

I	Je
You	Tu
he/she/we	Il/elle/on
we	Nous
You /you all	Vous
theythey	Ils/elles



jouer**ai**
jouer**as**
jouer**a**
jouer**ons**
jouer**ez**
jouer**ont**

Je jouerai – I will play

Tu finiras – you will finish

Elle vendra – she will sell.

Future Tense Time Phrases	
demain	tomorrow
L'année prochaine	next year
L'été prochain	next summer
La semaine prochaine	next week
Le weekend prochain	next weekend

French Verb Conjugations – Imperfect (was ing.... / used to ....)

To make the imperfect tense you use the nous form of the verb in the present, remove **– ons** then add the endings

	-er verbs (jouons)	-ir verbs (finssons)	-re verbs (vendons)
Je	jou**ais**	finiss**ais**	vend**ais**
Tu	jou**ais**	finiss**ais**	vend**ais**
Il/elle/on	jou**ait**	finiss**ait**	vend**ait**
Nous	jou**ions**	finiss**ions**	vend**ions**
Vous	jou**iez**	finiss**iez**	vend**iez**
Ils/elles	jou**aient**	finiss**aient**	vend**aient**

Irregular verb – to be (used to be / I was)
J'étais
Tu étais
Il/elle/on était
Nous étions
Vous étiez
Ils/elles étaient

Je jouais – I used to play OR I was playing

Opinions	
J'aime / Je n'aime pas	I like / I don't like
J'adore / Je déteste	I love / I hate
Je m'intéresse à	I am interested in
Je me preoccupe de	I am worried about

If using a verb it needs to be in the infinitive

- J'aime jouer au foot - I like to play/playing football

French Adjective Agreements

Adjectives change their endings depending on whether the thing you are describing is masculine, feminine or plural

Regular Adjectives – most follow this pattern				
	Masculine	Feminine	Masculine Plural	Feminine Plural
petit	petit	petite	petits	petites
timide	timide	timide	timides	timides
fatigué	fatigué	fatiguée	fatigués	fatiguées

Adjectives in French go after the noun **NOT** before like in English

Le chat noir – the black cat
La personne intelligente – the intelligent person
Les garçons timides – the shy boys
Les filles fatiguées - the tired girls

Irregular adjectives				
	Masculine	Feminine	Masculine Plural	Feminine Plural
sérieux	sérieux	sérieuse	sérieux	sérieuse
gros	gros	grosse	gros	grosses
bon	bon	bonne	bons	bonnes
gentil	gentil	gentille	gentils	gentilles
blanc	blanc	blanche	blancs	blanches
actif	actif	active	actifs	actives

EXCEPT – the following go **before** the noun

beau/belle - beautiful
joli(e) - pretty
grand (e) - big
petit (e) - small
vieux / vielle - old

Possessive Adjectives - change depending on what is being described			
	Masculine	Feminine	Plural
Mine	**mon**	**ma**	**mes**
Yours	**ton**	**ta**	**tes**
His / Hers / Theirs	**son**	**sa**	**ses**
Ours	**notre**	**notre**	**nos**

Comparisons

le/la/les	plus (most) moins (less)	+ adjective
le/la	meilleur (the best pire (the worst)	

Key Vocabulary	Definitions
¿Cuándo?	When?
¿Dónde	Where?
¿Cómo?	How?
¿Cuánto?	Hom much/many?
¿Quién?	Who?
¿Por qué?	Why?
¿Qué?	What?
¿Cuál?	Which?
El / La / Los / Las	The (m) / The (f) / The (pl)
Uno / una / unos / unas	A (m) / A (f) / Some (pl)

Pronouns			
Yo	I	**Nosotros**	We
Tú	You	**Vosotros**	You all
Él / Ella / Usted	He / She / You formal	**Ellos / Ellas**	They

A - ah	B - beh	C - seh	D - deh	
E - eh	F - eh feh	G - heh	H - ah cheh	
I - ee	J - hoh tah	K - kah	L - eh leh	
M - eh meh	N - eh neh	Ñ - eh nieh	O - oh	
P - peh	Q - koo	R - eh reh	S - eh seh	
T - teh	U - oo	V - oo beh	W - oo beh doh bleh	
X - eh kiss	Y - yeh	Z - seh tah		

Sounds

ll - 'yay' ge - 'he' j - 'huh' rr – rolled qu - 'k'

Essential numbers that can be used to build others

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
30- treinta	40- cuarenta	50- cincuenta	60- sesenta	70- setenta
80- ochenta	90- noventa	100- cien	500 = quinientos	

Spanish Verb Conjugations – Present Tense

Tener = to have			
Tengo	I have	**Tenemos**	We have
Tienes	You have	**Tenéis**	You all have
Tiene	He/she/you formal has	**Tienen**	They have

Faire = to do			
Hago	I do	**Hacemos**	We do
Haces	You do	**Hacéis**	You all do
Hace	He/she /you formal does	**Hacen**	They do

Ir – to go			
Voy	I go	**Vamos**	We go
Vas	You go	**Vais**	You all go
Va	He/she/you formal goes	**Van**	They go

Être = to be			
Soy	I am	**Somos**	We are
Eres	You are	**Sois**	You all are
Es	He/she/ you is	**Son**	They are

Regular Present Tense Verb Endings. Remove the –ar/-ir/-re first and then add the endings

Pronouns		-ar	-er	-ir
I	Yo	o	o	o
You	Tú	as	es	es
He/she/it	Él/Ella	a	e	e
We	Nosotros	amos	emos	imos
You guys	Vosotros	áis	éis	ís
They	Ellos/Ellas	an	en	en

Spanish Verb Conjugations – Past Tense (Preterito)

Pronoun	-ar verbs (habl**ar**)	-er (com**er**) + -ir (viv**ir**) verbs
Yo (I)	hablé	comí / viví
Tú (You)	hablaste	comiste / viviste
Él /ella /usted (he/she/you formal)	habló	comío / vivío
Nosotros (We)	hablamos	comimos / vivimos
Vosotros (You all)	hablasteis	comisteis / vivisteis
Ellos/ Ellas (They)	hablaron	comieron / vivieron

Key Irregular Verbs

Pronoun	ir (to go) ser (to be)	tener (to have)	hacer (to do)
Yo	**fui**	**tuve**	**hice**
Tú	**fuiste**	**tuviste**	**hiciste**
Él /ella /usted	**fue**	**tuvo**	**hizo**
Nosotros	**fuimos**	**tuvimos**	**hicimos**
Vosotros	**fuisteis**	**tuvisteis**	**hicisteis**
Ellos/ Ellas	**fueron**	**tuvieron**	**hicieron**

Past Tense Time Phrases	
ayer	yesterday
el año pasado	last year
el verano pasado	last summer
La semana pasada	last week
el fin de semana pasado	last weekend

Spanish Verb Conjugations – Future (will)

Time Phrases	Infinitive + ending	
La semana próxima (next week) **mañana** (tomorrow) **El fin de semana próximo** (next weekend) **El año próximo** (next year) **En el futuro** (in the future) **Cuando sea más mayor** (when I will be older)	yo Tú él / ella / usted nosotros vosotros ellos / ellas	hablar**é** hablar**ás** hablar**á** hablar**emos** hablar**éis** hablar**án**
	Irregular Stems	
	hablar**é** hablar**ás** hablar**á** hablar**emos** hablar**éis** hablar**án**	tendr**é** har**é** dir**é** saldr**é**

To go		infinitve
voy	**a**	hablar comer vivir
vas		
va		
vamos		
vais		
van		

Future – am going to .....

Voy a ir a la playa – I am going to go to the beach

Vamos a jugar al fútbol - We are going to play football

Spanish Verb Conjugations – Imperfect (was ing.... / used to ....)

