

Knowledge Organiser

Year 8 Autumn 1 2025

Create Your Future



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Team GB cyclist



"Have a dream and pursue it with everything you've got. Don't let anyone or anything get in the way of your goal and happiness"

Name:

Tutor Group:

Contents Page

| | |
|--------------------------|----|
| Timetable | 5 |
| School Expectations | 6 |
| Attendance & Punctuality | 7 |
| Guided Reading Tracker | 8 |
| Subject: English | 9 |
| Subject: Maths | 10 |
| Subject: Science | 13 |
| Subject: Geography | 16 |
| Subject: History | 17 |
| Subject: World Views | 18 |
| Subject: French | 19 |
| Subject: German | 21 |

| | |
|-----------------------------|----|
| Subject: Computing | 23 |
| Subject: PE | 24 |
| Subject: Art | 27 |
| Subject: Music | 29 |
| Subject: Drama | 30 |
| Subject: D&T Food | 31 |
| Subject: D&T Textiles | 32 |
| Subject: D&T Product Design | 33 |
| Subject: PSHE | 34 |
| Subject: Oracy | 35 |
| Subject: Writing | 37 |
| Extra-curricular timetable | 38 |

Science, PE and Technology are on a rotation so have multiple pages in this booklet.
Your teacher will direct you to the appropriate pages when setting work.

Timetable

| Week 1 | 1 | 2 | 3 | Lunch extra-curricular club | 4 | 5 | After school extra-curricular club |
|-----------|---|---|---|-----------------------------|---|---|------------------------------------|
| Monday | | | | | | | |
| Tuesday | | | | | | | |
| Wednesday | | | | | | | |
| Thursday | | | | | | | |
| Friday | | | | | | | |

| Week 2 | 1 | 2 | 3 | Lunch extra-curricular club | 4 | 5 | After school extra-curricular club |
|-----------|---|---|---|-----------------------------|---|---|------------------------------------|
| Monday | | | | | | | |
| Tuesday | | | | | | | |
| Wednesday | | | | | | | |
| Thursday | | | | | | | |
| Friday | | | | | | | |

In Class Expectations



Out of Class Expectations




Attendance and Punctuality

Being in school and being on time is crucial for success and preparing for the future.

Lost learning can lead to additional anxiety and pressure to catch up work and risks the student falling even further behind.

Create Your Future



100%
OUR TARGET FOR ALL STUDENTS

97%
6 DAYS ABSENCE
30 HOURS LOST LEARNING
EXCELLENT OR GOOD ATTENDANCE
BEST CHANCE OF ACADEMIC SUCCESS

95%
10 DAYS ABSENCE
50 HOURS LOST LEARNING
WORRYING
AT RISK OF MAKING IT HARDER TO PROGRESS

90%
19 DAYS ABSENCE
95 HOURS LOST LEARNING
CONCERN
LESS CHANCE OF SUCCESS
AND SIGNIFICANTLY REDUCES LEARNING

BE PRESENT
BE PUNCTUAL

THERE ARE 175 NON-SCHOOL DAYS DURING THE YEAR TO SPEND ON FAMILY TIME, VISITS, HOLIDAYS, SHOPPING, HOUSEHOLD JOBS AND OTHER APPOINTMENTS

DAYS OFF SCHOOL ADD UP TO LOST LEARNING

BE BELPER

Attendance

- 90% attendance is half a day missed every week
- 90% attendance in one school year is 4 whole weeks of lessons (100 lessons) missed in that year.
- 90% attendance over 5 years of secondary school is half a year of school missed.
- Evidence suggests that, on average, every 17 days of school missed by a student equates to a drop of 1 GCSE grade.

Punctuality

- 10 minutes late each day = 50 minutes of lessons missed each week
- 10 minutes late each day = 2000 minutes (33.3 hours, 5.5 days) every academic year
- 10000 minutes (166.5 hours, 27.5 days) of missed learning from year 7 to year 11.

“Everyday you show up, you’re investing in your future self. Don’t underestimate the power of attendance.”

Attendance this half term

| Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 |
|--------|--------|--------|--------|--------|--------|--------|--------|
| | | | | | | | |

Guided Reading Tracker


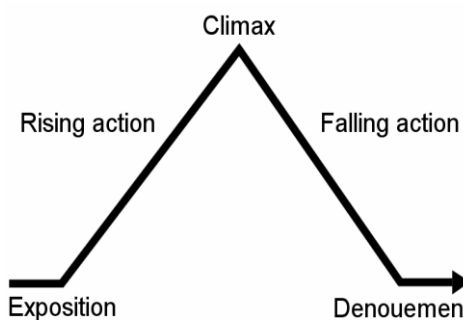
| Date | Title and author | Summary of reading (+interesting or new vocabulary learned) | Signed: | |
|------|------------------|---|---------|--|
| | | | | |
| | | | | |
| | | | | |
| | | | | |

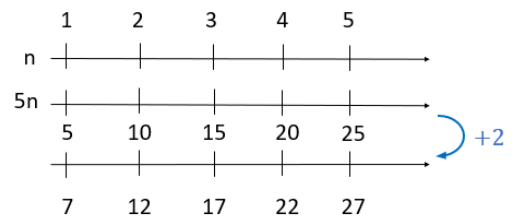
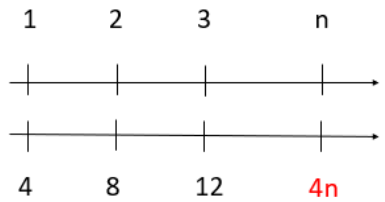
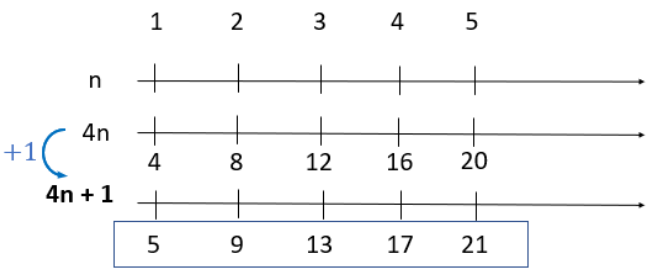
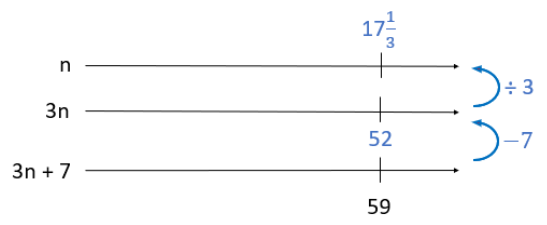

As part of your library lessons, you are expected to complete **at least 20 minutes** of reading once a fortnight.

To track your reading, you need to complete a row of the table before each library lesson to show details of the book you have read.

Your table also needs to be signed by someone who has witnessed you reading. This will most likely be a parent/guardian but it can alternatively be signed by your tutor, classroom teacher, buddy reader, TA or Sarah in the library.



| Section 1: Key Vocabulary | | Section 2: New Key Skills and Strategies | CPEAT is the writing frame to use when analysing a text. | Below is an example of how to build a paragraph. | Section 3: Example Questions: Applying Section 2 Skills | |
|---------------------------|---|---|--|--|---|---|
| Tier 3 vocabulary | Définition | | | | Write a description as suggested by this image OR Write a story titled 'Into the Unknown' | |
| Gothic | Genre featuring dark themes, strong emotions, mysterious characters | | | |  | |
| Supernatural | Phenomena outside of, or unexplained by, science | C | Connective | Firstly... | | |
| | | P | Point | the writer uses the simile... | | |
| Foreboding | A feeling of approaching disaster | E | Evidence | “the classroom glowed like a sweetshop”... | | |
| Macabre | Ideas associated with death, or the fear of death | A | Analysis | this suggests that the room is exciting... | | |
| Isolation | The experience of being either literally or metaphorically alone | | | | | |
| Emotions | Feelings and reactions, different to thoughts and ideas | | | | | |
| Tier 2 vocabulary | | Définition | T | Think (intention and impact) | | revealing the character has happy memories of school. |
| Tension | The unknown difference between the current moment in a narrative and a future point | Freytag Pyramid of Structure | | | | |
| Foreshadowing | The suggestion of an event that will occur later in the narrative |  | | | | |
| Pathetic fallacy | The relationship between environment and atmosphere | | | | Many questions sentence: What if she was lost? Trapped? Captured? Murdered? | |
| Plot development | The evolution of narrative and character through different stages | | | | Emotion word comma phrase: Desperate , she screamed for help. | |
| Enigma | The creation of mystery and intrigue by presenting information that is incomplete | | | | Personification of the weather sentence: The wind stroked his face gently as he meandered along the path. | |
| Characterisation | The creation of characters through vivid description | | | | O.I. sentence (outside, inside): Outside , he tried to remain composed. (Inside) , however, his heart was pounding in fear). | |

| Section 1: Key Vocabulary | | Section 2: Representations | Section 3: Skills |
|--|--|---|---|
| Tier 3 vocabulary | Definition | | |
| Arithmetic sequence | A sequence of numbers where the gap between one term and the next is constant | | What is the n^{th} term rule that generates the sequence 7, 12, 17, 22, 27, ? |
| n^{th} term of a sequence | An expression, containing n , the position number, that gives a rule for finding any term in a sequence. Also called a position to term rule | When we use the natural numbers for the upper number line, the multiplicative relationship shown by the double number line also shows a sequence. |  |
| Multiplicative relationship | A relationship between two quantities whereby the values are linked by a multiplier, such as $n \rightarrow 5n$ |  | We see that the sequence increases by 5 from term to term, so it is related to the 5 times table. We put the sequence $5n$ on the middle number line and look to adjust the sequence accordingly. |
| Additive relationship | A relationship between two quantities whereby the values are related by the addition of a number, such as $2n \rightarrow 2n + 3$ | The n^{th} term rule ' $4n$ ' takes any number ' n ' and gives a term ' $4n$ '. This generates the sequence 4, 8, 12, ... which we recognise as the 4 times table. | We have found the n^{th} term rule is $5n + 2$ |
| Tier 2 vocabulary | Definition | We can move from the 4 times table by adding or subtracting, to generate a different sequence that also moves by 4 each time: | Is the number 59 a term in the sequence generated by the n^{th} term rule $3n + 7$? |
| Sequence | A particular order in which related objects follow each other |  |  |
| Term | An individual number in a sequence, such as "6 is the 2nd term in the sequence 1, 6, 11, 16" | | The n^{th} term rule $3n + 7$ is related to the $3n$ sequence, so we use this as the middle number line. To move upwards to this, we subtract 7. Here we can see that there is not an integer position number that generates 52, since $52 \div 3 = 17\frac{1}{3}$ |
| Substitution | To make an exchange of one object for another. In this context, we give a numerical value to the letter n | | We conclude that 59 is not in the sequence |
| Natural numbers | The counting numbers, that is, the positive integers 1, 2, 3, ... | | |
| Maths watch revision links | | From the rule ' $4n + 1$ ' we can find any term in the sequence. | |
| | | e.g. for the 20 th term, substitute $n=20$ $4 \times 20 + 1 = 81$ The 20 th term in the sequence 5, 9, 13, 17, ... is 81 | |
|  | | | |

Section 1: Key Vocabulary

Tier 3 vocabulary

| | |
|------------------------------------|---|
| gradient | How steep a line is |
| intercept | Where two lines cross |
| co-ordinate(s) | A numeric location on a graph |
| axis (sing.) axes (pl.) | The reference lines from which all coordinates are located |
| origin | The point (0 , 0) where the coordinate axes intercept each other |
| linear | In or of a straight line |
| cartesian | Relating to the x – y – z system of graphing (after Rene Descartes 1596-1650) |
| quadrant | One of the four quarters of a graph as separated by the coordinate axes |
| line segment | A given length of line between two points |

Tier 2 vocabulary

| | |
|-----------------------|--|
| rate of change | How the y-values change each time the x-values increase by 1 |
| parallel | Running in the same direction |
| perpendicular | Running at right-angles |

Maths watch revision links

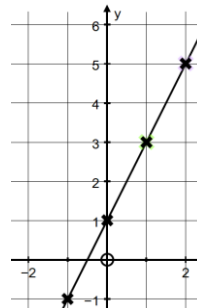


Section 2: New Knowledge/Skills

In Year 7 you plotted straight-line graphs using co-ordinates that you had generated, probably using a table of results like the one below.

eg $y = 2x + 1$

| | | | | |
|---|----|---|---|---|
| X | -1 | 0 | 1 | 2 |
| Y | -1 | 1 | 3 | 5 |



Generate A Table Of Coordinates Using Your Calculator

If you have a scientific calculator such as the Casio fx-83 (incl. the ClassWizz) or the Aurora AX-59 it will produce a table of coordinates if you follow these instructions

1. Select Table mode
2. Input your equation eg $f(x) = 2X + 1$
3. Tell it your start and finish x-values (eg start = -1, End = 2)
4. Step up in 1s

The Gradient Of A Straight Line, m

We can work out how steep a line is by finding the change in the y-coordinates and the change in the x-coordinates between any two points on the line. The steepness is called **gradient** and is represented by the letter m .

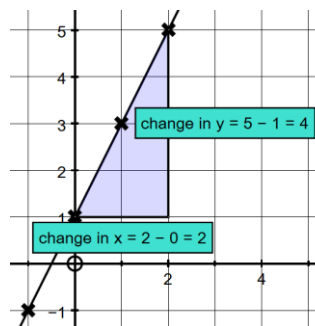
$$m = \frac{\Delta y}{\Delta x} = \frac{y_2 - y_1}{x_2 - x_1} = \frac{\text{change in } y}{\text{change in } x}$$

If we look at $y = 2x + 1$ again:

Point 1 : (0,1)
Point 2 : (2,5)

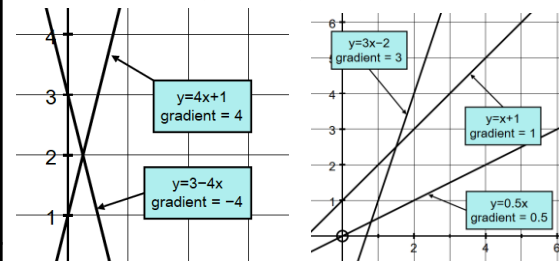
$$m = \frac{y_2 - y_1}{x_2 - x_1} = \frac{5 - 1}{2 - 0} = \frac{4}{2} = 2$$

Gradient can also be considered as:
rate of change
i.e. how fast y changes in respect to the change in x



More On Gradient

Gradients can be positive (going right AND up) or negative (going right AND down).
Steeper lines have higher value gradients.