To make the imperfect tense take the infinitive and remove the –ar/-er/-ir + endings

	-ar (hablar)	-er/-ir (comer/vivir)
Yo	habal**aba**	com**ía**
Tú	habl**abas**	com**ías**
Él /ella /usted	habl**aba**	com**ía**
Nosotros	habl**ámos**	com**íamos**
Vosotros	habl**abais**	com**íais**
Ellos/ Ellas	habl**aban**	com**ían**

Irregular verbs ir-to go and ser (to be)	
iba	era
ibas	eras
iba	era
ibamos	eramos
ibais	erais
iban	eran

hablaba – I used to talk **OR** I <u>was</u> talking

Opinions	
Me gusta(n) / No me gusta(n)	I like / I don't like
Me encanta(n) / Me chifla(n) / Odio	I love / I love / I hate
Me preocupa(n)	It worries me
Me interesa(n)	I am interesed in

When talking about 1 thing
- Me gusta el chocolate

When talking about multiple things
- Me gusta**n** los gatos

If using a verb it needs to be in the infinitive
- Me gusta jugar al fútbol - I like to play football

Spanish Adjective Agreements

Adjectives change their endings depending on whether the thing you are describing is masculine, feminine or plural

Regular Adjectives – most follow this pattern				
	Masculine	Feminine	Masculine Plural	Feminine Plural
pequeño	pequeño	pequeña	pequeños	pequeñas
trabajador	trabajador	trabajadora	trabajadores	trabajadores
inteligente	inteligente	inteligente	inteligentes	inteligentes
feliz	feliz	feliz	felices	felices

Adjectives in Spanish go after the noun NOT before like in English

El gato negro – the black cat
La persona inteligente – the intelligent person
Los niños tímidos – the shy boys
Las niñas cansadas - the tired girls

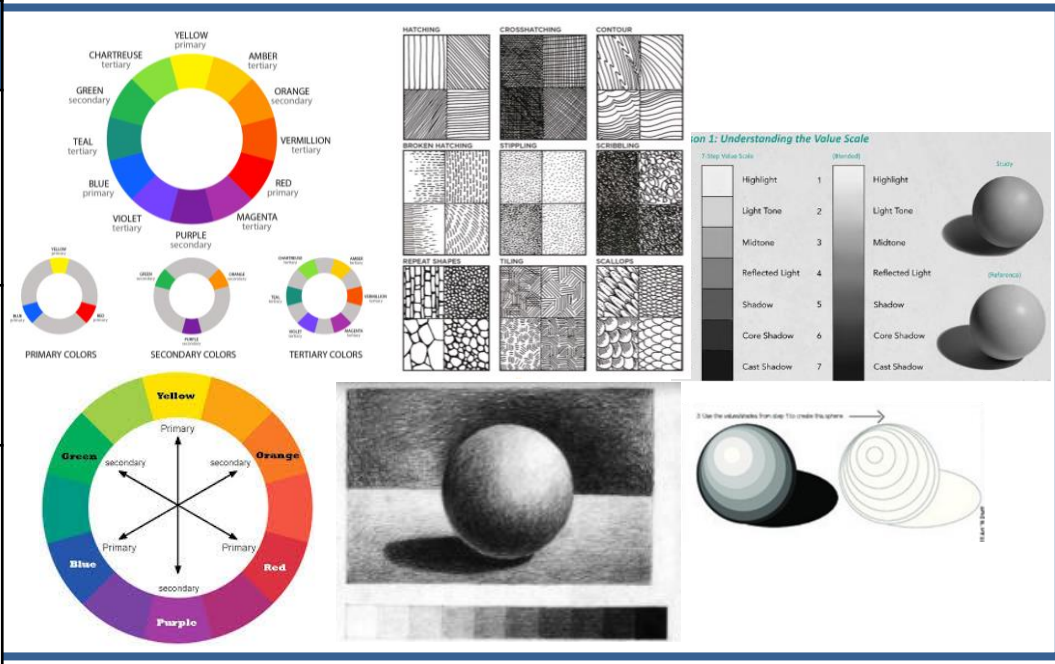
Comparisons in Spanish

el / la / los / las	más (most) menos (least)	+ adjective el más intelligente – the most intelligent la menos simpatica – the least nice
el / la	mejor – the best	peor – the worst

Possessive Adjectives - change depending on what is being described				
	Masculine	Feminine	Masculine Plural	Feminine Plural
Mine	**mi**	**mis**	**mis**	**mis**
Yours	**tu**	**tu**	**tus**	**tus**
His / Hers / Theirs	**su**	**su**	**sus**	**sus**
Ours	**nuestro**	**nuestra**	**nuestros**	**nuestras**

ART - FORMAL ELEMENTS

FORMAL ELEMENTS	Definitions
Line	A **LINE** is the path left by a moving point, eg. A pencil or a brush dipped in paint. A **LINE** can take many forms, eg. Horizontal, diagonal or curved. A **LINE** can be used to show contours, movements, feelings and expressions.
Tone	**TONE** means the lightness or darkness of something. This could be a shade or how dark or light a colour appears.
Shape/ Form	A **SHAPE** is an area enclosed by a **LINE**. It could be just an outline or it could be shaded in. **FORM** is a three dimensional shape such as a sphere, cube or a cone. Sculpture and 3D design are about creating **FORMS**
Texture	**TEXTURE** is the surface quality of something, the way something feels or looks like it feels. There are two types of texture: **ACTUCAL TEXTURE** and **VISUAL TEXTURE**. **ACTUAL TEXTURE**: really exists so you can feel it and touch it **VISUAL TEXTURE**: created using different marks that represent actual **TEXTURE**
Colour	There are 3 primary **COLOURS**: **RED**, **YELLOW**, **BLUE** By mixing any 2 **PRIMARY COLOURS** together you create **SECONDARY COLOURS**; **ORANGE**, **GREEN**, **PURPLE**
Pattern	**PATTERN** is a design that is created by repeating **LINES**, **SHAPES**, **TONES** or **COLOURS.** Patterns can be manmade or natural.



Giorgio Morandi

Morandi was an Italian painter and printmaker. His work is known for it's simplicity. He used a range of strong, directional mark making to create a sense of space, form and texture.

Sonia Delaunay

Delaunay was a French artist, printmaker and textile artist. She spent most of her working life in Paris. Her work was largely focused on bright, bold, sometimes weaving and overlapping shapes and patterns.

Michael Craig Martin

Michael Craig Martin is an Irish born, American artist known for his paintings of objects. He simplifies his images, using bright, bold, block colour schemes with overlapping lines and shapes.

Angie Lewin

Lewin in a British artist and printmaker. Her work is inspired by the natural world around her. Using found objects like feathers, stones and shells within her images. Her work is abstract through simplification and use of bold colour and pattern.

ART - SONIA DELAUNAY, PATTERN/COLOUR/SHAPE

ARTIST RESEARCH SENTENCE STARTERS

- My chosen artist works with the materials:...
- I like/don't like the work of my chosen artist because...
- The mark making in the image creates...
- In my own work I will try to create...in the style of my chosen artist.
- I would describe the pattern/tone/detail in this image as...

SENTENCE STARTERS FOR TALKING ABOUT YOUR OWN WORK

- I can vary tone by...
  - layering mark making
  - using a range of pencils
  - varying the pressure of my marks
  - using an eraser to add highlights

- My work is successful because...
- I could develop my work further by...
- My design was inspired by the work of...

SONIA DELAUNAY

Delaunay was a Russian born, French artist, printmaker and textile artist. She spent most of her working life in Paris. During WW2 she moved with her young family to Spain and then Portugal, moving back to France later in her life. Her work was largely focused on bright, bold, sometimes weaving and overlapping shapes and patterns. Delaunay was known for her use of colour and the sense of movement within her work and was part of the Orphism movement, a development (and one Delaunay is specifically known for) from the Cubist movement.







COLOUR	LINE	SHAPE/FORM/SPACE	PATTERN/TEXTURE	TONE
BRIGHT	FLUENT	CLOSED	REPEATED	BRIGHT
BOLD	CONTINUOUS	OPEN	UNIFORM	DARK
VIBRANT	CONTROLLED	DISTORTED	GEOMETRIC	FADED
PRIMARY	LOOSE	FLAT	RANDOM	SMOOTH
SECONDARY	POWERFUL	ORGANIC	SYMMETRICAL	HARSH
TERTIARY	STRONG	POSITIVE	SOFT	CONTRASTING
RADIANT	ANGULAR	NEGATIVE	IRREGULAR	INTENSE
VIVID	FLOWING	FOREGROUND	UNEVEN	SOMBRE
DULL	LIGHT	BACKGROUND	ROUGH	STRONG
CONTRASTING	DELICATE	COMPOSITION	BROKEN	POWERFUL
COMPLIMENTARY	SIMPLE	ELONGATED	GRID	LIGHT
HARMONIOUS	THICK	LARGE	FLAT	MEDIUM
MONOCHROME	THIN	SMALL	WOVEN	DARK
NATUARL	BROKEN	2D	ORGANIC	LAYERED
SATURATED	OVERLAPPING	3D	SMOOTH	DEPTH
PASTEL	LAYERED	TWISTED	ABSTRACTED	DEVELOPED
COOL	MARK MAKING	JAGGED	COLOURFUL	SOFT
WARM				

ART - MARK HEALRD, PATTERN/COLOUR/SHAPE/LINE

MARK HEARLD

Hearld is a contemporary British artist and printmaker, known for his collages and prints inspired by the flora and fauna of the British countryside. Hearld was inspired by the farmland around where he grew up and would often produce paintings and drawings of his natural surroundings. Hearld creates various work in a range of media, including; prints, linocuts, lithographs, paintings, drawings, collage and hand painted ceramics.





RESEARCHING HABITATS

- Where do the animals live?
- How is their fur/scales/feathers adapted to their climate?
- Where do they build their homes?
- How do they build their homes?
- What do they eat?
- Do they hibernate or not?

SIMPLIFICATION AND ILLUSTRATION



The background adds a 'story'

Pattern is included through mark making

Colour is blocked

Outline shape is similar but not 'perfect'

Detail is simplified into clear and strong lines



DIFFERENT HABITATS

- Cliffs and beaches
- Farmland
- Estuaries and mudflats
- Heathland
- Meadows and grasslands
- Uplands, mountains and moors
- Urban and suburban
- Wetlands
- Woodlands

<u>How to make a successful artist analysis page</u>

Student work in the style of the artist

Neat but creative title

Backgrounds add texture without being distracting



Information about the artist

Added opinion of the work using key art specific language

Images of the artist's work

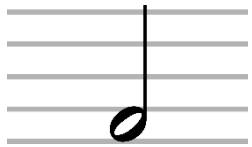
MUSIC - FOUNDATIONS AND KEYBOARD SKILLS

Key Vocabulary	Definitions
Dynamics	The volume of the Music
Rhythm	The order of the notation duration
Pitch	The highness or lowness of a note in sound frequency
Structure and Form	How the composition is built
Melody	The Tune
Instrumentation	The instruments used by the composer
Tempo	The Speed of the Music
Harmony	All the musical parts that support the Melody
Scale	The order of notes for a specific key
Black Keys	Arranged in groups of twos and threes
Middle C	The white note to the left of two black notes found in the centre of a piano or keyboard.
Octave	Notes with the same letter name but at differing frequencies
Stave	The five lines where musical notes are written
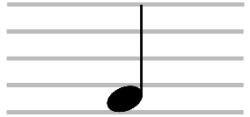
Essential Music Symbols



Treble Clef



Minim = 2 beats



Crotchet = 1 beat



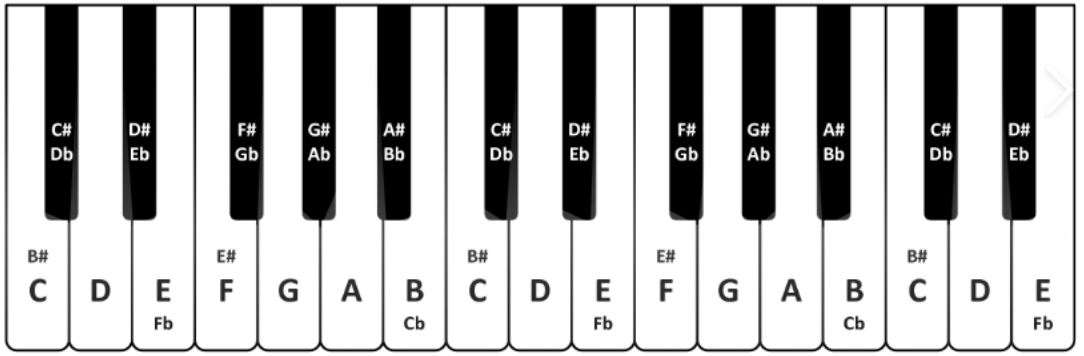
Semibreve = 4 beats



Quaver = 1/2 beat



Time Signature

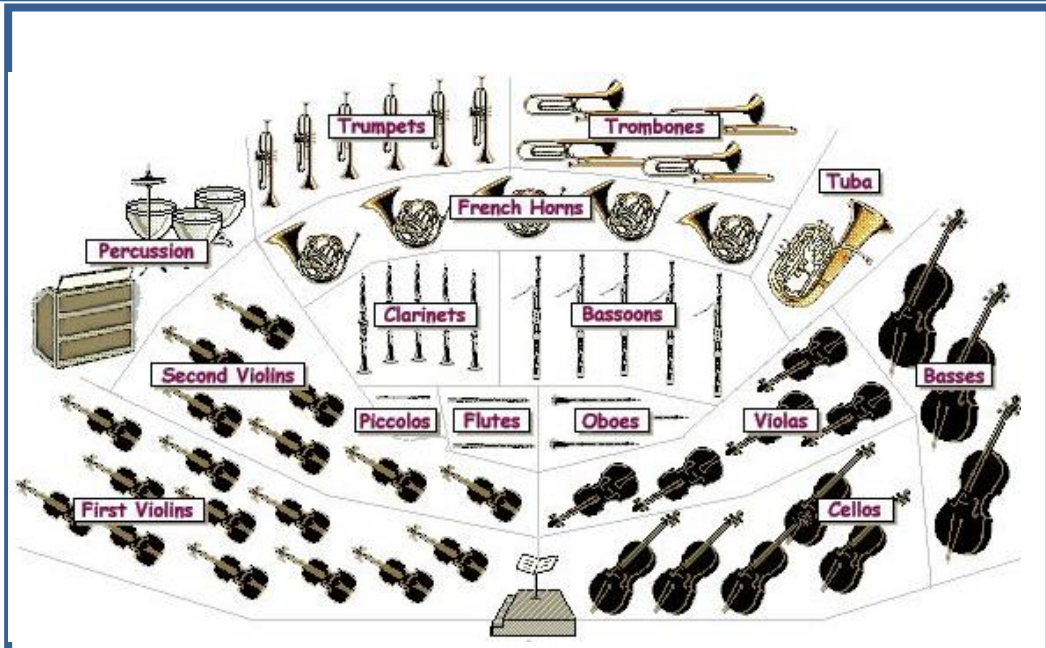


PIANO/KEYBOARD LAYOUT

MUSIC - I'VE GOT RHYTHM AND SONORITY CITY
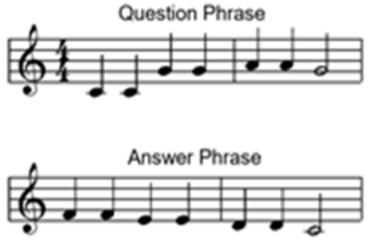