The General Equation Of A Straight Line $y = mx + c$

All straight lines have equations that can be written in the general form

$$y = mx + c$$

where m is the gradient

and c is the intercept with the y-axis and those values can simply be read from the equation

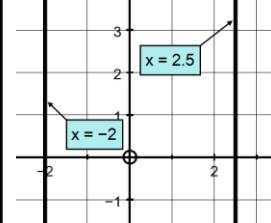
Eg $y = 2x + 1$ has gradient 2 and y-intercept +1
 $y = 4x + 1$ has gradient 4 and y-intercept +1
 $y = x - 1$ has gradient 1 and y-intercept -1
 $y = 3 - 2x$ has gradient -2 and y-intercept +3

BUT TAKE CARE

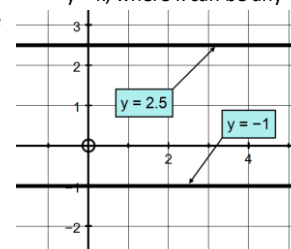
$3y = 4x + 1$ **does not** have gradient 4 and the y-intercept is **not** +1

Horizontal & Vertical Lines

Vertical lines are always written as $x = k$, where k can be any value



Horizontal lines are always written as $y = k$, where k can be any



Section 1: Key Vocabulary

| Tier 3 vocabulary | Definition |
|--------------------|---|
| Algebra | The use of letters or symbols to represent unknown values. |
| Equation | Shows two things as equal and can be solved to find an unknown, or variable amount. |
| Solution | A value or values which, when substituted for a variable in an equation, make the equation true. |
| Unknown | an unknown is a number we do not know. They are commonly used in algebra, where they are also known as variables and represented by symbols |
| Coefficient | The numerical multiplier for any variable in an expression/equation. |
| Simplify | To write in a simpler form by collecting common terms. |

Tier 2 vocabulary

| Term | Definition |
|-------------------------|--|
| Term | A single number or variable |
| Expression | A "bit of algebra" with a minimum of two numbers/variables and at least one operation. |
| Variable | A quantity that may change within the context of a problem. |
| Subject | The unknown number we need to find the value of. |
| Collecting terms | Simplifying an expression by combining "like terms" |
| Solve | Numerical value that satisfies the equation. |
| Product | The result of a multiplication. |

Maths watch revision links



Section 2: Knowledge/Skills

Solving one-step equations

1.

| | | |
|----|---|---------------|
| x | 5 | $x + 5 = 20$ |
| 20 | | $-5 \quad -5$ |
| x | 5 | $x = 15$ |
| 15 | 5 | |

2.

| | | |
|----|---|-----------------------|
| 3x | | $3x = 15$ |
| 15 | | $\div 3 \quad \div 3$ |
| x | x | $x = 5$ |
| 5 | 5 | |

3.

| | |
|---------------|---------------------------|
| $\frac{x}{2}$ | $\frac{x}{2} = 10$ |
| 10 | $\times 2 \quad \times 2$ |
| x | $x = 20$ |
| 20 | |

Solving equations involving brackets

| | | | | | | |
|----|----|---|----|----|----|---------------|
| x | +2 | x | +2 | x | +2 | $3(x+2) = 15$ |
| 15 | | | | | | |
| x | x | x | +2 | +2 | +2 | $3x + 6 = 15$ |
| 15 | | | | | | |

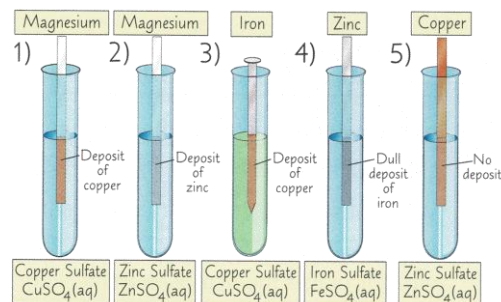

Section 2: Knowledge/Skills

Solving two step equations

| | | |
|----|---|-----------------------|
| 4x | 3 | $4x + 3 = 27$ |
| 27 | | $-3 \quad -3$ |
| 4x | 3 | $4x = 24$ |
| 24 | 3 | $\div 4 \quad \div 4$ |
| x | x | $x = 6$ |
| 6 | 6 | |

Solving equations with unknowns on both sides

| | | |
|----|----|---------------------|
| 3x | 10 | $3x + 10 = 2x + 18$ |
| 2x | 18 | $-2x \quad -2x$ |
| x | 10 | $x + 10 = 18$ |
| 18 | | $-10 \quad -10$ |
| | | $x = 8$ |

| Section 1: Key Vocabulary | | Section 2: Chemical reactions | Section 3: Displacement reactions | | | | | | | | |
|------------------------------|--|--|--|---------------------|-------------------|----------------|---------------|---------------|-------------|---------------|--|
| Tier 3 vocabulary | Definition | Oxidation Metals react with oxygen to produce metal oxides. Metal + Oxygen → Metal Oxide e.g. Magnesium + oxygen → Magnesium oxide | Reactivity Series Potassium Sodium Calcium } React violently with dilute acids. (likely to explode) Magnesium Aluminium Zinc Iron Lead } React fairly well with dilute acids. Copper Silver Gold } Don't react with dilute acids. | | | | | | | | |
| Combustion | The scientific name for burning. | Neutralisation reactions Acid + Metal → A Salt + Hydrogen e.g. Hydrochloric acid + magnesium → Magnesium chloride + hydrogen Acid + Base → A Salt + Water e.g. Sulfuric acid + magnesium → Magnesium sulfate + water Acid + Metal Carbonate → A Salt + Water + Carbon Dioxide e.g. Nitric + magnesium → Magnesium + water + carbon acid carbonate nitrate dioxide | Investigating displacement reactions  1) Samples of metals (elements) are reacted with solutions containing metal compounds . 2) If the element is more reactive than the compound a displacement reaction happens. Zinc + copper sulfate → zinc sulfate + copper Copper + zinc sulfate → no reaction | | | | | | | | |
| Oxidation | When an element reacts with oxygen. | | | | | | | | | | |
| Thermal decomposition | Breaking down a compound into two or more substances by heating. | | | | | | | | | | |
| Exothermic | A reaction which releases heat, its temperature increases. | | | | | | | | | | |
| Endothermic | A reaction which absorbs heat, its temperature decreases. | | | | | | | | | | |
| Conservation of mass | No mass is lost or gained during a chemical reaction. | Naming Salts Salt names are based on the metal and the acid in the neutralisation reaction. |  Oxidation Neutralisation Displacement reactions | | | | | | | | |
| Chemical reaction | Chemical bonds are broken and formed making new products. | | | | | | | | | | |
| Reactivity Series | A list of metals in order from most reactive to least reactive. | | | | | | | | | | |
| Neutralisation | Reaction of an acid with an alkali or metal. | | | | | | | | | | |
| Displacement reaction | A reaction in which a more reactive element displaces a less reactive element from a compound. | | | | | | | | | | |
| Tier 2 vocabulary | Definition | <table><tr><th>Name of acid</th><th>Name of salt formed</th></tr><tr><td>Hydrochloric acid</td><td>_____ chloride</td></tr><tr><td>Sulfuric acid</td><td>_____ sulfate</td></tr><tr><td>Nitric acid</td><td>_____ nitrate</td></tr></table> | Name of acid | Name of salt formed | Hydrochloric acid | _____ chloride | Sulfuric acid | _____ sulfate | Nitric acid | _____ nitrate | |
| Name of acid | Name of salt formed | | | | | | | | | | |
| Hydrochloric acid | _____ chloride | | | | | | | | | | |
| Sulfuric acid | _____ sulfate | | | | | | | | | | |
| Nitric acid | _____ nitrate | | | | | | | | | | |
| Concentrated | A solution with a large amount of dissolved solid. | | | | | | | | | | |
| Dilution | .Adding water to a mixture. | | | | | | | | | | |
| Salt | A chemical produced in a neutralisation reaction. | | | | | | | | | | |



Oxidation



Neutralisation



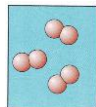
Displacement reactions

Section 1: Key Vocabulary

| Tier 3 vocabulary | Definition |
|--------------------------|---|
| Atom | The smallest part of a chemical element which can take part in a chemical reaction and remain unchanged |
| Element | A substance which cannot be broken down into simpler substances |
| Molecule | A group of chemical atoms joined together by chemical bonds |
| Compound | A substance which consists of two or more different elements chemically joined together. |
| Periodic table | A list of all the known chemical elements. |
| Group | A column on the periodic table. Elements in the same group react in a similar way. |
| Period | The rows on the periodic table |
| Chemical Symbol | Letters which are used to represent a chemical. |
| Word equation | Word equations are used to represent chemical reactions. |
| Tier 2 vocabulary | Definition |
| Mixture | A substance containing two or more different substances which are not joined together. |
| Property | The way a substance behaves or reacts. |
| Chemical reaction | When the particles in substances join together or split apart to form new substances |

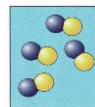
Section 2: New Knowledge/Skills

Element



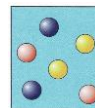
An element contains only one type of particles.

Compound



A compound contains more than one type of particle. The different particles are joined.

Mixture



A mixture contains more than one type of particle. The different types of particle are not joined.

| Metals | Non Metals |
|------------------------------------|--|
| Conduct heat and electricity. | Poor conductors of heat and electricity. |
| Malleable (can be shaped) | Brittle |
| Ductile (can be pulled into wires) | Most have low melting points. |

Word equations

These show what happens in a chemical reaction.

Reactants → Products

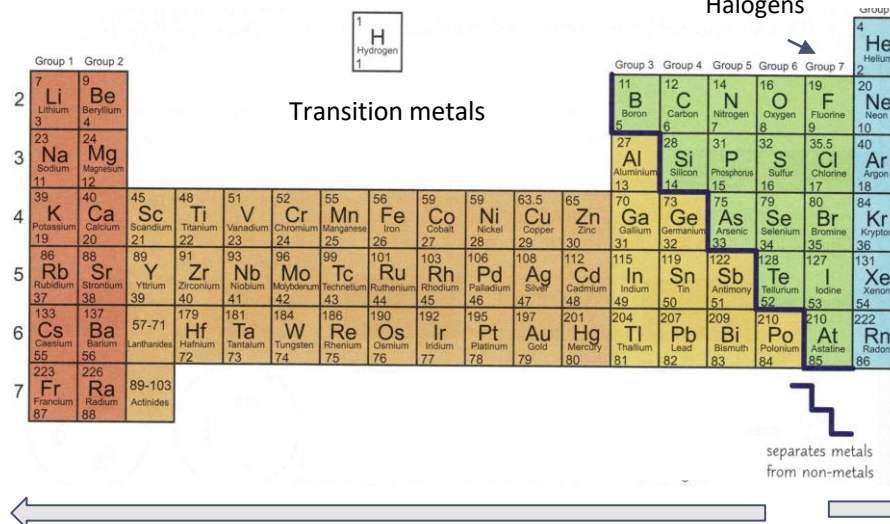
Columns on the periodic table are called groups.

Group 1 is called the Alkali Metals

Transition metals

Group 7 is called the Halogens

Group 0 is called the Noble Gases



The periodic table shows elements arranged in groups (columns) and periods (rows). Key features include:

- Group 1:** Alkali Metals (Li, Na, K, Rb, Cs, Fr)
- Group 2:** Alkaline Earth Metals (Be, Mg, Ca, Sr, Ba, Ra)
- Transition Metals:** Groups 3-10 (Fe, Cu, Zn, etc.)
- Group 7:** Halogens (F, Cl, Br, I, At)
- Group 0:** Noble Gases (He, Ne, Ar, Kr, Xe, Rn)
- Group 11-12:** Other metals (Cu, Ag, Au, etc.)
- Group 13-18:** Non-metals and metalloids (B, C, N, O, P, S, Se, Te, etc.)

A zigzag line separates metals from non-metals, starting from Boron (B) and ending at Astatine (At).

These elements are metals

These elements are non metals.