Symbol	Name	Number of beats
𝅝	Semibreve	4
𝅗𝅥	Minim	2
♩	Crotchet	1
♪	Quaver	$\frac{1}{2}$



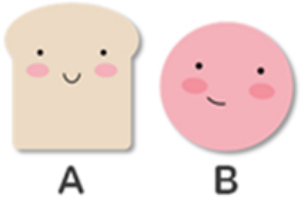
Key Vocabulary	Definitions
Rhythmic Ostinato	A short repeated rhythmic pattern without a particular pitch.
Cyclic Rhythm	A rhythm which is repeated over and over again in a cycle.
Polyrhythm	The use of several independent rhythms to create a thick texture
Duration	The length of a particular note or sound
Orchestra	A large musical ensemble divided into four sections
Sonority	Describes the unique sound quality of differing instruments
Pizzicato	To pluck the strings
Arco	To bow the strings

MUSIC - FORM AND STRUCTURE PLUS, FOLK MUSIC

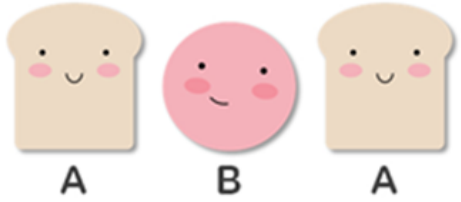
Two short sections in a piece of music. The first **QUESTION PHRASE** is followed by the **ANSWER PHRASE** which in some way copies or answers the first – like a 'musical conversation'. The **MELODY** below shows the opening of "Twinkle Twinkle Little Star" - notice how the **QUESTION PHRASE** rises in **PITCH** and the **ANSWER PHRASE** descends in **PITCH**.



BINARY FORM (AB) describes music in two sections. The first section can be labelled "A" and the second section "B" (either or both sections may be repeated). The "B" section **contrasts** musically in some way to the first "A" section.



TERNARY FORM (ABA) describes music in three sections. The first section can be labelled "A" and the second section "B" The "B" section **contrasts** in some way to the first "A" section which is then **repeated** after the "B" section again.



RONDO FORM (ABACADA…) describes music where a main **theme** or **melody** "A" keeps returning between different contrasting sections "B, C, D…" (called **episodes**)



Key Vocabulary	Definitions
Folk Music	Music of the people from different countries and cultures
Oral Tradition	Songs which are passed down by word or mouth
Sea Shanties	Songs sung by sailors to help with hoisting the sails
Ostinato	A repeated musical pattern
Drone	A form of musical accompaniment of two continuous notes
Harmony	The effect produced by playing two or more notes
Tonic Pedal	A long continuous note played by the bass
A Cappella	Songs sung without any instrumental accompaniment
Folk Fusion	A combination of two musical genres such as rock and folk
Work Songs	Songs sung in the fields to help with the manual labour
Interval	The distance between two musical pitches

Drama - Intro to Drama and Physical Theatre- Mime

Key Vocabulary	Definitions
Mime	Acting as if objects are there when they are not, usually without speaking.
Tableaux	Freezeframes- like taking a photo.
Improvisation	Making things up on the spot, with no rehearsal.
Devising	Developing your improvisations into a performance.
Voice Projection	Ensuring your voice is heard by all.
Hotseating	A technique where we question one another, in character, to develop our knowledge of who we are playing.
Levels	Making a play visually engaging by staging some things high, some middle and some low. This may also reveal something about the character's status.
Characterisation	Creating a role.
Corpsing	Coming out of character by giggling.
Upstaging	Stealing the audience's attention from others in the play.
End-on	A staging configuration of audience in front of the actors.

DRAMA TARGETS



The Trafalgar School DOWNTON

- ☐ I can cooperate
- ☐ I can perform confidently – taking an equal share of the lines and actions
- ☐ I can work with everyone
- ☐ I can lead
- ☐ I can use my voice to create a character
- ☐ I can compromise
- ☐ I can project my voice
- ☐ I can stay in role (no corpsing)
- ☐ I can stay focused on the task
- ☐ I can come up with and share creative ideas
- ☐ I can use Drama terminology accurately
- ☐ I can verbally evaluate my own and others' work (support and suggest)
- ☐ I can use my physicality to create a role

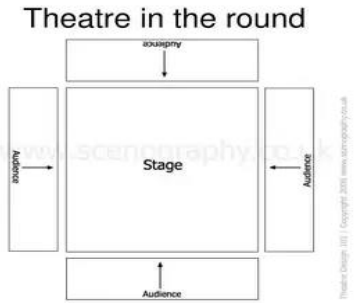
Drama - Theatre History 1 and Devising competition

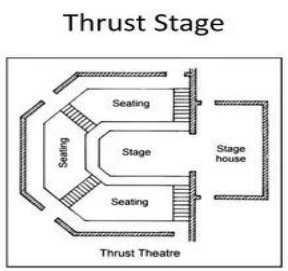
Scripted:-
A performance based on a pre-written play script- all dialogue, stage directions and plot are pre-determined by a playwright.

Improvised:-
A performance that is created spontaneously by the performers in real-time, without a pre-written script or plan.

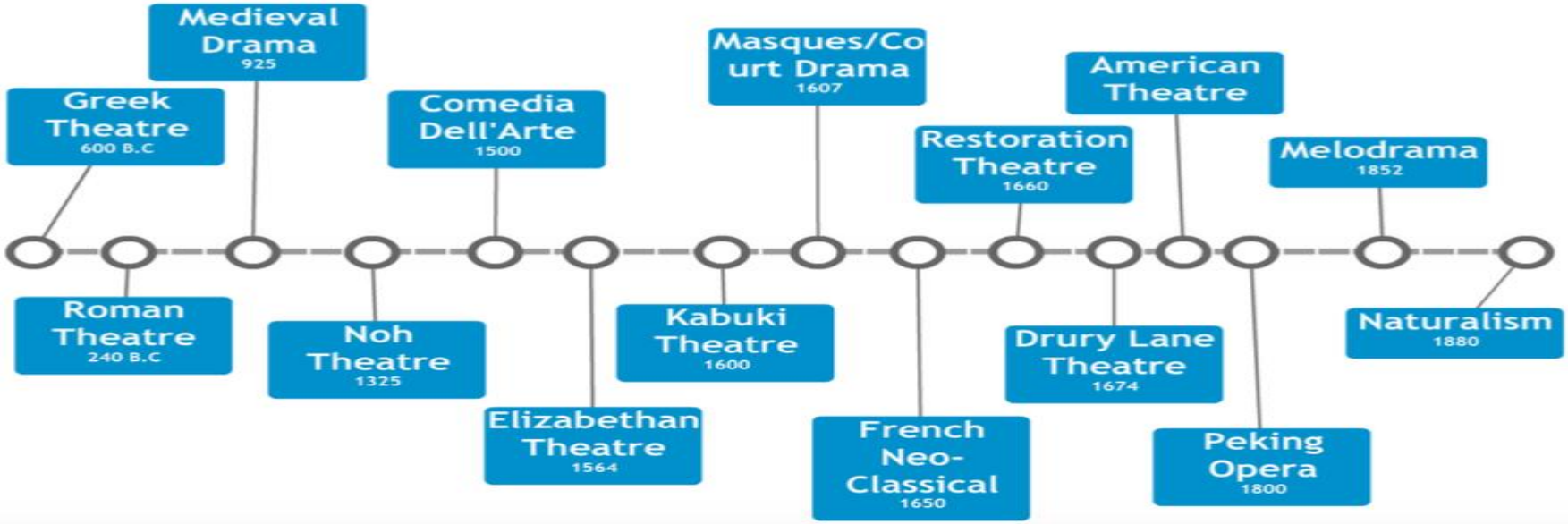
Devised:-
A performance created through collaboration. A group of people who work together on an initial theme, idea or stimulus.