Section 1: Key Vocabulary

| Tier 3 vocabulary | Definition |
|----------------------------------|--|
| Tissue | Group of cells of one type. |
| Organ | Group of different tissues working together to carry out a job. |
| Organ system | A group of organs working together to perform a certain function. |
| Antagonistic pair | Pairs of muscles that relax and contract to create movement. |
| Joints | Places where bones meet. |
| Ventilation | Movement of air in and out of the lungs. |
| Trachea (windpipe) | Carries air from the nose and mouth to the lungs. |
| Bronchi | Tubes which branch off from the trachea and carry air into the lungs. |
| Bronchioles | Small tubes branching off the bronchi that carry air throughout the lung tissue. |
| Alveolus (plural alveoli) | Small air sacs where gas exchange happens. |
| Gas exchange | The exchange of oxygen into the blood and carbon dioxide out. |
| Aerobic respiration | Chemical reaction that uses oxygen release energy from glucose. |
| Anaerobic respiration | Chemical reaction that does not use oxygen to release energy from glucose. |
| Diaphragm | Sheet of muscle found under the lungs. |
| Tar | A thick black substance produced by cigarettes. |
| Carbon monoxide | A poisonous gas that stops the blood from carrying oxygen. |
| Nicotine | The addictive substance in cigarettes |

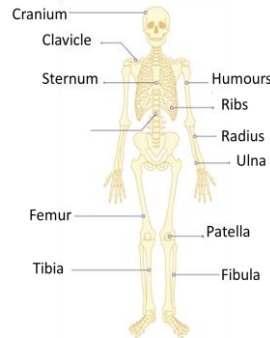
Section 2: organ systems

Key human organ systems include;

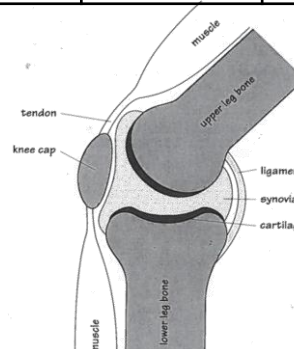
- Circulatory system used to pump blood around the body.
- Respiratory system used to get oxygen into the blood
- Reproductive system used to produce babies
- Musculoskeletal system used for movement
- Digestive system used to get nutrients from food
- Immune system used to fight infections
- Nervous system is used to control the body

The skeleton

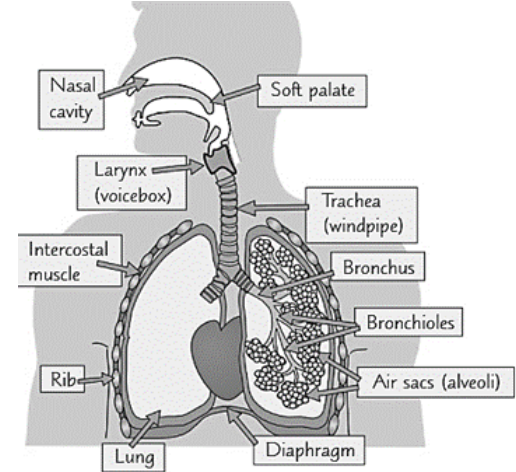
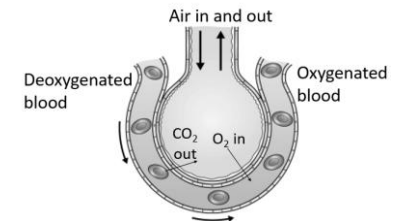
There are 206 bones in the human body, below are some of the most important bones.



| | | |
|---------------------------|----------------------------------|--|
| Antagonistic muscle pairs | Lower arm raises and elbow bends | Lower arm lowers and elbow straightens |
| Tricep | | |
| Bicep | | |



Section 3: Breathing System and Cellular Respiration

Breathing system

Gas Exchange in the Alveoli


Respiration is a chemical reaction that occurs in every living cell to release energy.

Aerobic respiration requires oxygen.

Glucose + Oxygen → Carbon Dioxide + Water

Anaerobic respiration happens when there is not much oxygen, for example during exercise.

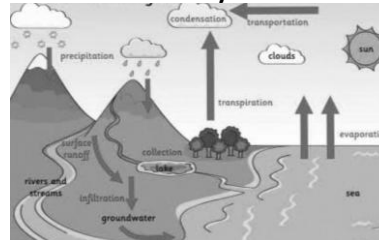
Glucose → Lactic Acid

Section 1: Key Vocabulary

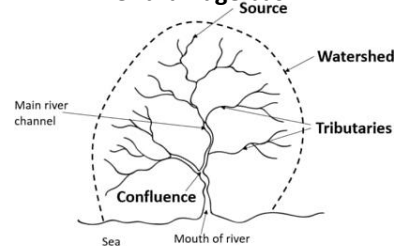
| Tier 3 vocabulary | Definition |
|-------------------------|---|
| Source | The place where a river begins. |
| Mouth | The place where a river ends. This is often the sea but can be a lake. |
| Evaporation | When the sun heats water as a liquid and it turns into a gas (water vapour). |
| Condensation | When water vapour cools and becomes a liquid eg. when clouds form. |
| Interception | When plants catch the falling rain (precipitation) on their leaves. |
| Infiltration | Water sinks into the ground. |
| Surface runoff | Water runs over the top of the ground. A lot of surface runoff will often cause floods. |
| Groundwater | Water stored in the bedrock underground. |
| Watershed | The edge of a river's drainage basin. |
| Abrasion | Erosion where sediment (eg rocks) in the river wears away the banks and bed of the river. |
| Attrition | Erosion where the rocks in the river hit each other and over time become smaller and smoother. |
| Hydraulic action | Erosion where the force of the water pushes into cracks in the river's bed and banks, causing rock to break away. |
| Solution | Erosion where rocks such as chalk and limestone dissolve in the slightly acidic river water. |
| Transport | The movement of sediment along the river channel. |
| Deposition | When the river loses energy and it drops the sediment it is carrying. |
| Waterfall | A steep fall of water. These are found in the upper course of a river. |
| Meander | Bends in the river. These are found in the middle course of a river. |
| Floodplain | The flat area next to a river. |

Section 2: New Knowledge

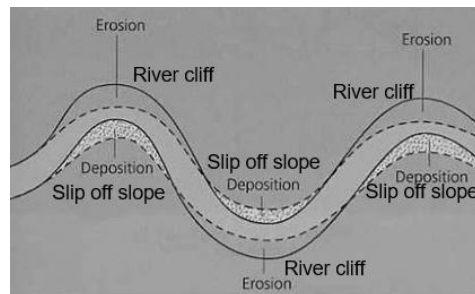
The water cycle



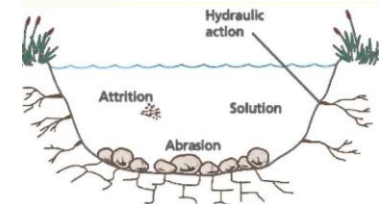
River drainage basin



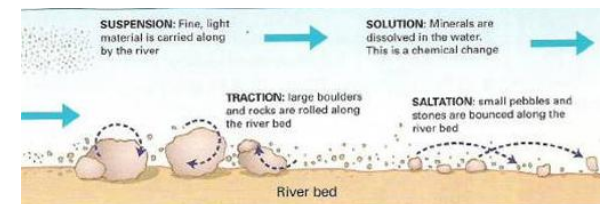
Meanders



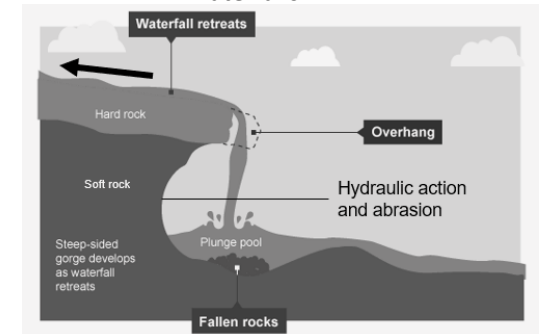
Types of erosion



Types of sediment transport



Waterfalls




Reasons for flooding: Heavy rain, impermeable surfaces, no trees, steep slopes, no flood management eg. walls, urban areas (towns and cities).

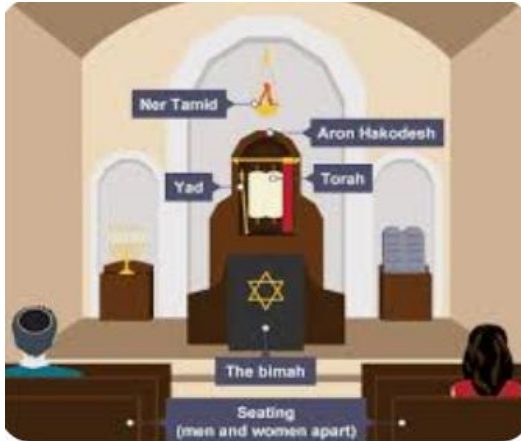
Section 3: Geographical Skills

- Using OS maps and aerial photographs to identify the features of a river.
- Labelling diagrams, using geographical terms.

| Section 1: Key Vocabulary | |
|------------------------------|--|
| Tier 3 vocabulary | Definition |
| Revolution | A period of great change |
| Industrial Revolution | The process of change from an agricultural economy to one dominated by industry and machines . |
| The Flying Shuttle | An invention that could produce much wider cloth at faster speeds than before. |
| The Spinning Jenny | An invention meaning that up to eight threads could be spun at once and sped up the process of spinning. |
| The Water Frame | Machine producing thread that is far stronger. |
| Suffrage | The right to vote. |
| Suffragists | A person advocating that the right to vote be extended to more people, especially to women. |
| Suffragettes | Women seeking the right to vote through organized protest. |
| Shell Shock | The psychological effects of war |
| Tier 2 vocabulary | Definition |
| Reformers | People who want to bring about change |
| Chartists | A group who campaigned for better social and industrial conditions for the working classes |
| Franchise | The right to vote in elections for public officials |

| Section 2: New Knowledge |
|---|
| The Industrial Revolution <ul style="list-style-type: none"> 1750-1900 There was a huge shift in Britain from farming and household work by hand to machines, mills and factories this is known as the Industrial Revolution. The causes of the Industrial Revolution in 1750. The role that Belper and the local area played in the Industrial Revolution. The new inventions of the period like the Spinning Jenny, The Water Frame and The Flying Shuttle. Key individuals of the Industrial Revolution including: Richard Arkwright, John Kay and James Hargreaves. |
| The Impact of the Industrial Revolution on people's lives. <ul style="list-style-type: none"> Conditions in the mills and factories. The impact these had on the workers. The work of men in mines and textile factories. Children in the mills. The jobs they were expected to do and the conditions in which they worked. Strutts Mill in Belper and how it treated its workers. A comparison between Belper's Mill and others nearby. The working lives of women in mills. Their role and the expectations of working women. Liberty's Dawn and what can be learnt from the book about the impact of the Industrial Revolution on people's lives. |
| The Campaign For The Vote and Equal Rights in the 1800s <ul style="list-style-type: none"> The efforts of reformers to extend the right to vote. The arguments for and against reforming the democratic system in the 1800s The work of the Chartists, their methods and supporters in the 1830s. The successes of the Chartists in extending the franchise and workers rights. Women's rights and the campaign for women's suffrage in the 1800s Views for and against women having the right to vote The work, campaigns and limitations of the Suffragist movement The rise and popularity of the Suffragette movement The tactics and treatment of the Suffragettes The success of the Suffragettes The campaign for equal rights focussing on the life of Anne Lister and other groups in society. |


| Section 3: Enquiry Questions |
|--|
| What was it like living and working in Belper during the 18 th and 19 th century? |
| Did the efforts of Chartists and Reformers change anything? |
| What's the story of the women's suffrage campaign? |
| Section 4: Source Analysis |
| <p>When analysing sources consider the following:</p> <p>Content- What is happening in the picture, who are the key people, what message is it giving?</p> <p>Context- What else is happening at the time?</p> <p>Purpose- Why was this cartoon drawn?</p> <p>Provenance- Who drew it? Who is it the audience?</p> |
|  |
| Section 5: Interpretations |
| How and why historians and others have interpreted the same events and developments in different ways. |
| <p>For example:</p> <p>Some historians will argue that the Suffragettes were campaigners for a just cause.</p> <p>Other historians will argue that their methods amounted to terrorism.</p> |

| Section 1: Key Vocabulary | | Section 2: New Knowledge | Section 3: New Knowledge |
|---------------------------|---|--|--|
| Tier 3 vocabulary | Definition | <p><u>Abraham</u></p> <p>The Torah says that God appeared to Abraham, saying that there is only one God and that he should leave his home to travel to Canaan, a land that God would give to him and his descendants</p> <p><u>Key Beliefs</u></p> <p>There is only one God</p> <p>God created the universe and is eternal</p> <p>God is omniscient</p> <p>God rewards those who obey his commands and punishes those who disobey them</p>  | <p><u>The Tenakh</u></p> <p>The Jewish Bible is called the Tenakh and is a collection of 24 separate books, divided into three sections:</p> <ul style="list-style-type: none">• Torah• Nevi'im• Ketuvim <p>Jewish people try to follow the commands contained in the Torah, believing that they came from God.</p> <p>The Ten Commandments are probably the best known of the 613 mitzvot. While the first four are about the Jewish people's relationship with God, the last six are about relationships with other human beings.</p> <p><u>Worship</u></p> <p>Orthodox Judaism teaches that men should pray three times a day (morning, afternoon and evening) except at Shabbat - the weekly day of rest - when there should be 4 prayers daily.</p> <p>Shabbat begins before nightfall on Friday and lasts for 25 hours. It is a command from the Torah that Jewish people should recite the shema twice a day - morning and night. Shema is a short collection of passages from the Torah.</p> <p>A Jewish place of worship is called synagogue or shul. Individuals may pray anywhere, but Jewish law says that some forms of worship are communal. Readings from the Tenakh play an important part in worship in the synagogue.</p> <p>Two festivals that are important in Judaism are Pesach which celebrates Moses' mission to free the Israelites from slavery in Egypt, and Sukkot, which reminds Jewish people of the time when the ancient Israelites, having escaped from slavery in Egypt, travelled through the desert sleeping in temporary shelters.</p> <p><u>Source of Authority</u></p> <ul style="list-style-type: none">• Genesis 12:1-3• Exodus 1• Deuteronomy 6.4-5 |
| Mantle | The cover of a Torah Scroll. | | |
| Mitzvah | Commandment | | |
| Pesach | (Passover) Jewish festival commemorating the Exodus from Egypt. | | |
| Torah | 'The Law'' the first section of the Tenakh and the first five books of the of the Jewish Bible. | | |
| Tenakh | The 24 books of the Jewish Bible. Comprising three sections; Torah, Nevi'im and Ketuvim. | | |
| Ketuvim | 'The writings' the third section of the Jewish Tenakh. | | |
| Ten Commandments | Fundamental laws of the Jewish people which tells them how to live. | | |
| Synagogue | Jewish place of worship. | | |
| Tier 2 vocabulary | Definition | | |
| Eternal | 'Everlasting': without beginning or end. | | |
| Reform | Progressive form of Judaism | | |
| Orthodox | Traditionalist branch of Judaism. | | |
| Covenant | In Judaism an agreement or contract. | | |
| Exodus | The journey of the Israelites out of Egypt. | | |

| Section 1: Key Vocabulary/Questions | |
|-------------------------------------|--|
| Tier 3 vocabulary | Definition |
| Definite article | 'the'- in French they use 'le', 'la', 'les' and 'l'' before a vowel. |
| Indefinite article | A or an in English, un (masculine) and une (feminine) |
| Verb (vb) | A word used to describe an action or a state |
| Adjective (adj) | Tells more about noun |
| Adjectival agreement | In French the adjective must agree with the noun its describing |
| Subject pronoun | je, tu, il, elle, nous, vous, ils, elles (I, you, he, she, we, you, they (m) and they (f)) |
| Possessive adjectives | Saying 'my', 'your', 'his/her' etc. French has 3 words for each. |
| Inversion questions | Swap the subject pronoun and the verb to form a question |
| Intonation questions | Raise your voice at the end of a statement to ask a Q. |
| Questions | Translation |
| 1. Comment ça s'écrit ? | How do you spell that? |
| 2. Comment dit-on? | How do you say.....? |
| 3. Tu es...? | Are you.....? (intonation) |
| 4. Es-tu? | Are you...? (inversion) |
| 5. Est-ce que tu es...? | Are you.....? (Est-ce que + statement) |

| Section 2: Grammar | | | | | |
|--|--------------------|-------------------|--|-----------------------------------|-------------|
| <p>Using 'il y a' and 'il n'y a pas de'</p> <p>To say there is, use il y a + indefinite article: il y a un vélo il y a une télé il y a des vélos</p> <p>To say what there isn't, use il n'y a pas + article 'de' for all genders: Il n'y a pas de vélo Il n'y a pas de télé Il n'y a pas de vélos</p> <p>Verbs with prepositions</p> <p>★ Some verbs need to be followed by a preposition in English, but not in French: I listen to the radio. J'écoute la radio. (no à) I am looking at the train. Je regarde le train. (no au) I am looking/asking for a book. Je cherche/demande un livre. (no pour)</p> <p>★ Other verbs need a preposition in French too, often a form of à: I am talking to the teacher. Je parle au professeur. I am giving a present to the girl. Je donne un cadeau à la fille.</p> | | | | | |
| | masculine singular | feminine singular | masculine/ feminine plural | before a vowel/ non-aspirated 'h' | |
| indefinite articles | a/an | un | une | des | no change |
| definite articles | the | le | la | les | l' |
| possessive adjectives | <u>my</u> | mon | ma | mes | mon |
| | your | ton | ta | tes | ton |
| | <u>our</u> | notre | notre | nos | no change |
| à + definite article | at the/ to the | au | à la | aux | à l' |
| <p>Saying 'it' and 'they'</p> <p>When we are referring to things, il/elle means 'it' and ils/elles means 'they'. The word for it or they matches the gender: Le livre est bon. Il est bon. It (m) is good. La règle est petite. Elle est petite. It (f) is short.</p> | | | | | |
| <p>French Masculine → Feminine Grammar Rules <input checked="" type="checkbox"/> Key Tips:</p> <p>•ADJECTIVES -Add -e for general rule, unless the word already ends in -e. •Watch for irregulars: not all follow these patterns. •Same spelling: Some words stay the same for both genders (ex: <i>un/une artiste</i>).</p> | | | | | |
| Type | Masculine Ending | Feminine Ending | Example (M → F) | | |
| Adjective | (general) + e | Add e | petit → petite (<i>small</i>) | | |
| Adjective | -x | -se | <u>heureux</u> → <u>heureuse</u> (<i>happy</i>) | | |
| Noun | (general) + e | Add e | <u>ami</u> → <u>amie</u> (<i>friend</i>) | | |
| Noun | -eur | -ice | <u>acteur</u> → <u>actrice</u> (<i>actor</i> → <i>actress</i>) | | |
| Noun | -eur | -euse | chanteur → chanteuse (<i>singer</i>) | | |

| Section 3: WAGOLL & phonics |
|--|
| <p>Bonjour ! Pour mes devoirs, je lis un livre ou j'écris des phrases. Mon frère, travaille à l'ordinateur et ma sœur prépare le déjeuner. Ma sœur est avocate et elle est travailleuse. Le soir, nous écoutons la radio et nous regardons la télé. Normalement on regarde une série avec des enfants, ils jouent et chantent. Voici ma maison, il y a des affaires, des vêtements et les devoirs. En juillet, nous allons passer des vacances en France. Nous allons chanter, parler, et étudier le français. Je suis très heureuse. Est-ce que tu vas en vacances ? Au revoir !</p> <p>*le soir –in the evening</p> |

| French phonics | | | |
|----------------|----------|--|----------------------------|
| liaison with h | l'hôtel | liaison with 's' | trois hôtels Z z |
| em | ensemble | um | parfum |
| am | chambre | un | lundi |
| aim | faim | gn | ligne |
| im | simple | SFC  | Silent Final E like petite |
| om | combat | SFE | Silent Final E like petite |

| Autumn 1 week 1 (Y7 revision- 54 words) | | |
|---|------------------------|------------------------------|
| Y8 French Autumn 1 week 2 | | |
| <i>nm</i> | l'avocat (m) | lawyer (m) |
| <i>nf</i> | l'avocate (f) | lawyer (f) |
| <i>nm</i> | le bureau | desk, office |
| <i>nm</i> | le directeur | headteacher (m) |
| <i>nf</i> | la directrice | headteacher (f) |
| <i>nm</i> | l'emploi (m) | job |
| <i>nm</i> | le facteur | postman (m) |
| <i>nf</i> | la factrice | postwoman f) |
| <i>nm</i> | le secrétaire | secretary (m) |
| <i>nf</i> | la secrétaire | secretary (f) |
| <i>adj</i> | ambitieux | ambitious (m) |
| <i>adj</i> | ambitieuse | ambitious (f) |
| <i>adj</i> | prudent | careful (m/f) |
| <i>adj</i> | travailleur | hard-working (m) |
| <i>adj</i> | travailleuse | hard-working (f) |
| <i>adv</i> | assez | quite |
| | est-ce que | questioning device (do/does) |
| Autumn 1 week 3 (revise week 2 and Y7) | | |
| Autumn 1 week 4 | | |
| | célébrer | to celebrate, celebrating |
| | préférer | to prefer, preferring |
| | avril (m) | April |
| | la date | date |
| | l'événement (m) | event |
| | février (m) | February |
| | janvier (m) | January |
| | juin (m) | June |
| | mars (m) | March |

| | mai (m) | May |
|--|---------------------------|-------------------------|
| | la tradition | tradition |
| | premier | first (m) |
| | première | first (f) |
| | quatorze | fourteen |
| | quinze | fifteen |
| | seize | sixteen |
| | trente | thirty |
| | treize | thirteen |
| | vingt | twenty |
| | on | everyone, you, one |
| Autumn 1 week 5 (revise week 4 and Y7) | | |
| Autumn 1 week 6 | | |
| | organiser | to organise, organising |
| | chacun | each person |
| | l'anniversaire (f) | birthday |
| | août (m) | August |
| | décembre (m) | December |
| | juillet (m) | July |
| | septembre (m) | September |
| | octobre (m) | October |
| | novembre (m) | November |
| | général | general (m) |
| | générale | general (f) |
| | national | national (m) |
| | nationale | national (f) |
| | partout | Everywhere |

Autumn 1 week 7 (Y7 revision list on Quizlet)

Quizlet
links for
revision



| | | | | |
|---------------------|---------------------|---------------------|----------------------------|----------------------------|
| A <u>a</u> | G <u>jay</u> | M <u>em</u> | S <u>ess</u> | W <u>doubla-vay</u> |
| B <u>bay</u> | H <u>ash</u> | N <u>en</u> | T <u>tay</u> | X <u>eeks</u> |
| C <u>say</u> | I <u>ee</u> | O <u>oh</u> | U <u>oo</u> | Y <u>ee greque</u> |
| D <u>day</u> | J <u>gee</u> | P <u>pay</u> | V <u>vay</u> | Z <u>zed</u> |
| E <u>ehh</u> | K <u>kah</u> | Q <u>koo</u> | L'alphabet français | |
| F <u>eff</u> | L <u>el</u> | R <u>air</u> | | |

- | | | |
|----------|----------------|-----------------|
| 1.un | 11.onze | 21.vingt et un |
| 2.deux | 12.douze | 22.vingt-deux |
| 3.trois | 13.treize | 23.vingt-trois |
| 4.quatre | 14.quatorze | 24.vingt-quatre |
| 5.cinq | 15.quinze | 25.vingt-cinq |
| 6.six | 16.seize | 26.vingt-six |
| 7.sept | 17.dix-sept | 27.vingt-sept |
| 8.huit | 18.dix-huit | 28.vingt-huit |
| 9.neuf | 19.dix-neuf | 29.vingt-neuf |
| 10.dix | 21.vingt et un | 30.trente |
| | 20.vingt | 31.trente et un |



Scan to
revise
numbers

| Regular ER verb CONJUGATION example: jouer (to play,playing) Remove –er and add the correct ending | |
|--|--|
| je joue (I play/am playing) | nous jouons (we play/are playing) |
| tu joues (you play/are playing) | vous jouez (you (pl/fml) play/are playing) |
| il/elle joue (he/she plays/is playing) | ils/elles jouent (they (m/f) play/are playing) |

Section 1: Key Vocabulary/Questions

| Tier 3 vocabulary | Definition |
|------------------------|---|
| Weak verb | A regular verb. The past participle sandwiches the verb stem with 'ge' and '-t'; for example, 'gespielt' |
| Strong verb | An irregular verb. The past participle usually sandwiches the verb stem with 'ge' and 'en'; the stem vowel often changes |
| Perfect tense | Describes actions that have been completed in the past. |
| Past participle | The form of the verb used in the perfect tense ; for example, '(I have) done ', '(I have) eaten ' |
| Accusative | Form(s) used for the object or 'receiver' of the action of the verb |
| Dative | Shows to whom or for whom something is done. It's mainly used for indirect objects. Example: <i>Ich gebe dem Mann das Buch.</i> |
| Time adverbial | A word or phrase that tells when , how often , or how long something happens |
| Nominative case | Used to describe the subject of a sentence, i.e., who or what is doing the action of the verb |

| Questions | Translation |
|--|----------------------------------|
| 1. Was hast du gestern gemacht? | What did you do yesterday? |
| 2. Bist du schon nach London gefahren? | Have you already been to London? |
| 3. Hast du Hunger? | Are you hungry? |
| 4. Was must du machen? | What do you have to do? |
| 5. Worauf hast du Lust? | What do you fancy doing? |
| 6. Warum magst du Wassersport? | Why do you like water sports? |

Section 2: Grammar

The perfect tense has 3 parts

- | | | | |
|----------------------|-----|-------|-------------------|
| 1) a subject | 1 | 2 | 3 |
| 2) an auxiliary verb | ich | habe | (Tennis) gespielt |
| 3) a past participle | er | hat | (Musik) gehört |
| | wir | haben | (Pommes) gegessen |

*Most verbs in the perfect tense use **haben** as their auxiliary verb

* Weak verbs form their past participle by taking the stem of the infinitive, then adding **ge** to the front and **t** the end of the stem.

e.g. gespielt (played), gemacht (did)

* Strong verbs usually form their past participle by taking the stem of the infinitive, adding **ge** to the front and **en** to the stem. The vowel in the stem may change as well.

Present
Past (perfect)
Ich mache eine Tour.
Ich habe eine Tour gemacht.

I am doing a tour.
I do a tour.

I have done a tour.
I did a tour.

Regular past participles sandwich the stem with **ge-** and **-t**:

machen → gemacht
spielen → gespielt
kaufen → gekauft

Some verbs don't add **-ge**!
besuchen → besucht
erleben → erlebt
It would be harder to pronounce them if they did!

Sie hat im Café gegessen.
She has eaten / ate in the café.

Sie hat eine Liste geschrieben.
She has written / wrote a list.

The past participle **stays the same** when we are talking about different people!

Er hat Freunde getroffen.
He has met / met friends.

Er hat viel Wasser getrunken.
He has read / read a book.

Infinitive clauses with **zu**

Ich habe keine Lust, zu arbeiten. I don't have any desire to work.

Er vergisst immer, Kaffee zu kaufen. He always forgets to buy coffee.

Es ist wichtig, Deutsch zu lernen. It is important to learn German.

Like in other two-verb structures, the second verb (with **zu**, in infinitive) is at the **end**.

Adjectival agreement in the nominative and accusative cases

R1

Ein kleiner Mund ist schön.

Das ist eine lange Nase.

Ein rundes Gesicht ist komisch.

R2

Sie hat einen kleinen Mund.

Ihr Bruder hat eine lange Nase.

Die Oma hat ein rundes Gesicht.

Section 3: WAGOLL & phonics

Gestern habe ich meine Austauschfotos gesehen. Letztes Jahr habe ich einen tollen Austausch in Deutschland gemacht. Ich habe viele Briefe an meinen Austauschpartner geschrieben. Er heißt Nico und er hat für mich Schnitzel und Bratkartoffeln gekocht.

Dieses Wochenende muss ich meine Hausaufgaben machen. Ich muss mein deutsches Vokabular lernen aber ich will nicht. Ich habe Lust, in der Stadt Eis zu essen und ich habe auch Lust, zum See zu fahren.

Ich mag Wassersport, weil er so spannend und lustig ist. Ich vergesse manchmal, wieviel Zeit notwendig ist.