Vocal skills	
Pitch	The highs and lows of the voice
Pace	The speed at which you speak
Pause	Including silence, for effect
Accent	Showing where a character is from

Technical and design	
Lighting	Spotlights or washes and blackouts
Set design	The dressings of the stage
Sound	Live or recorded music and effects
Costume	Wigs, make-up and clothing choices

What skills do we develop in Drama?	
Teamwork	Creativity
Leadership	Oracy
Compromise	Analysis
Confidence	Evaluation

Physical skills	
Posture	The way a character stands and sits
Gesture	What they do with their hands
Gait	How they move
Facial expressions	The emotions shown on the face

The Ingredients of a Play

- **Characters**- the **people** in the play.
- **Plot**- The **storyline.**
- **Setting**- **Where & when** the scene is set. The **time & place.**
- **Dialogue/ monologue** – The **words** that the characters say
- **Theme** – What the play **is about – its meaning-** its message.
- **The Genre and style of the play.**

Basic Health & Safety	Why we do it
Hair-up	Reduces the risk of bacteria transferring to food through hair dropping in.
Wear an apron	Protects you from spillages and reduces risk of bacteria transferring to food from everyday clothing.
Wash your hands	Regularly using hot soapy water to reduce the bacteria on your hands.
Wear a blue plaster	Blue plasters should be used to cover cuts and grazes as they will be easily seen if accidentally fall into food.
Cooking	Ensure food is cooked to 75C to ensure all bacteria are killed.
Cleaning	Make sure all work tops, utensils and equipment are cleaned with hot soapy water.
Chilling	Ensure all food is stored at the correct temperatures, ensure cooked food is cooled within 90 minutes.
Cross-Contamination	When raw food comes into contact with ready to eat food. For example raw meat juices spilling onto salad.

Knife Skills

Bridge Hold – Hand creates a bridge holding the food in between. The knife slices through the middle of the bridge. Used for cutting food in half.





Claw Grip – Fingers tucked under holding food. Knife comes down from flat knuckles to slice food. Used for slicing.

The Cooker



What are Nutrients?
Nutrients are the building blocks that make up food and have specific and important roles to play in the body. Some nutrients provide energy while others are essential for growth and maintenance of the body.

Macro Nutrient	Role in the body	Food Example
Carbohydrate	The main source of energy for the body.	Bread, rice, pasta, potatoes
Protein	Provides the body with growth and repair.	Meat, poultry, beans, eggs, lentils, tofu, fish
Fat	Provides the body with insulation and a small amount protects vital organs. Provides essential fatty acids for the body.	Butter, oil, cheese, cream, nuts, oily fish, crisps

The Eatwell Guide

The Eatwell Guide shows how much of what we eat overall should come from each food group to achieve a healthy, balanced diet.



Important temperatures



Danger Zone
Bacteria multiply quickest between 5 ◦C - 63◦C

Fridge
Between 1 ◦C - 5◦C



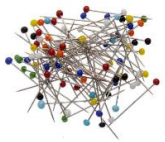
Freezer
Below -18◦C



Cooking
Food should be cooked above 75◦C

8 Tips for healthy eating

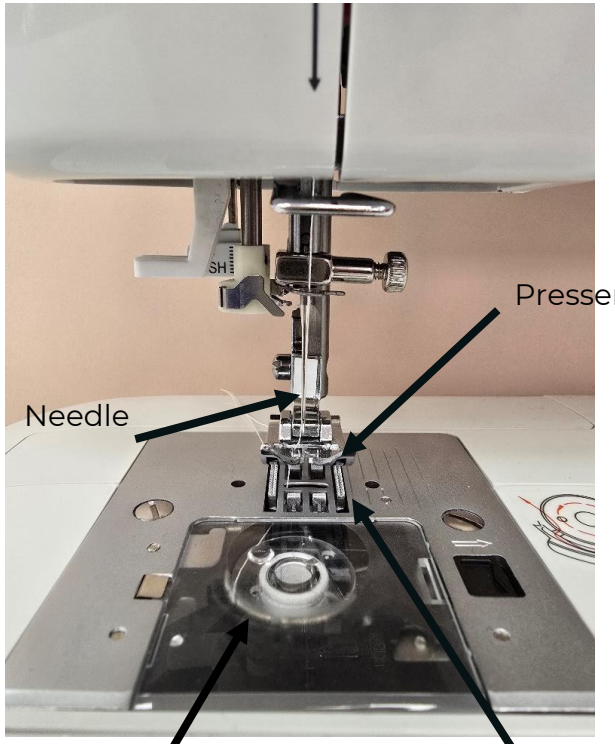
1)Base your meals on starchy foods
2)Eat lots of fruit and veg
3)Eat more fish
4)Cut down on saturated fat and sugar
5)Eat less salt
6)Get active and be a healthy weight
7)Drink plenty of water
8)Don't skip breakfast

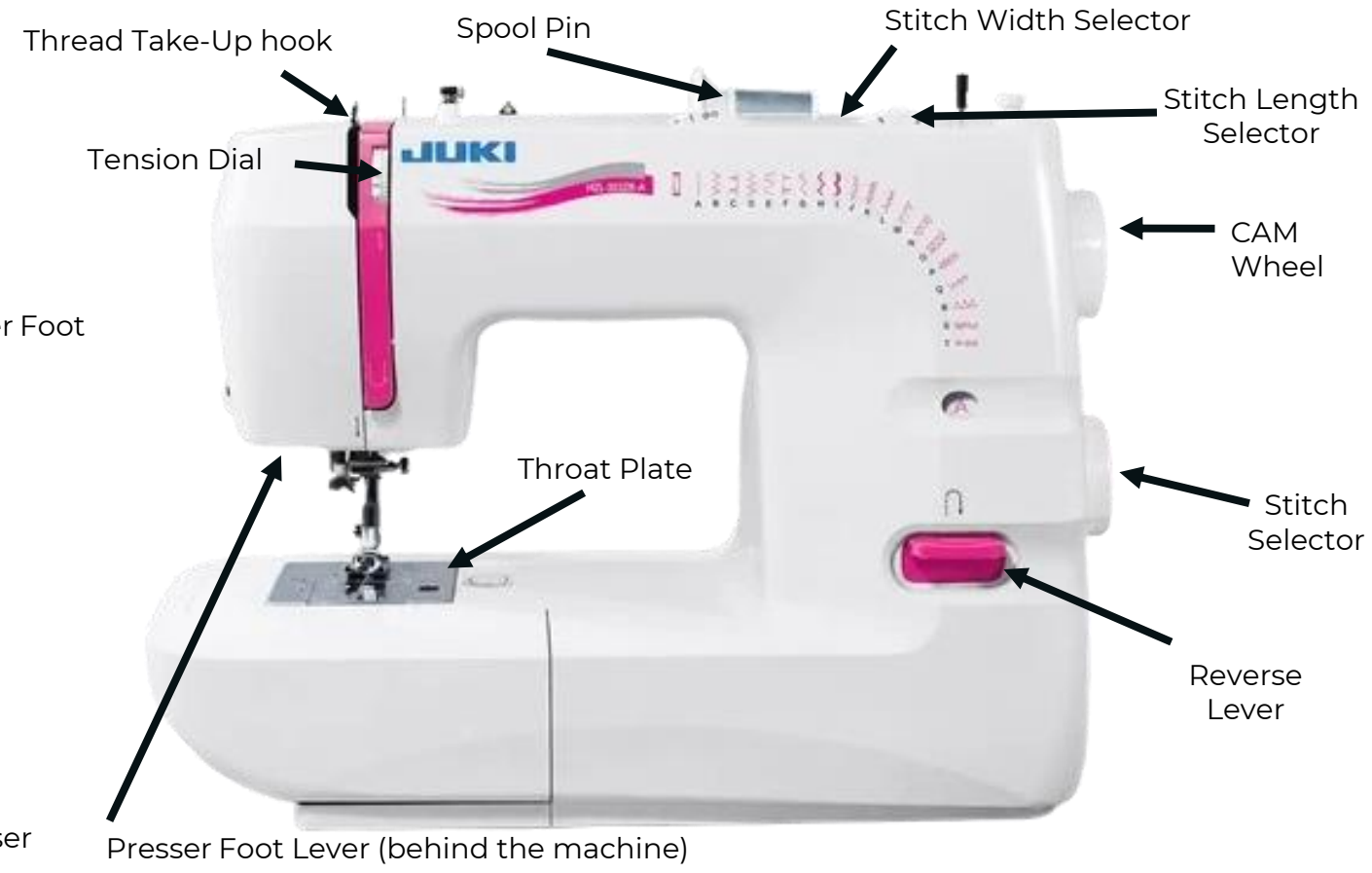
Key Equipment	
Hand sewing Needle	
Pins	
Pin Magnet	
Fabric Scissors	
Embroidery Scissors	
Pinking Shears	
Paper Scissors	