Using **which** in German

To ask **which?** in German, use the question word **welcher, welche, welches**:

| | | |
|------------------|--|---|
| masculine | <u>Welcher</u> Tisch ist das? Which table is that? | Der <u>Schreibtisch</u> . The writing table (desk). |
| feminine | <u>Welche</u> Flasche ist das? Which bottle is that? | Die <u>Wasserflasche</u> . The water bottle. |
| neuter | <u>Welches</u> Schwimmbad ist das? Which swimming pool is that? | Das <u>Schulschwimmbad</u> . The school swimming pool. |

German phonics

| | | | |
|------------|-----------|------------|-----------------------------|
| ei | ein | u | du |
| ie | sie | ü | fünf |
| sch | schreiben | SSC | Sound-symbol correspondence |
| st- | stark | ai | der Hai |
| sp | spielen | r | Uhr |

Year 8 German (Y7 Revisited Term 3.2 Week 4)




| Y8 German Autumn 1 week 1 | | |
|---------------------------|-----------------------------|--|
| dieser, diese, dieses | this | |
| letzter, letzte, letztes | last | |
| so | so | |
| schon | already | |
| die Kultur | culture | |
| die Türkei | Turkey | |
| die Kleidung | clothing | |
| die Tour | tour | |
| der Spaß | fun | |
| Juli | July | |
| August | August | |
| die Ferien | holidays | |
| selbst, selber | -self | |
| kaufen | to buy, buying | |
| Besuchen | to visit, visiting | |
| erleben | to experience, experiencing | |
| Y8 German Autumn 1 week 2 | | |
| bisher | until now, up to now | |
| der Sommer | summer | |
| Spanien | Spain | |
| Frankreich | France | |
| welcher, welche, welches | which | |
| treffen | to meet, meeting | |
| getroffen (pp) | met (pp) | |
| gesprochen (pp) | spoke, spoken (pp) | |
| geschrieben (pp) | wrote, written (pp) | |
| gesungen [pp] | sang, sung (pp) | |
| getrunken (pp) | drank, drunk (pp) | |
| gegessen (pp) | ate, eaten (pp) | |
| gelegen (pp) | lay (pp) | |

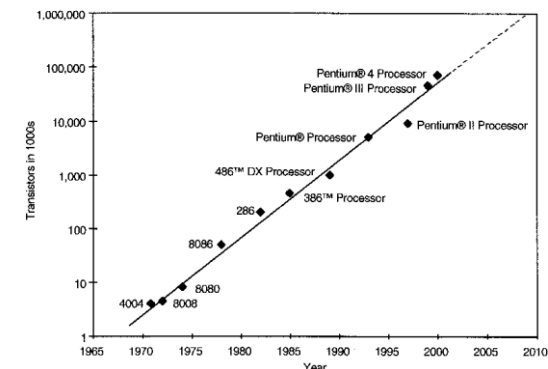
| Autumn 1 week 3 | | |
|---|-------------------------|--|
| müde | tired | |
| oben | above, upstairs | |
| unten | below, downstairs, down | |
| noch | still, yet | |
| die Küche | kitchen | |
| die Lust | desire | |
| der Hunger | hunger | |
| der Schmerz | pain | |
| der Brief | letter | |
| die Wohnung | apartment, flat | |
| der Kaffee | coffee | |
| das Bad | bathroom | |
| Sie | you [formal] | |
| gefunden (pp) | found (pp) | |
| Autumn 1 week 4 (Y7 revision list on Quizlet- 50 words) | | |
| Autumn 1 week 5 | | |
| bequem | comfortable | |
| freundlich | friendly | |
| wieder | again | |
| die Jahreszeit | season | |
| Dezember | December | |
| März | March | |
| der Blick | look, view | |
| der Wechsel | change | |
| der Schuh | shoe | |
| die Pflanze | plant | |
| das Mal | time | |
| duschen | to shower, showering | |
| | to understand, | |
| begreifen | understanding | |

| Autumn 1 week 6 | | |
|-----------------|---------------------|--|
| rund | round | |
| breit | wide | |
| dünn | thin | |
| neu | new | |
| ähnlich | similar | |
| als | as | |
| die Schülerin | pupil (f) | |
| die Zeit | time | |
| die Nase | nose | |
| der Schüler | pupil (m) | |
| der Mund | mouth | |
| das Gesicht | face | |
| das Auge | eye | |
| das Haar | hair | |
| verbringen | to spend (time) | |
| Autumn 1 week 7 | | |
| interessant | interesting | |
| unmöglich | impossible | |
| notwendig | necessary | |
| wunderbar | wonderful | |
| spannend | exciting, thrilling | |
| lustig | funny, enjoyable | |
| warum? | why | |
| weil | because | |
| denn | because, for | |

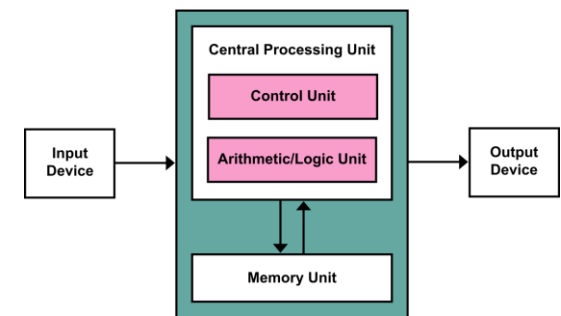


Quizlet links for revision

| Section 1: Key Vocabulary | | Section 2: Famous historical people in Computing | Section 3: Subject Content and Questions |
|---------------------------|--|---|---|
| Tier 3 vocabulary | Definition | | |
| Transistors | Tiny electronic switches and amplifiers found inside electronic devices such as computers and mobile phones. | Al-Khwarizmi - was a Persian mathematician born in 800 AD who was the father of algebra. Without his work, in solving problems, we would not have logic in computing. |  |
| CPU | The part of the computer that is responsible for carrying out calculations and processing instructions. | Ada Lovelace - Ada is considered the first computer programmer. Even though she did not build a physical computer she wrote about one named "The Analytical Engine". She wrote about the fact that this computer could follow simple programmed instructions to perform a complex calculation. | |
| Hertz | A measure of the speed a computer's processor executes instructions. | | |
| Moore's Law | A theory in Computing relating to the knowledge that computer speed and processing will be expected to double every 2 years. | | |
| Enigma Code | The project worked on during World War II at Bletchley Park to decipher Nazi communications by the British. | Alan Turing - Alan is considered to be the most famous mathematician and programmer in British history. His work during World War II on the Enigma Machine helped to bring down the Nazi's and shorten the war by 2-4 years. | |
| Colossus | The first purpose built computer based at Bletchley Park. | |  |
| Microchips | Integrated printed circuits inside computers that transfer digital communications. | Gordon Moore - is an American businessman and developer of computer processors. In 1965 he developed a theory in which he stated that every 2 years the processing power and speed of computers would double. His theory is called "Moore's Law". | |
| The Internet | A global network of connected computers. | | |
| The World Wide Web | 'WWW' or 'web' for short, is a collection of webpages found on the Internet. | | |
| Tier 2 vocabulary | Definition | Sir Tim Berners Lee - the founder of the World Wide Web. | |
| Investigate | To find relevant information | In 1989 he developed a set of rules or protocols which include HTML (hyper text markup language), HTTP and URLs. |  |
| Produce | To make a piece of work | | |
| Logic | To solve a problem through steps | Bill Gates - is the founder of Microsoft. | |
| Problem Solving | To find a solution to a problem | Microsoft is one of the largest software companies in the world today. | |
| Execution | To produce and run a solution | | |



The chart above shows the modelling of Moore's Law and his prediction about computer speed and processing



The diagram above is The Von Neumann Computer Architecture developed by John Von Neumann.

Who founded Google?

Google was founded by Larry Page and Sergey Brin in 1998 while they were PhD students at Stanford University in California. They initially developed a search engine called BackRub, which looked at the connections between websites using a system that would later become known as PageRank.

The name "Google" is a play on the word "googol", which refers to the number 1 followed by 100 zeros—symbolising their mission to organise a seemingly infinite amount of information on the web.

Section 1: Key Vocabulary

| Tier 3 vocabulary | Definition |
|-------------------------------------|---|
| Give and Go (One-Two) | Passing to a teammate, running up the court or pitch and receiving the ball back. |
| Layup | A method of shooting in Basketball. |
| Deception, Dummy or Feint | Methods used to send an opposing player the wrong way in order to beat them. |
| Breakdown | The point at which the attacking team's forward progress is stopped. |
| Ruck | After a player is tackled in Rugby and players contest the ball on the ground. |
| Possession | The team or player that currently has the ball. |
| 1st Stage Defence | Marking a player |
| 2nd Stage Defence | Marking the ball. |
| Tier 2 Vocabulary | Definition |
| Contact | Touching another player. |
| Foul | Breaking the rules of the game such as unfair contact that gains an advantage. |
| Free Pass/Kick | Normally awarded after a foul or ball out of play as a way to restart the game. |
| Offside | A player in the wrong position gaining an unfair advantage (varies by sport). |
| Obstruction | Unfairly blocking or standing too close to an opponent to impair their progress (varies by sport) |

Section 2: Developing Skills in Court Based Invasion Games

In all invasion games there are many skills that are common between the sports, but there are also more specialist skills that are specific to each sport. Examples of these are given below.

Netball Shooting & Marking



When shooting in Netball bending the elbows and knees can help gain power and therefore height on the ball to get it over a defender. When marking in Netball you must keep your feet 1 metre away from the attacker to avoid breaking the obstruction rule whilst leaning and stretching to block. In Basketball you can shoot as you dribble into the basket by performing a layup. When performing a layup we stretch and push the ball up onto the backboard, driving with the knee.

Basketball Layup



Section 3: Developing Skills in Field/Pitch Based Invasion Games

Football Lofted Pass



In Football the lofted pass can be used to pass the ball over the top of opposition players rather than risking a ground pass or several short passes being intercepted. The ball needs to be struck in its lower half and you should lean back and follow through to gain height and power. In Rugby a tackle is used to prevent the player with the ball making further progress. Tackles must be safe and effective, you should hit with the shoulder into the thighs and holding tightly with both arms, ensuring your head goes down the side of the player 'cheek to cheek' and with your 'spine in line'.

Rugby Tackle



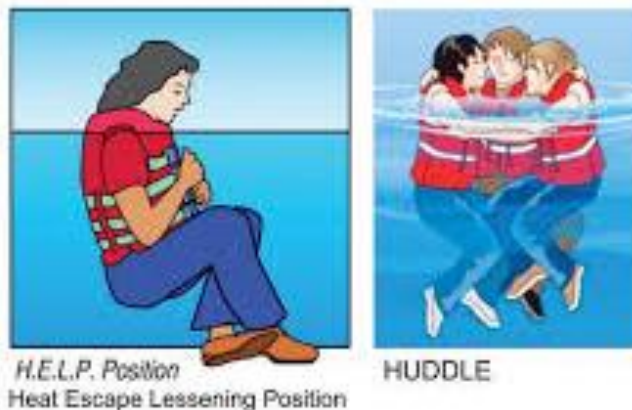
Section 1: Key Vocabulary

| Tier 3 vocabulary | Definition |
|----------------------------|---|
| Survival | Continuing to exist in difficult circumstances. |
| HELP | Heat Escape Lessening Posture/Position. |
| HUDDLE | A group survival technique. |
| Training Method | The style of training used. |
| Fartlek | Known as 'speed play', a training method with varying intensity. |
| Continuous | A training method that takes place over a long duration at low intensity. |
| Resistance | Exercising muscles against an opposing force, such as a free weight. |
| Tier 2 Vocabulary | Definition |
| Emergency Situation | Un unexpected event that has the potential to put us in danger. |
| Signal | Trying to gain the attention of someone. |
| Fitness Training | A method used to improve or maintain a component of fitness. |
| Duration | How long something goes on for. |
| Intensity | How hard something is. |
| Targeting | When training is aimed at a certain component of fitness or body part. |

Section 2: Personal Survival

Personal survival is about being able to enter the water in an emergency situation, without panicking. Personal survival skills can then be used to help you survive for longer as an individual or group and maximise your chances of rescue.

HELP and HUDDLE Position



HELP Position

The HELP position stands for Heat Escape Lessening Posture or Position. The idea of the HELP position is to retain as much heat in the body as possible as well as conserving energy. This works by closing the areas most susceptible to heat loss such as the armpits and groin, covering the chest to protect the organs and keeping the head above water.

HUDDLE Position

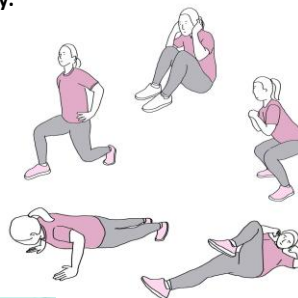
The HUDDLE position can be used in a group survival situation. The group gather together to form a circle and use their collective body heat to survive for longer. Again, the areas where heat is lost are closed or protected and the head stays above the water. The HUDDLE position also makes rescue more likely as the group forming a circle is easier to spot. Members of the group can take turns to raise their arms or signal for help.

Section 3: Fitness Training – Methods of Training

A method of training is a training type or style that targets a particular component of fitness or activity.

Circuit Training

Doing several exercises in turn at stations, targeting different areas of the body or different components of fitness.



Weight Training

Weight training uses weights to act as resistance for the muscles, this allows you to work on different types of strength and to target individual muscles or groups of muscles.

Continuous Training

Continuous training is normally aimed at athletes taking part in long duration activities such as running, road cycling or open water swimming. You train at a low intensity for a long duration.



Fartlek Training

Fartlek training is aimed at athletes that take part in activities where the intensity can change, such as invasion games players. Fartlek means 'speed play' and you alter the intensity throughout the training.

Section 1: Key Vocabulary

| Tier 3 vocabulary | Definition |
|-------------------------|---|
| Apparatus | A piece of gymnastic equipment with a particular purpose. |
| Vault | A gymnastic skill performed using apparatus such as a box, buck or horse. |
| Depth | Altering how long or short the ball or shuttlecock is played in net games. |
| Service Line/Box | In net games we normally need to begin behind the service line and may serve into a service box |
| Springboard | A piece of gymnastic equipment designed to assist with flight. |
| Trampette | A piece of gymnastic equipment designed to assist with flight. |
| Advanced Skills | Skills or specific techniques unique to an activity. |

Tier 2 Vocabulary

| Tier 2 Vocabulary | Definition |
|-------------------|--|
| Landing | A controlled landing is vital in gymnastics for safety and as it is aesthetically pleasing. |
| Flight | Producing gymnastic shapes in the air, with or without assistance. |
| Jump | Used in gymnastics flight and can take many forms. |
| Angle | Changing the direction of the ball or shuttlecock in net games. |
| Pace | Changing the speed at which the ball or shuttlecock moves in net games. |
| Spin | Getting the ball to move or bounce in an unpredictable way, making it harder to return in net games. |

Section 2: Gymnastics Flight

Jumps and Vaults



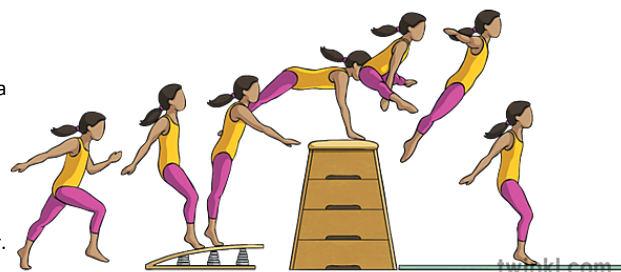
Tuck

Split

Straddle

Pike

Gymnastic jumps involve creating aesthetically pleasing shapes in the air. When going over or onto a piece of apparatus this is known as a vault. We can gain extra height by using apparatus such as a springboard or trampette, or even by using a partner.