Safety Rules	
1	*FOLLOW* instructions carefully.
2	Put all bags and coats under the table
3	Keep chairs tucked in.
4	Do NOT run in the Textiles workroom – WALK!
5	Use all equipment correctly and appropriately.
6	Put all equipment away in the correct place after you have used it.
7	Always make sure that you have been shown how to use equipment before using it.
8	Tie up long hair.
9	Carry scissors closed and by the blades.
10	A sewing machine is used by one person only – don't try to use a sewing machine with someone else.
11	NEVER distract anyone who is using a sewing machine.
12	Turn sewing machines off when you have finished using them.
13	No food and drink in the Textiles workroom.

Key Vocabulary	Definitions
Safety	taking care not to hurt or injure yourself or others.
Hazard	any feature of a situation which may cause harm or injury.
Risk	the chance of a hazard causing harm or injury.
Risk Assessment	calculating how big a risk is by thinking about whether the harm or damage is likely to happen.
Risk Control	action taken to ensure that the harm or damage is less likely to happen.

The Sewing Machine

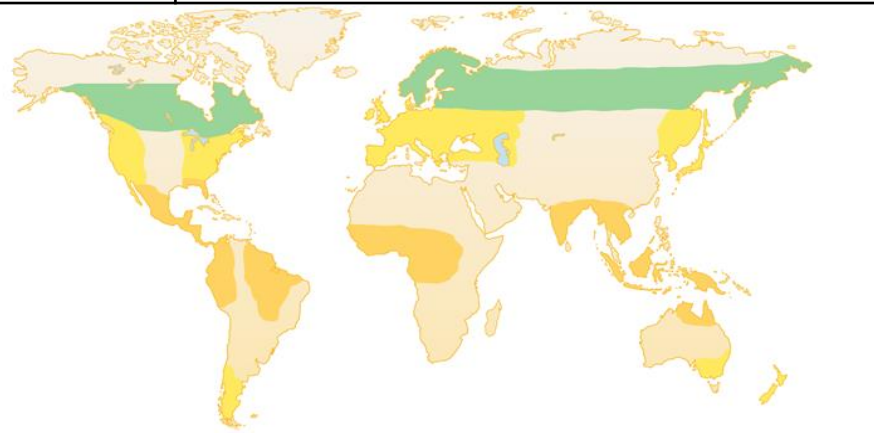




Other Sewing Machine Parts			
	Foot Pedal and Lead		**Bobbin**

Design and Technology Timbers

Key Vocabulary	Definitions
Timber	is wood that has come from tree trunks and has been dried and cut into planks. Timber has been used as a building material for thousands of years to make homes, furniture and tools. Timber is still used a lot as trees grow naturally, their wood is easy to work with and it is relatively strong and lightweight.
Hardwood	comes from a broad leaved tree whose seeds are enclosed in a fruit. They grow quite slowly, often taking over 100 years to be big enough to be used for timber.
Softwood	comes from a tree with needle like leaves, and seeds in a cone, they are coniferous. Most softwood trees are evergreen, meaning they have leaves all year. They grow quite quickly, and can be used for timber after about 30 years. This means they can be grown commercially, which is why softwood is a lot cheaper than hardwood.
Manufactured timbers	use natural timbers to make boards that have different properties to plain timber. Because of the size of a tree trunk timber is limited to fairly narrow planks. If you need large, thin sheets of wooden material you will need a manufactured board.



Cold climates (such as Alpine) with softwood forests, such as pine, cedar and larch.
Temperate climates (such as European) with a mix of softwoods and temperate hardwoods, such as oak, beech, ash and birch.
Tropical climates (such as Amazonian) with rainforests of tropical hardwoods, such as mahogany and jelutong.

Hardwood	Advantages	Disadvantages	Common uses
Ash	Strong, tough and flexible Finishes well	Low resistance to rot and insect attack	Handles for tools, sports equipment and ladders
Beech	A tough wood Does not crack or splinter easily Hard	Expensive, not very resistant to moisture Not suitable for exterior use	Toys, cooking implements, solid wood and laminated furniture
Birch	Regular even grain Easy to work	Low resistance to rot and insect attack	Veneers to make plywood and surface cheaper materials that are used for furniture or doors
Oak	Strong and durable Has an attractive grain when well finished	Expensive, becoming rarer Harder to work than other woods Corrodes iron and steel	Building houses and boats, high quality furniture, wine and whisky barrels
Balsa	Very lightweight Easy to cut	Much too soft and weak for most products	Model making, surfboard cores, buoyancy aids
Jelutong	Even close grain Easy to cut and shape	Soft and not very strong Not good for structural use	Model making, moulds for casting or vacuum forming
Mahogany	Has a very attractive finish Quite easy to work with	Expensive, environmental problems with sourcing from tropical forests, oil in the wood can cause skin or breathing problems	High quality furniture, jewellery boxes and window frames

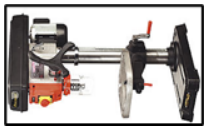
Design and Technology Timbers

Softwood	Advantages	Disadvantages	Common uses
Cedar	Tough, durable and resistant to water It can be used outside untreated and weathers to a silvery grey	Costs more than other softwoods	Small boats, yachts, exterior cladding on buildings
Larch	Natural oils make it resistant to water and fungal growth	More expensive than pine and not as strong	Outdoor furniture, fences, sheds and boats
Pine	Very durable, easy to work, quite cheap as it grows quickly enough to be forested, reasonably strong and lightweight	Can warp, crack and splinter more than some other woods	House construction for roof joists and floorboards Furniture doors and interior woodwork

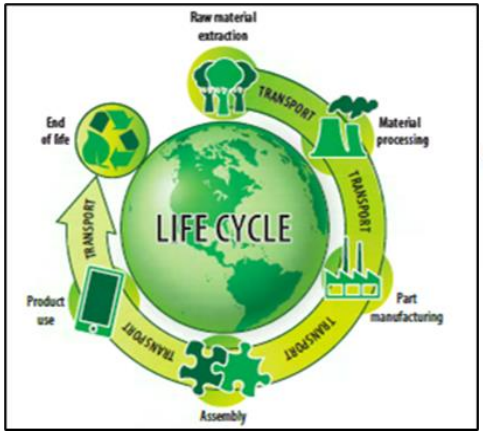
Boards	Advantages	Disadvantages	Common uses
Plywood	Flat and structurally sound, surface looks like real wood, resistant to warping, cracking and twisting	Quite expensive, edges can look rough, susceptible to water damage if using the wrong grade	Building and furniture panels that need some strength
MDF	Cheap (made from waste wood), smooth ungrained surface is good for painting or staining, easy to machine	Poor aesthetics, so needs coating, weak compared to real or plywood, tools blunt quickly due to glue content	Flat pack furniture, wall panels, display cabinets, storage units and kitchen units
Chipboard	Use waste materials so is cheap to produce	Poor structural strength, especially in damp conditions, surface is very rough so usually plastic coated	Desktops, kitchen worktops, cheap flat pack furniture