Landing



When attempting any flight, we must attempt to land in a safe and controlled manner. You should always aim to land on 2 feet and for the landing to be aesthetically pleasing, take no more than 1 step.

Section 3: Net Games Advanced Skills

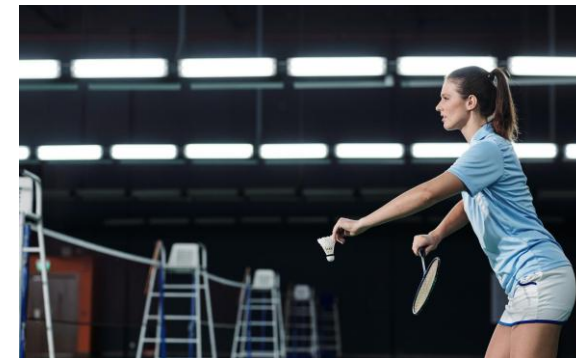
Advanced skills or specific skills are used in individual net games as we become more experienced. These skills can help to give an advantage and can be used to put an opponent under pressure.

Table Tennis Serve



In Table Tennis you can change the angle, depth, pace and spin of your serve but must follow all of the service rules. You should have an open, flat palm, you should be behind the table, the ball must be above the table, it should be thrown up a minimum of 6 inches and only be hit on its downward flight, it should also hit your side of the table followed by your opponents. If you clip the net but it lands in this is a 'let' and you are allowed another go.

Badminton Serve



In Badminton, you can alter the angle, pace and depth of your serve to make it difficult for your opponent to return the shuttle. You should stand behind the service line and must serve into the service box diagonally opposite you with both feet on the ground. The shuttlecock must be hit underarm and below the waist in one continuous forward motion.

Section 1: Key Vocabulary

| Tier 3 vocabulary | Definition |
|----------------------|---|
| Scarification | Scratching, etching, burning, branding, or superficially cutting designs into skin. |
| Fragmented | To break or cause to break into pieces. |
| Tonal bar | A way of demonstrating a tonal range. |
| Ombre | Ombre is the blending of one colour hue to another, usually moving tints and shades from light to dark. |
| Proportion | How the sizes of different parts of a piece of art or design relate to each other. |
| Symmetry | When two halves of a work of art mirror each other. |
| Press print | Thin polystyrene printing sheets. |
| Gradient | A gradual blending from one tone to another tone. |
| Elongate | To stretch out of proportion lengthwise. |

| Tier 2 vocabulary | Definition |
|-------------------|---|
| Carving | The act of using tools to shape something from a material. |
| Blend | The gentle transition from one tone or colour to another. |
| Texture | How something feels e.g., rough or smooth. |
| Detail | An individual or small part of an item. |
| Highlight | The lightest parts of an object, drawing or painting. Where the light hits or reflects off an object. |
| Distort | To stretch out of proportion. |

Section 2: Observational drawing

You are going to make a drawing of an African mask - this is called first-hand observational drawing.

It is important you draw lightly and carefully using a 2B pencil.

Initially you are learning about what your mask looks like.

Look closely at your mask –

What shape is it?

Is it symmetrical?

Where are the eyes positioned?

How long is the nose?

Does it have hair or ears?

What sort of a mouth does it have?

Are there any other details? Headdress? Facial markings?

You are now going to start your drawing.

1. Lightly draw a **straight line** down the centre of your mask photograph and repeat this on your blank page, using a ruler. This will be the centre of your mask. This is a construction line so don't press on as you will be rubbing these out later!

2. Lightly draw the **outline** of the main mask. Ignore any bits that are add-ons. (headdresses or ears) Is your mask symmetrical? If so, copy over the shape.

3. Now add headdresses, ears, to the outer shape. Don't add facial details yet, you are only looking at the main outline..... **remember to sketch lightly**, as these may need to be moved.

Now you are going to place the facial features – the eyes, nose and mouth. Remember to sketch these lightly, as your first attempt may not be correct.

Start by placing the eyes. Notice on this mask the eyes are central to the main head shape. Study your mask and decide where, and how big your masks eyes are. Now **lightly** draw in where you want them to go using **construction lines**.

Use **construction lines** to help you place all of the main facial features now – as shown on the photo. So how low does the nose drop below the eyes? How far is it to the centre of the lips?

Section 2: Adding tone

Tonal bar you are going to draw out a tonal bar to practice adding tone first



Below is a drawing of An African mask. You can see all of the line work is done and the artist has started to add tone using a shading pencil. Use a **4B or a 6B pencil** for your shading. Before applying tone to your drawing, draw up a **tonal bar** somewhere at the edge of your page.

Use a ruler to draw the grid. Then carefully and smoothly fill in the tones from darkest to lightest using your **4B or 6B pencil**. You should look to use each of these tones in your drawing.

Important- Before adding any tone to your mask, rub out any construction lines.

Now, using the full range of tones, start to apply shading to your mask drawing.

Start by looking hard to spot the darkest areas. Compare your darkest areas – are they equally dark or is one darker than the other?

Start with your darkest tone. Decide where you are going to start and gradually apply this dark tone to your drawing.

Apply this same dark tone to the mask drawing where you feel it should be.

Now look at how this tone changes as the shape of the mask changes. Look carefully to see how the tones **blend** from dark to light carefully and **smoothly**.

Dark, mid and light tones can be found all over the mask where the light and shadows fall.



Section 1: Key Vocabulary

| Tier 3 vocabulary | Definition |
|---------------------|--|
| Hyperrealism | A genre of art in which the work is of such detail that it resembles a photograph. |
| Burnishing | A colour pencil technique that is achieved by layering with more and more pressure until there's no sign of paper underneath and a sheen is created from the pencil wax. |
| Illustrator | A person who draws or creates pictures for magazines, books, advertising, etc |
| Zentangle | A form of meditative art that involves creating intricate designs using repeated patterns that together form the structure of a subject. |

Tier 2 vocabulary

| Tier 2 vocabulary | Definition |
|----------------------|---|
| Tone | Refers to how light or dark a colour is. Each colour has an almost infinite number of tones. |
| Gradient | A process of transitioning a tone from light to dark or dark to light. |
| Blending | A process of layering two or more colour pencils together to create new colours and transitions of colour. |
| Flat wash | Paint that has been thinned or diluted making the paint less vibrant and semi-translucent. |
| Underpainting | The application of a flat wash of colour to start a piece of work before layering materials such as colour pencil over the top. |

Section 2: Artists and techniques



Ian Macarthur is a renowned artist / illustrator from Swindon, England. He has achieved fame across the globe for his zentangle inspired patterns often depicted on the surface of humans and animals.

1. Draw the basic outline of a bird's head.
2. Break the bird down into key shapes.
3. Create your own Ian Macarthur inspired patterns inside those shapes considering the curves over the bird's face (no patterns in the eyes and beak, just tone)
4. Make your design symmetrical.
5. Use black pen to go over and shade your design.

Mark Powell is a well know fine artist from Yorkshire. He is most famous for his depictions of people and animals in biro pen on the surface of found, used paper materials such as envelopes, postcards, maps, and old documents



1. Find an old, used, discarded paper; the more interesting the better.
2. Draw the basic outline of a bird on the surface considering its placement on the document.
3. Shade your bird using a black biro focussing on the shadows and leaving highlights. Practise applying different levels of pressure with biro to make a gradient like below. The less scratchy your marks the better.



Section 2: Artists














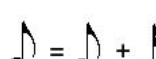

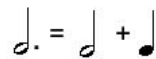

























Amy Holliday is well known for her depictions of birds using vibrant watercolour splashes. She allows her colours to bleed, creating new smooth blended areas, before working over key details such as the eye, beak and feet using a fine-liner pen. Holliday currently lives and works in Cumbria, England

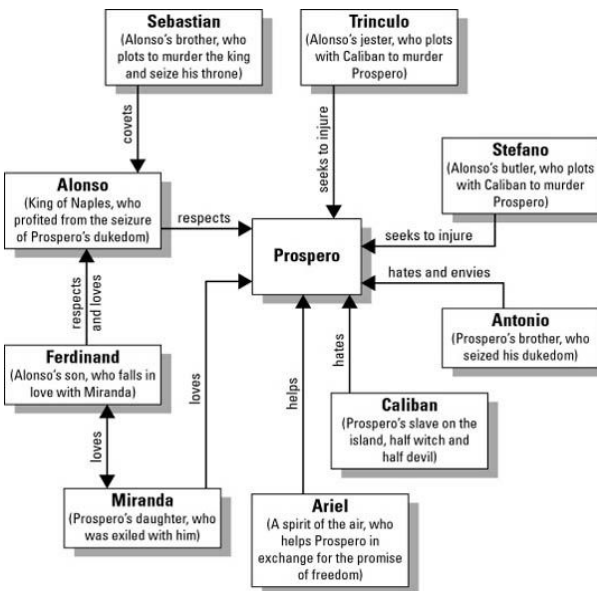


Claire Brewster is a British papercut artist from Lincolnshire. Her process involves intricately cutting map paper with a sharp craft knife. She first draws the silhouette of the bird she wants to create onto a map carefully selected based on where the birds are found. Her silhouettes are often presented showing the shadow of the bird cast on a white surface.

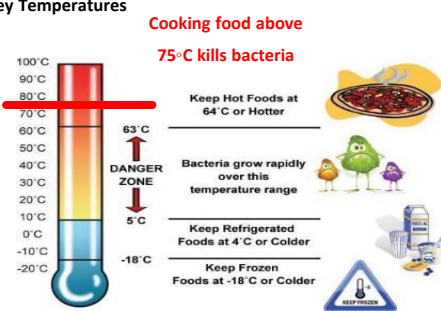


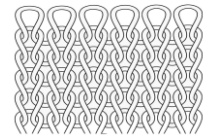
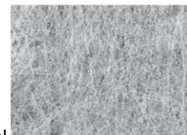
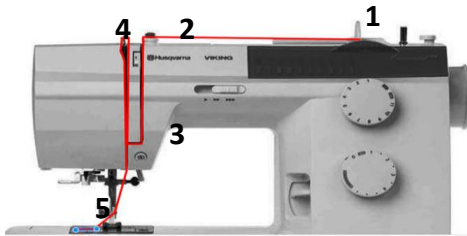
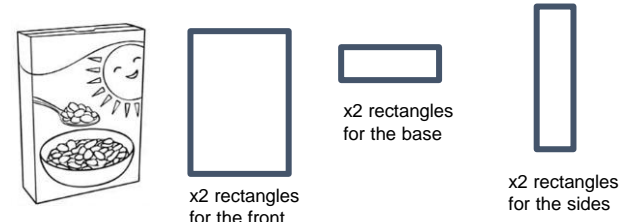
Street artist Hua Tunan creates beauty out of chaos. Often seen throwing and splatting paint across the wall. Tunan gradually builds his main shape from these expressive movements. He then will work into the central focus of his work which is the bird's head, often the only section rendered in colour. Tunan was born in Guangdong, China and currently works in Singapore.

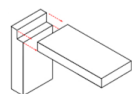
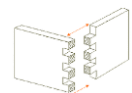




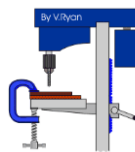


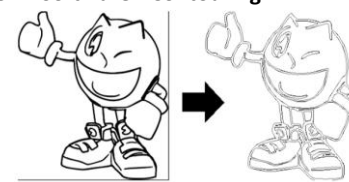
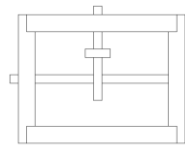

| Section 1: Key Vocabulary | | Section 2: New Knowledge/Skills | Section 3 | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--|---|----------|---|-------|---|----|---|----|---|-------|---|-------------|---|-----------|---|-----|---|--------|---|------------|
| Tier 3 vocabulary | Definition | <p>When we use our voices we need ensure that we are fully warmed up. Like with exercise when we sing we are using muscles within our body and these can strain if used without warming up.</p> <p>Vocal warmups</p>  <p>Challenge 1,2,3,4,5,6,7,8</p>  <p>Different types of songs</p> <p>Unison – songs sung together, all doing the same.</p> <p>A Capella – songs without accompaniment.</p> <p>Harmony – songs sung together but in different sections (on different notes).</p> <p>Solo – a song sung on your own.</p> <p>Duet – a song sung in a pair; with harmony.</p> <p>Trio- a song sung in a group of four; with harmony.</p> <p>Quartet – a song sung in a group of four; with harmony.</p> | <p>Rhythm</p> <p>Kodály Rhythm Method</p> <table><tr><td></td><td>Ta _ _ _</td></tr><tr><td></td><td>Two _</td></tr><tr><td></td><td>Ta</td></tr><tr><td></td><td>Te</td></tr><tr><td></td><td>Te-te</td></tr><tr><td></td><td>Tecka-tecka</td></tr><tr><td></td><td>Three _ _</td></tr><tr><td></td><td>Tay</td></tr><tr><td></td><td>Tim-ka</td></tr><tr><td></td><td>Tri-cy-cle</td></tr></table> <p>Dotted Notes</p> <p>When a note has a dot after it, the note value has half the amount added again.</p> <div></div>   <p>Time signatures</p>  <p>Top Number = how many beats Bottom Numbers = Type of beat</p> |  | Ta _ _ _ |  | Two _ |  | Ta |  | Te |  | Te-te |  | Tecka-tecka |  | Three _ _ |  | Tay |  | Tim-ka |  | Tri-cy-cle |
|  | Ta _ _ _ | | | | | | | | | | | | | | | | | | | | | | |
|  | Two _ | | | | | | | | | | | | | | | | | | | | | | |
|  | Ta | | | | | | | | | | | | | | | | | | | | | | |
|  | Te | | | | | | | | | | | | | | | | | | | | | | |
|  | Te-te | | | | | | | | | | | | | | | | | | | | | | |
|  | Tecka-tecka | | | | | | | | | | | | | | | | | | | | | | |
|  | Three _ _ | | | | | | | | | | | | | | | | | | | | | | |
|  | Tay | | | | | | | | | | | | | | | | | | | | | | |
|  | Tim-ka | | | | | | | | | | | | | | | | | | | | | | |
|  | Tri-cy-cle | | | | | | | | | | | | | | | | | | | | | | |
| Pulse | A regular beat that is felt throughout much music. | | | | | | | | | | | | | | | | | | | | | | |
| Time Signature | A time signature tells us how many beats (and what type of beats) there are in each bar of music. | | | | | | | | | | | | | | | | | | | | | | |
| Projection | The strength at which we speak or sing. | | | | | | | | | | | | | | | | | | | | | | |
| Polyrhythm | The use of several rhythms performed simultaneously. | | | | | | | | | | | | | | | | | | | | | | |
| Mash Up | A set of songs that can be sung simultaneously. | | | | | | | | | | | | | | | | | | | | | | |
| Round/ Canon | A melody that can be sung in layers starting at different times | | | | | | | | | | | | | | | | | | | | | | |
| Tier 2 vocabulary | Definition | | | | | | | | | | | | | | | | | | | | | | |
| Structure | The organisation of sound or how sounds are ordered. | | | | | | | | | | | | | | | | | | | | | | |
| Warm Up | The activity in preparing your body for activity. | | | | | | | | | | | | | | | | | | | | | | |
| Rhythm | A series of sounds or notes of different lengths that create a pattern. | | | | | | | | | | | | | | | | | | | | | | |
| Posture | How we sit or stand. | | | | | | | | | | | | | | | | | | | | | | |