Key Vocabulary	Definitions
Hardness	is the ability of a material to withstand cutting and scratching. Timber is generally quite a soft material. It can easily be scratched and cut with metal tools, which are much harder than wood. Oak is quite hard for a wood. Balsa is very soft for a wood. This should not be confused with the classification of trees as hardwoods and softwoods.
Durability	is the ability of a material to last a long time. Timber that has been dried out and is kept dry is durable. Oak beams in old buildings can be hundreds of years old. However, wood that is left wet can rot quite quickly and won't then be very durable. Some timbers contain natural oils that make them more durable outside. Timber can be treated with preservatives to make it more durable for outside use.
Elasticity	is the ability to stretch and return to its original length or shape. Timber is not generally elastic, but some are more than others, yew is used to make archery bows for example.
Toughness	is the ability of a material to withstand being hit. A tough material can be quite soft, and might bend or deform when hit, but not break. Timber is quite a tough material. If you hit it with a hammer it may dent, but not break.
Tensile strength	is the ability to withstand pulling force, timbers tend to have a good tensile strength, often 3 or 4 times better than compressive strength.
Compressive strength	is the ability to withstand a crushing force, the denser the timber the better its compressive strength.

Design and Technology Timbers

Tools	Definitions
Steel rule	
Try Square	
Marking gauge	
Tenon Saw	
Mallet	
Chisel	
Pillar drill	
Centre lathe	
Disc sander	

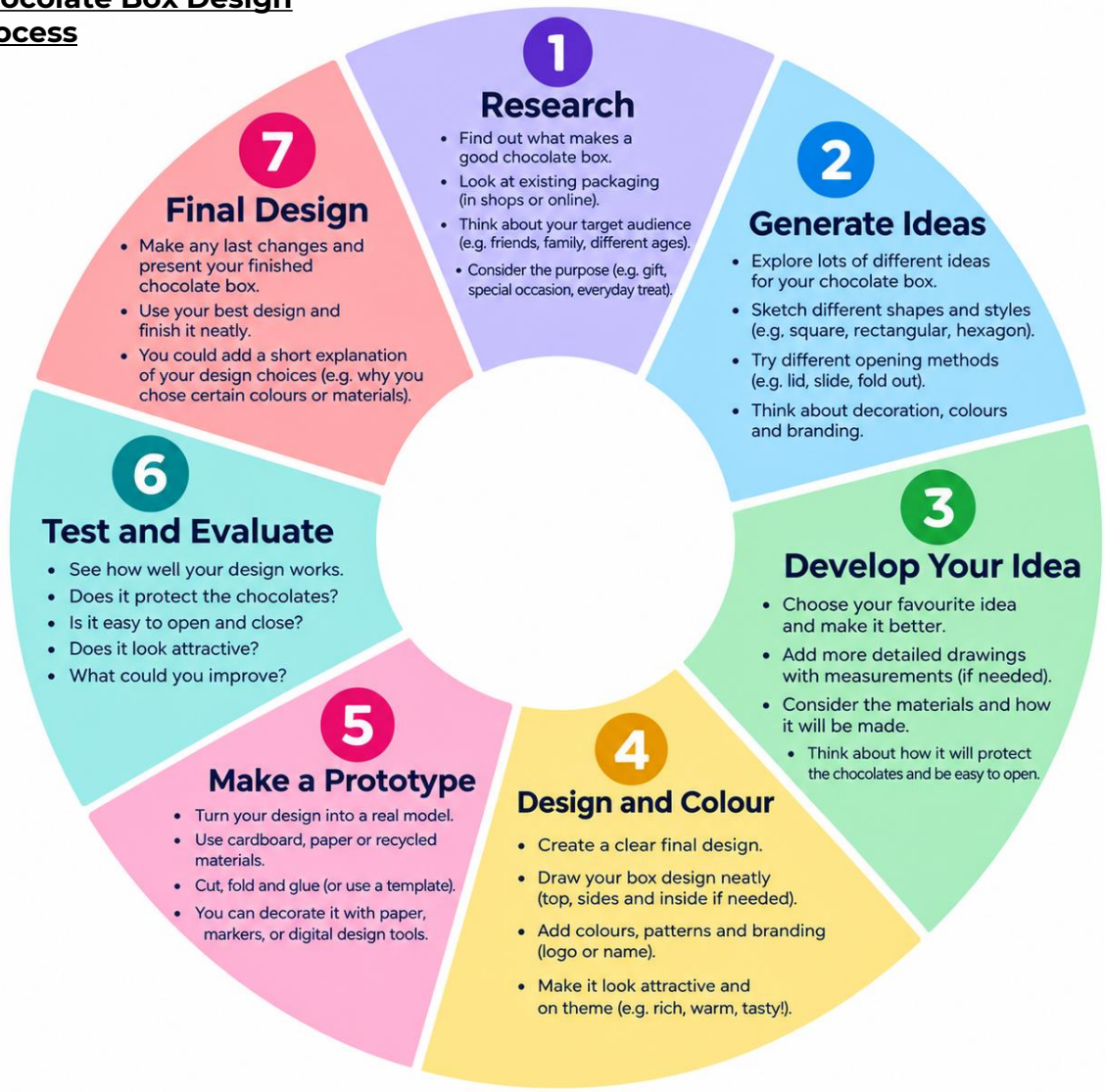




Life Cycle Assessment	
Raw materials	Where have your materials originated from? What is the environmental impacts of using them? Timber comes from trees, which are cut down…
Timber processing	How were the trees turned into the timber that you used? Trees are processed in a sawmill to turn them into timber, this has an impact on the environment…
Manufacture	How did you shape, join and finish the timber? Using tools, equipment and machinery all have an impact on the environment, some greater than others…
Distribution	If you were to make Funky Truck on a larger scale how would you distribute it to the retailers? Shipping raw materials and products around the planet uses a great amount of energy…
Product in use	Having observed your user playing with Funky Truck what environmental impact could it have? Is the product simple to use, does it require power?
Repair and maintenance	Is Funky Truck durable, does it require frequent servicing to keep it working? Will Funky Truck damage easily in normal use?
Disposal	Thinking ahead, what would happen to Funky Truck at the end of its life? Could it be easily disassembled and sorted for recycling? Have you include recycling symbols to make this process easier for your user? Are there any treatments that make disposal more difficult? Could the materials be upcycled?

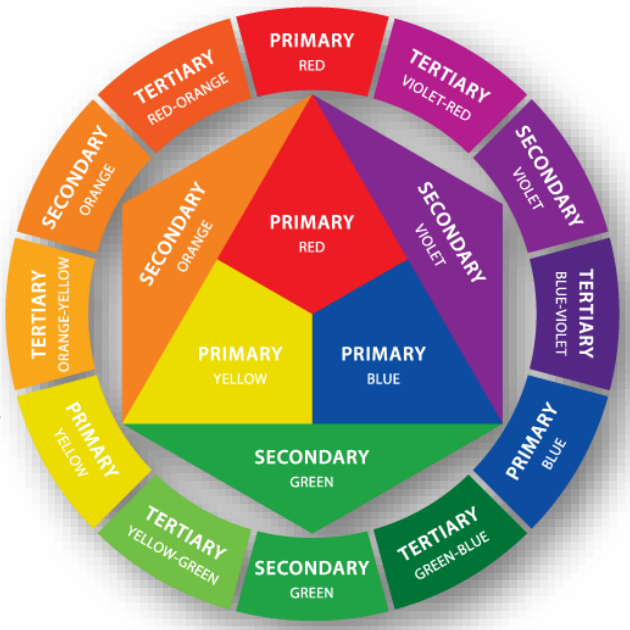
Key Vocabulary	Definitions
Graphic Design	The art or skill of combining text and pictures in advertisements, magazines, or books.
Design Process	An approach for breaking down a large project into manageable chunks.
Target Audience	A particular group at which a product is aimed towards.
Design Brief	Outlines the specifics of a design project.
Research	A collection of new knowledge and/or the use of existing knowledge in a new and creative way so as to generate new concepts and understandings.
Annotation	Adding detailed notes and labels to sketches to explain your thoughts and features.
Evaluation	Testing your finished product template against your initial design criteria to see how it can be improved

Chocolate Box Design Process



This diagram shows the design process used to create a chocolate box. Designers move through each stage to research, develop ideas, make and test a prototype, and improve their design. The process helps ensure the final chocolate box is functional, attractive and suitable for its target audience.

Complementary colours are colours that are opposite each other on the colour wheel. Examples of complementary colour combinations include **red and green, yellow and purple, orange and blue, and green and magenta**. Complementary colour combinations tend to be bold and eye-catching, which is why they are often used by sports teams for their team colours.



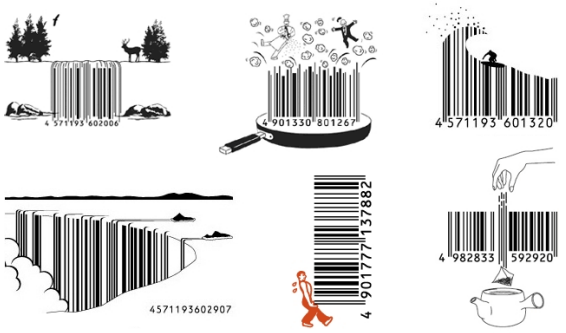


Typography

The style of font/typeface can also express a message about the product or company and in some cases the style of writing has become the logo itself.

BAR CODES

A barcode is a method of representing data in a visual, machine-readable form.



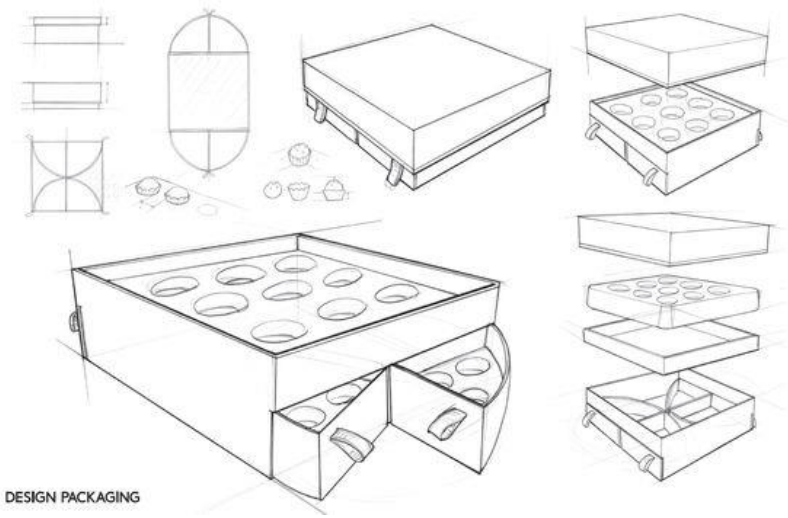
Key Vocabulary	Definitions
Colour Theory	The collection of rules and guidelines which designers use to communicate with users through appealing colour schemes in visual interfaces.
Typography	The art or practice of setting and arranging type.
Mood board	An arrangement of images, materials, pieces of text, etc. intended to present a particular style or concept.
Modelling	Making a model allows designers to visualise and test how a product looks and performs in 3D and is a great way of checking a product's viability .
Slogan	A short, catchy phrase used on the box to attract customers and advertise the product.
Prototype	In design, a prototype is an early or simplified version of a product, service, or interface that is created to test ideas, explore solutions, and identify problems before the final design is produced.

Design Technology 3D Design

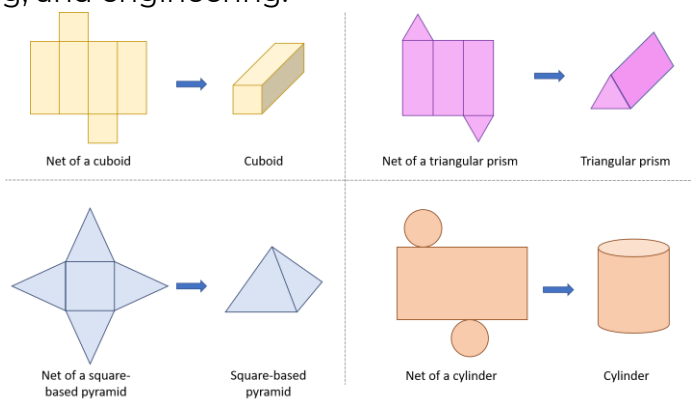
Design Equipment

	A **cutting mat** is a protective, flat surface used when cutting materials such as paper, fabric, card, leather, or vinyl with a craft knife or rotary cutter.
	A **safety knife** is a hand-held cutting tool designed with protective features to minimise the risk of injury during cutting tasks.
	A **metal safety ruler** is a durable measuring and cutting guide with a safety edge designed to protect fingers while producing accurate, straight cuts.
	A **hot glue gun** is a handheld tool used in design and craft work to melt and apply glue for joining materials together. It heats a solid glue stick until it becomes liquid, which is then pushed through the nozzle and allowed to cool and harden.
	**Fine liner pens** are drawing and writing tools with a thin, precise fibre or plastic tip that produces a consistent line. In design, they are commonly used for technical drawing, sketching, outlining, detailing.
	**French curves** are drawing tools made of thin, curved templates used in design and technical drawing to create smooth, accurate curves that are difficult to draw using a compass or ruler.
	**Pro marker pens** are professional-quality, marker pens used in design, illustration, fashion, architecture, and technical drawing. They have a smooth, blendable ink that allows designers to create shading, gradients, highlights, and realistic colour effects.

Drawing using 3D methods means using lines, shapes, shading and perspective to make objects look three-dimensional and appear to have height, width and depth. Artists use techniques such as perspective, shading, tone and overlapping to create the illusion of space and form.



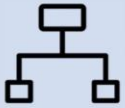
Shape nets: are 2D patterns or flat layouts that can be folded, cut, or assembled to form a 3D shape or object. They are commonly used in product design, packaging, model making, and engineering.



Your Knowledge Organiser is a vital document. It contains all the key things from your lessons that you will need to work on committing to your long-term memory.
Here are some useful methods to use that will help commit the information to your long-term memory

The Trafalgar School AT DOWNTON

How to use a knowledge organiser – step by step guide

	Look, Cover, Write, Check	Definitions to Key Words	Flash Cards	Self Quizzing	Mind Maps	Paired Retrieval
Step 1	Look at and study a specific area of your knowledge organiser 	Write down the key words and definitions 	Use your knowledge organiser to condense and write down the facts and or information on flash cards 	Use your knowledge organiser to create a mini quiz. 	Create a mind map with all the information you can remember from your knowledge organiser. 	Ask a partner or family member to have the knowledge organiser in their hands, read out what you remember. 
Step 2	Cover or flip the knowledge organiser over and write down everything you remember. 	Try not to use your knowledge organiser to help you 	Add pictures to help support. Then quiz yourself using the flash cards. You can write questions on one side and answers on the other. 	Answer the questions and remember to use full sentences 	Check your knowledge organiser to see if there were any mistakes with the information you have made. 	They can test you by asking you questions on different sections of your knowledge organiser. 
Step 3	Check what you have written down. Correct any mistakes in green pen and add anything you missed. Repeat. 	Use a different coloured pen to check and correct your work. 	Use a parent/carer or friend to help quiz you on the knowledge. 	You can also use family to quiz you. Keep self-quizzing until you get all questions correct. 	Try to make connections that link information together. 	Write down your answers. 