29


| Section 1: Key Vocabulary | | Section 2: Characters in The Tempest | Section 3: Other subject specific content |
|----------------------------------|--|--|--|
| Tier 3 vocabulary | Definition |  <p>How the characters are played in the productions</p> <p>Prospero - Powerful, magical, scary, caring, kingly, wizard, intimidating, uses the space confidently, big strides, mocking, deep voice, fierce, threatening, use of arms and magical staff.</p> <p>Ariel - Magical, light on feet, moves with fluidity, more animal than human, magical creature, feather like costume, make up, soft voice compared to Prospero, walks on toes, big gestures, frightened, lower status, a slave.</p> | <p>You will watch two productions of The Tempest, from the RSC and The Globe Theatre.</p>  <p>“We create world class theatre, made in Stratford-upon-Avon and shared around the world. We perform plays by Shakespeare and his contemporaries, as well as commissioning a wide range of original work from contemporary writers. Our purpose is to ensure that Shakespeare is for everyone, unlocking the power of his plays and live performance, throughout the UK and across the world.”</p>  <p>Take a tour of the Globe Theatre.</p> <p>Shakespeare’s Globe is a world-renowned performing arts venue, cultural attraction and education centre located on the bank of the River Thames in London.</p> <p>Links to prior learning: Greek chorus, creation of a character, production values (lighting and sound), analysis of acting.</p> |
| Abstract Still Image | Used to represent people or objects and even abstract concepts like emotions or atmospheres. | | |
| Physical Theatre Sequence | A rehearsed range of movements, which have a fluid quality and a physical self discipline. | | |
| Proxemics | Proxemics is the use of space/distance between characters on stage. This can represent the relationship between characters | | |
| Director | A director is responsible for the overall creative vision of the show. | | |
| Production Concept | The production designer works closely with the director to establish a shared vision for the piece and then they are responsible for every area of design. This can also encompass other areas of design, such as film and multimedia. | | |
| Theatrical convention | A convention is a technique employed regularly in the drama so that the audience come to attach specific meaning to it. When a technique is used repeatedly in a drama the audience recognise its significance. | | |
| Tier 2 vocabulary | Definition | | |
| Interpretation | Choices you make about the way to play the scene are called the interpretation. | | |
| Status | Status is the level of power or influence a character has. | | |
| Character | A person in a novel, play or film. | | |

| Section 1: Key Vocabulary | | Section 2: New Knowledge/Skills | Section 3: Other subject specific things | | | | | | | | | | | |
|------------------------------|--|---|---|----------------------|-------------------|---------------------------|------------------------------|--|------------------------|----------------------|----------------|---|----------------------|--|
| Tier 3 vocabulary | Definition | <p>Key Temperatures</p>  <p>The temperature of a domestic fridge should be 1-5°C The temperature of a freezer should be -18°C The core temperature of meat should reach 75°C The danger zone is the temperature that is perfect for bacterial growth -it is between 5°C - 63°C</p> <p>Making bread</p> <p>Strong plain flour is used as it contains a lot of gluten (a protein which becomes stretchy when kneaded) Yeast is a microorganism which produces C02 when given warmth, moisture, food and time to grow. The stretchy gluten in the dough can expand around the C02 bubbles creating a light airy texture</p> | <p>What Conditions Do Bacteria Need To Grow? Warmth, Moisture, Food, Time</p> <p>Who is most at risk of Food Poisoning? Babies and toddlers, very elderly frail people, pregnant women, people who are already seriously ill or who have a compromised immune system.</p> <p>Examples of high risk foods are Meat and meat products, Fish (especially shellfish), poultry, eggs, dairy products & reheated rice</p> | | | | | | | | | | | |
| Pathogenic bacteria | Harmful bacteria (can cause Food Poisoning) | | | | | | | | | | | | | |
| Raising Agent | Can be biological (e.g. yeast) or chemical (e.g. baking powder) - methods of introducing bubbles to create light texture. | | | | | | | | | | | | | |
| Fermentation | When yeast has the correct conditions it will produce carbon dioxide. | | | | | | | | | | | | | |
| Reduction Sauce | Flavours in a liquid sauce become more intense when the water content is reduced through evaporation | | | | | | | | | | | | | |
| Core Temperature | The central temperature that meat should reach to ensure that it is safely cooked. | | | | | | | | | | | | | |
| Preservation | To keep something for longer without it decaying or deteriorating | | | | | | | | | | | | | |
| Gluten | A stretchy protein which gives bread dough the capacity to expand as yeast produces carbon dioxide. (Some people who have coeliac disease cannot digest. | | | | | | | | | | | | | |
| Hypothesis | Prediction of results | | | | | | | | | | | | | |
| Enzymic browning | An oxidation reaction (usually in fruit and vegetables) which causes browning | | | | | | | | | | | | | |
| Tier 2 vocabulary | Definition | <table><tr><th>Some Names of Bacteria</th><th>Where they are found</th></tr><tr><td><i>Salmonella</i></td><td><i>Chicken & Eggs</i></td></tr><tr><td><i>Staphylococcus aureus</i></td><td><i>Humans & animals, skin / hair</i></td></tr><tr><td><i>Bacillus cereus</i></td><td><i>Reheated rice</i></td></tr><tr><td><i>E. coli</i></td><td><i>Animals / meat, unpasteurised milk / unclean water</i></td></tr><tr><td><i>Campylobacter</i></td><td><i>Animals / meat especially poultry</i></td></tr></table> | Some Names of Bacteria | Where they are found | <i>Salmonella</i> | <i>Chicken & Eggs</i> | <i>Staphylococcus aureus</i> | <i>Humans & animals, skin / hair</i> | <i>Bacillus cereus</i> | <i>Reheated rice</i> | <i>E. coli</i> | <i>Animals / meat, unpasteurised milk / unclean water</i> | <i>Campylobacter</i> | <i>Animals / meat especially poultry</i> |
| Some Names of Bacteria | Where they are found | | | | | | | | | | | | | |
| <i>Salmonella</i> | <i>Chicken & Eggs</i> | | | | | | | | | | | | | |
| <i>Staphylococcus aureus</i> | <i>Humans & animals, skin / hair</i> | | | | | | | | | | | | | |
| <i>Bacillus cereus</i> | <i>Reheated rice</i> | | | | | | | | | | | | | |
| <i>E. coli</i> | <i>Animals / meat, unpasteurised milk / unclean water</i> | | | | | | | | | | | | | |
| <i>Campylobacter</i> | <i>Animals / meat especially poultry</i> | | | | | | | | | | | | | |
| Cross Contamination | Transfer of bacteria or an ingredient which can cause allergies from one place to another | | | | | | | | | | | | | |
| Dough | Thick paste which can be shaped and moulded (e.g. pastry / bread) | | | | | | | | | | | | | |
| Knead | Action of folding and stretching dough to develop gluten strands | | | | | | | | | | | | | |
| High Risk Foods | Foods which have a high risk of carrying food poisoning | | | | | | | | | | | | | |
| Prove | Leaving dough in a warm place to give the yeast time to produce carbon dioxide | | | | | | | | | | | | | |

| Section 1: Key Vocabulary | | Section 2: Skills | Section 3: Knowledge |
|---------------------------|--|--|---|
| Tier 3 vocabulary | Definition | Manufacturing Process <ol style="list-style-type: none"> 1. Draw the packing to scale 2. Label the different fabrics/decoration skills you will use. 3. Trace templates from your drawing for each of the pieces you will need to cut from fabric. Cut out. 4. Place the templates onto the fabric. Hold in place with pins or draw around with Tailors chalk/pencil. 5. Carefully cut out fabric shapes 6. Pin the fabric shapes together to match your drawing. Sew together using hand or machine skills 7. Sew the front and back together, leaving a gap on one side. 8. Fill the design with stuffing and hand sew the gap. 9. Add details with 3D puff paint or embroidery. | Lucy Sparrow <p>Lucy is an artist who creates soft sculptures from felt. Her most famous piece was an installation of a supermarket where everything was made from felt.</p> <p>She recently made an instillation for Buckingham Palace! To celebrate the Queen's Jubilee she made a full afternoon tea with every part made from felt.</p> <p>The work of artists can be a very interesting starting point for a project.</p> |
| Embroidery | Decorating fabric using thread and a needle to create a pattern | | Knitted Fabric <p>Knitted fabric is created by looping yarn in rows. The structure of the fabric means that it has a built in amount of stretch.</p> <p>Fleece is a knitted fabric. Knitted fabrics are commonly used in garment production as it is comfortable due to the fabric being able to stretch with your body as you move, resulting in comfortable clothes.</p>  |
| Fleece | A soft, warm, knitted fabric. | | |
| Non Woven Fabric | Fabric created by bonding fibres together using pressure, heat or adhesive | | Non Woven Fabric <p>Non woven fabric is created by fibres that have been layer over each other in different directions. These fibres are Bonded together using adhesive, heat or friction. The resulting fabric is not very useful for garment production but is used for disposable medical clothing, such as the face mask you may have worn during the pandemic.</p>  |
| Knitted | Fabric created with rows of loops that interlock with each other | | |
| Sequin | A decorative, reflective piece of plastic that can be sewn onto a product | How to thread the top of the sewing machine <p>Knowing how to change the top thread on the machine is essential in making your work look neater. It allows you to match the colour of the thread to the fabric you are sewing. The sewing machine has numbers and lines on it to show you how to thread the top of the machine. Use them alongside this diagram to help you change the thread successfully.</p> <p>Remember to pull the balance wheel out before you start to ensure you are safe. Pulling the balance wheel out stops the needle from moving if you accidentally put your foot on the pedal.</p>  <p>If you need to change the bobbin you should ask your teacher for help.</p> | Creating 3D shapes in Felt <p>You will select a piece of packaging to recreate in felt for this project. To do this you will need to think about how the shapes will be made up, for example:</p> <p>This cereal packet would need to be made from...</p>  |
| Button | A component that is sewn onto a textile item for decoration or functional purposes. Can be many different shapes, sizes and colours. | | |
| Tailors Chalk | A thin, triangle shaped chalk that is used to mark fabric. | | |
| Back Stitch | A stitch that can be used for decorative purposes or to secure stitches at the start or end of seam. | | |
| Oversewing | A stitch where the thread goes over the edge of the fabric to hold the pieces together securely and neatly. | | |
| Tier 2 vocabulary | Definition | | |
| Sculpture | A 3D form, can be made from many different materials. | | |
| Template | A paper shape that shows the exact size of fabric that needs to be cut out | | |

| Section 1: - Key Vocabulary | | Section 2: Skills | Section 3:- New Knowledge | |
|-----------------------------|---|---|--|--|
| Tier 3 Vocabulary | | Bench Carpentry  Lap Joint – A method of using a tenon saw, mallet and bevelled edge chisel to remove ½ the thickness of the one part wood to create a larger gluing surface areas.  Comb Joint– A method of using a tenon saw, coping saw, mallet and bevelled edge chisel to remove ‘fingers’ of wood which can be interlocked and glued for strength, stability and appearance. | Design Briefs Product design often happens as a result of a problem arising. Be able to analyse a problem, then write a design brief which will guide the develop if ideas to solve the problem | |
| Cam | A shaped profile which transfers rotary movement to another form of movement in a new direction | | Types of movement  Linear Movement in a straight line in one direction | |
| Cam Shaft | A cylinder which carries the cams and is rotated | |  Reciprocating Movement in a straight line back and forth | |
| Cam Follow | A cylinder which rests on, and follows the movement of the cam profile | |  Oscillating Movement back and forth in an arch | |
| Lap Joint | A simple corner joint which increased the glued surface area | |  Rotary Movement in a continuous full circle | |
| Comb Joint | An interlocking corner joint used to increase the gluing surface are and appearance | Pillar Drill  Drilling is a wastage procedure When drilling all the way through a piece of wood the drill should be set at a lower speed, and the work piece should be clamped in place with a G Cramp. A piece of ‘sacrificial’ wood should be place below the work to stop any splintering | Cam mechanisms  Eccentric Cam – Smooth movement up and down | |
| Image Contour | Technique used on 2D design to create an outline of an image | |  Snail Cam – Fast, smooth movement up, followed by a drop back down | |
| Laser Cutter | Machine used to accuracy cut and engrave wood and some types of plastic | | 2 CAD Software - Contouring  Using CAD software to convert a Black and white JPG image into a outline DXF image which a laser cutter can then engrave | |
| Tier 2 Vocabulary | | Mechanism assembly and testing  Cam profiles are attached the to the cam shaft, the cam follower rests on top of the cam profile. The cam should rotate at constant rate to produce the desired outcome movement of the follower, without it wobbling or jamming | | |
| Mechanism | A system of joined moving parts designed to transfer or change an input movement into a new output movement | Practical Problem solving When designing new products it is common to have problems along the was. Apply 3B4me rule to independently solve you problem. Try 3 methods of solving the problem before asking the teacher for support. (Ask a friend who has already solved it, look at a teacher example, have a go) | | |
| Reciprocating | Moving back and forth in a straight line | Graphics application  Be able to apply paint to wood using a range of techniques, including brush, toothbrush splatter, sponge, and Pen pens | | |
| Rotary | Movement in full circles | | | |
| Linear | Movement in a straight line in one direction | | | |
| Design Brief | A context used to define a problem which requires solving | | | |
| CAD | Computer Aided Design – Software used to design a product | | | |
| CAM | Computer Aided Manufacture – A machine which is controlled by a computer | | | |





33

Section 1: Key Vocabulary

| Vocabulary | Definition |
|-------------------|--|
| Curious | Interested in learning about people or things around you |
| Involved | To take part in or become involved in an activity |
| Respectful | Politeness, honour, and care shown towards someone or something that is considered important |
| Kind | Generous, helpful, and thinking about other people's feelings |
| Resilient | An ability to recover from or adjust easily to change |
| Brave | Having or showing mental or moral strength to face danger, fear, or difficulty : having or showing courage |
| Confident | Being certain of your abilities |
| Proud | Feeling pleasure and satisfaction because you or people connected with you have done or got something good |

BE THE BEST VERSION OF YOURSELF

Being the best version of yourself in Belper school means showing respect to teachers, students, and school rules. It also involves being kind, curious and resilient. Remember, everyone has strengths and areas they can improve on. By working hard and staying positive, you can strive to be the best version of yourself every day!

What are our Be Belper values and expectations within our school and wider community?

BE CURIOUS

Curiosity is when you have a strong desire to know or learn something. In Belper school, being curious means asking questions, exploring new ideas, and seeking answers. It helps you understand the world around you and makes learning more exciting and engaging.

BE RESPECTFUL

Respect is essential in Belper school as it creates a positive learning environment. It shows consideration for others' feelings and opinions, fostering a sense of community and cooperation. Respect helps to promote an atmosphere where everyone feels valued and safe. By respecting teachers, students, and school property, students contribute to a respectful school culture that enhances their overall development and well-being.

BE RESILIENT

Resilience is the ability to bounce back from challenges and setbacks. In Belper school, being resilient means staying positive, persevering through difficulties, and learning from mistakes. It's important because it helps us cope with stress, improve our problem-solving skills, and achieve our goals.

BE CONFIDENT

Confidence in Belper school means believing in your abilities and being comfortable in your own skin. You can show confidence by speaking up in class, asking questions, and participating in activities with enthusiasm. Confident students are not afraid to make mistakes and learn from them, they believe in themselves and their potential to succeed in their studies and interactions with others.

What are our Be Belper values and expectations within our school and wider community?

BE INVOLVED

Getting involved in Belper school means actively participating in school activities such as clubs, sports teams, and student councils. It also involves helping out in the school community, attending events, and supporting fellow students.

BE KIND


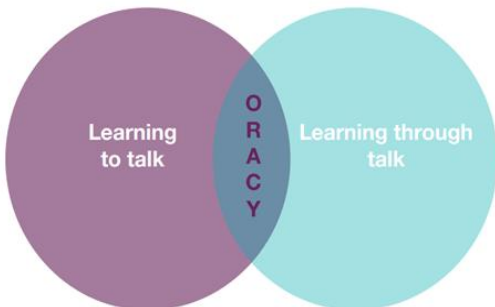



Being kind in Belper school is crucial for creating a positive and supportive environment where everyone feels valued and respected. Kindness helps to build strong relationships, improve teamwork, and enhance overall well-being. In Belper school, kindness promotes inclusivity, reduces bullying, and fosters a culture of empathy and compassion amongst students and staff members.

BE BRAVE

Being brave in Belper school means facing challenges, standing up for yourself and others, and trying new things. It can be speaking out in class, standing up to bullies, or taking on difficult tasks with confidence. Showing bravery can help you grow as a person and earn respect from others. In school, being brave is about being courageous in different situations.

BE PROUD

Showing pride in Belper school means being a positive representative of the school community. This includes following school rules, participating in activities, supporting classmates, and taking care of the school environment, one way of doing this is by picking up any litter if you see any.

| Section 1: Key Vocabulary | | Section 2: The 4 Strands of Oracy You Will Cover | Section 3: Student agreement for oracy | | |
|---------------------------|--|---|---|--|---|
| Tier 3 vocabulary | Definition | Physical | In order for all students to get the most from oracy lessons and activities we should always: | | |
| Register | A variety of language determined by formality, vocabulary, pronunciation and syntax. | This is how you use your voice and body Language to communicate and can include the pace or tempo of how you talk, the tone of voice, voice projection, posture, facial expression and eye contact. | <ul style="list-style-type: none">• Be respectful at all times• Be supportive of others• Consider how what you say may impact others around you• If you disagree, make sure you do so with respect• Actively listen• Observe the rules of turn taking• Be curious• Be confident to have your opinion heard | | |
| Turn taking | The coordinated way participants alternate speaking roles, ensuring that one person speaks while others listen, and then the speaking role transitions to someone else | Linguistic | Types of talk | | |
| Articulate | The ability to express oneself clearly and effectively, or to pronounce words clearly. | This how you use appropriate vocabulary choices, register, grammar, and rhetorical techniques such as questions and humour. | | Exploratory talk | |
| Rhetoric | The art of using language effectively, especially in persuasive speaking or writing. | Cognitive | |  | |
| Tier 2 vocabulary | Definition | Social and Emotional | | <p>This is about the choice of content you select to present meaning to an audience. It is about how you structure and organise your talk to engage your audience. Added to that it is seeking clarification through questioning, while maintaining focus and managing time.</p> | <p>A type of talk where participants critically and constructively engage with each other's ideas, often involving questioning and reasoning.</p> |
| | | |  | Presentational talk | |
| | | | |  | <p>Includes speeches, presentations, and other forms of one-way communication.</p> |
| | | | | Instigate | Present an idea or open up a new line of enquiry |
| Probe | Dig deeper, ask for evidence or justification of ideas |  | <p>A structured discussion with opposing viewpoints, aiming to persuade an audience or reach a conclusion.</p> | | |
| Challenge | Disagree or present an alternative argument | Instructional Talk | | | |
| Clarify | Asking questions to make things clearer and check your understanding | |  | <p>Used to teach or explain something, often involving a teacher or expert imparting knowledge or skills.</p> | |
| Summarise | Identify and recap the main ideas | | | | |
| Build | Develop, add to or elaborate on an idea | | | | |

35

Section 3: Talking Roles You Will Take:

Instigator



The person who starts the discussion might say:

‘I would like to start by saying...’

‘I think the first thing we should consider is...’

‘To begin with let’s talk about...’

Builder



The person who build or develops, adds to or runs with an idea might say:

‘I agree and I would like to add...’

‘Linking to your point I would suggest...’

‘Building on that idea...’

Challenger



The person who disagrees or presents an alternative argument might say:

‘That is true but have you considered...’

‘I respect your viewpoint but what about...’

‘I hear what you are saying but ...’

Clarifier



The person who clarifies makes things clearer and simplifies ideas by asking questions might say:

‘What do you mean when you say...’

‘Could you tell me more about that...’

‘Does that mean that...’

Prober



This person digs deeper into the argument, asks for evidence or justification of ideas might say:

‘What evidence do you have to support that?’

‘How does that support your argument?’

‘How did you come to that conclusion?’

Summariser



This person presents reflections on the discussion and may offer a conclusion or balanced assessment of the main point and may say:

“Overall, the main points covered were...”

‘In summary...’

‘To round up what has been discussed...’

The Writing Process

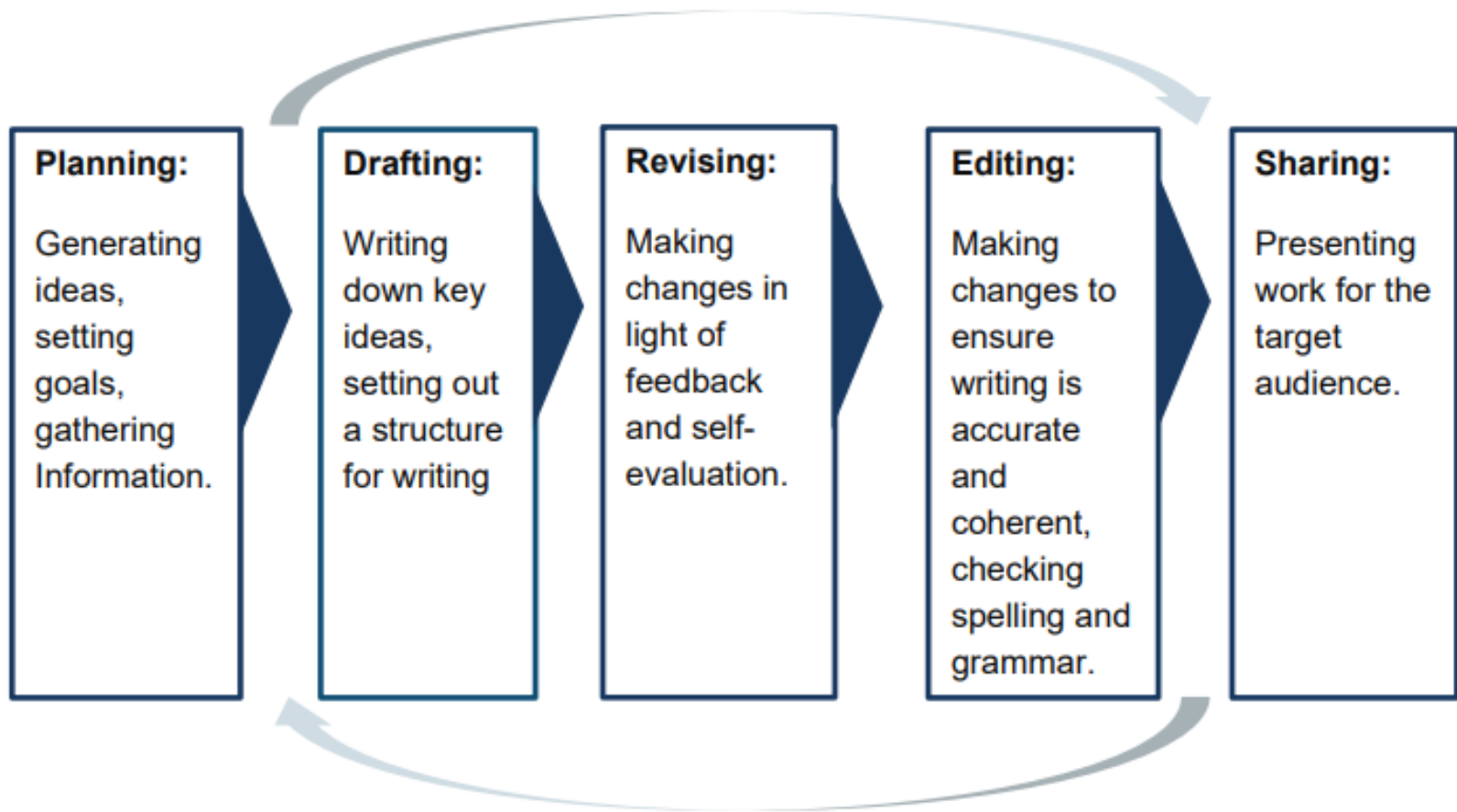
When we don't take the time to plan, revise, or edit, our writing can suffer—just like rushing a recipe without reading the instructions. But when we follow the writing process, it helps us:

Think more clearly

Organise our thoughts

Spot mistakes

Write with purpose



Strong writing doesn't happen by accident—it comes from thinking, crafting, and shaping your ideas over time. **Writing is thinking made visible.** The more we follow the process, the more confident and skilled we become.

Extra-Curricular Clubs - Lunch

| Monday | Tuesday | Wednesday | Thursday | Friday |
|---|---|--|---|---|
| Book club with Sarah (library) | Drama club with Sarah (drama studio) | Art club with Lucy (art area) | Technical Theatre club with Sarah (drama studio) | Year 7, 8 & 9 Table tennis club with Mary |
| Year 7 Music club with Phil (music rooms) | Knitting and crochet club with Emma (S9) | Belper Wind Band with Anna (music rooms) | Wellbeing club with Sophie (English area) | |
| Warhammer and Tabletop Games Hobby club with Richard (art area) | Modern Foreign Languages club with Sarah (L5) | Anti-bullying Ambassadors (week 1) with John | Wellbeing Ambassadors (week 1) with Sophie (English area) | |
| Year 10/11 Table tennis and badminton club with Tom | Chess with Dan (M2) | Student Leadership Group (week 2) with John | Year 7 & 8 Games club with Emma (library) | |
| | Year 11 Inter-tutor football competition with James and Matt (3G) | Year 8 Dodgeball competition with Tom | Belper Choir with Anna (music rooms) | |
| | | Model Railway Club with Phill (T2) | Year 7 Multi-sports club with Matt | |
| | | Textiles Club with Sarah (T1) | | |

BE INVOLVED



Extra-Curricular Clubs – After School

| Monday | Tuesday | Wednesday | Thursday | Friday |
|---|--|---|----------|--|
| Show rehearsals with Anna & Sarah (stage and main hall) | KS4 & 5 Art with Lucy (art area) | Show rehearsals with Anna & Sarah (stage and main hall) | | KS4, 5 and Staff Friday Sports Club with Matt, James, Tom & Leanne |
| Music Club with Phil (music rooms) | Year 9 Inter-tutor Basketball competition with James | Film Club with Becky (for students in Yr8 or above) (E6) | | |
| Year 7, 8 & 9 Football club with Matt, James & Tom | | Pride Club with Karen (T5) | | |
| Year 9,10 & 12 Sports Leaders Events | | Year 9 'Your Time' Leadership Programme with Rebecca and Matt | | |
| Robot Club with Sarah (T1) | | | | |

BE INVOLVED



2 Black or
Blue Pens



1 Coloured
Pen



2 Pencils



Eraser



Pencil Sharpener



Ruler



Scientific Calculator

