Year 8 End of Year Knowledge Organiser

HENLEY BANK
HIGH SCHOOL

Unit 4 Fear – Knowledge Organiser

Key Conventions of Gothic Texts

Typical themes in gothic:

1. Death and darkness
2. Supernatural
3. Curses or prophecies (predictions about the future)
4. Madness/intense emotions
5. Mystery/terror/suspense

Typical characters in gothic:

1. Female or feminine characters that are threatened by powerful characters
2. Threatening women who are monsters or vampires – Femme Fatale
3. Powerful, tyrannical (cruel) male figures
4. Villains, vampires, ghosts, werewolves, giants

Typical settings in gothic:

1. Wild landscapes
2. Medieval style castles, churches or abbeys
3. Gloomy, decayed and ruined environments
4. Remote, deserted places or monsters within everyday life
5. Dangerous and threatening weather (symbolism)

Key Conventions and Ideas

Gothic fiction explores:

1. The unpredictability and power of nature
2. The past
3. Fear of the unknown
4. Fear of being controlled against your will
5. The supernatural
6. Intense emotions
7. Death and darkness
8. Physical and mental illness

Key Conventions of Gothic Texts

Motifs:

1. The colour red
2. Mirrors
3. Moonlight/ Light/ Candles
4. Masks and helmets
5. Secret panels
6. Old documents
7. Roses
8. Paintings/ Portraits
9. Black birds e.g. ravens

Sentence types

Clause - An independent clause is a clause that **can** stand alone as a sentence. A dependent clauses (or subordinate clause) is one that **cannot** stand alone as a complete sentence. Remember that a clause has a subject and a verb.

Simple sentence -A simple sentence has just one independent or main clause.

Compound sentence - A compound sentence has at least two independent or main clauses.

Complex sentence- A complex sentence has an independent or main clause and at least one subordinate/ dependent clause.

Appositive phrase - An appositive phrase is a noun or a noun phrase that sits next to another noun to rename it or to describe it in another way.

Imagery and Implied Meaning

Foreshadow - Something in a story or other text which acts as a warning or sign of a future event.

Simile - A comparison of one thing with another thing of a different kind, used to make a description more emphatic or vivid; uses 'as' or 'like'.

Metaphor - A figure of speech in which a word/phrase is applied to an object or action which it is not literally applicable.

Personification - Giving something non-human human qualities.

Symbolism - Symbolism uses symbols, e.g. words, people, locations, or abstract ideas to represent something beyond the literal meaning.

Onomatopoeia - Where the pronunciation of the word echoes the sound it makes e.g. crash, bang, croak, rustles

Alliteration - Alliteration is the repetition of consonant sounds (any letters which are not the vowels a,e, i,u,o) at the start of different words close to each other.

Foreboding- creates a sense of something bad going to happen.

Key Texts

The Price- Neil Gaiman	A mysterious black cat protects a family nightly from unseen supernatural danger.
The Signal-Man- Charles Dickens	A haunted signalman is tormented by ghostly warnings of impending railway disasters.
The Monkey's Paw- W.W. Jacobs	A cursed monkey's paw grants wishes with tragic, unforeseen, and irreversible consequences.
Don't Ask Jack- Neil Gaiman	An old, sinister jack-in-the-box holds dark power over children and time.
The Furnished Room- O. Henry	A desperate man searching for his lost love discovers her tragic suicide's aftermath.
The Yellow Wallpaper - Charlotte Perkins Gillman	A woman's mental health deteriorates while confined, obsessed with the room's wallpaper.

Unit 4 Fear – Knowledge Organiser

Key Conventions of Gothic Texts

Typical themes in gothic:

1. D___ and d_____
2. _____
3. C_____ or p_____(predictions about the future)
4. M_____/i_____emotions
5. M_____/t_____/s_____

Typical characters in gothic:

1.
2.
3.
4.
5.

Typical settings in gothic:

1. W_____ landscapes
2. Medieval style c_____, c_____ or a____
3. Gloomy, d____ and r_____ environments
4. R____, d_____ places or m_____within everyday life
5. D_____s and threatening w_____(symbolism)

Key Conventions and Ideas

Gothic fiction explores:

1.
2.
3.
4.
5.
6.
7.
8.

Key Conventions of Gothic Texts

Motifs:

1. The colour _____
2. M_____
3. M____/ L____/ C____
4. M_____ and helmets
5. S_____ p_____
6. Old d_____
7. R_____
8. P_____/ P____
9. B_____ birds e.g. R_____

Sentence types

Clause –

Simple sentence –

Compound sentence –

Complex sentence-

Appositive phrase –

Imagery and Implied Meaning

Foreshadow -

Simile –

Metaphor –

Personification –

Symbolism -

Onomatopoeia –

Alliteration –

Foreboding-

Key Texts

The Price- Neil Gaiman	
The Signal-Man- Charles Dickens	
The Monkey's Paw- W.W. Jacobs	
Don't Ask Jack- Neil Gaiman	
The Furnished Room- O. Henry	
The Yellow Wallpaper - Charlotte Perkins Gillman	

Unit 5 The Fragile Mind – Knowledge Organiser

Hamlet: A Shakespearean Tragedy

Act 1:

Act 2:

Act 3:

Act 4:

Act 5:

Key Characters	Mental state
Hamlet:	Melancholic, contemplative, arguably unstable
Claudius: Hamlet's Uncle/King	Calculating, guilty, the source of 'rot'
Ophelia:	Genuinely fragile; she eventually loses her grip on reality due to grief.
The Ghost: Hamlet's Father	The catalyst; his appearance sparks Hamlet's mental spiral.
Gertrude: Hamlet's Mother	Caught between loyalty to her new husband(Claudius) and love for her son.

Key Vocabulary

Fatal flaw- a deadly characteristic of a character which causes them injury, harm or death

Hamartia- the fatal flaw leading to the downfall of a tragic hero or heroine

Hubris- having excessive pride or self-confidence

Betrayal- the action of not being loyal to a country or person, often by doing something harmful

Grief: deep, painful emotion felt after losing someone

Revenge- harm done to someone as punishment for harm that they have done to someone else

Paranoia- an extreme and unreasonable feeling that other people do not like you or are going to harm or criticize you

Jealousy- feeling of envy

Corruption- Honest power or systems become rotten or dishonest

Hierarchy- a system in which people or things are arranged to their importance

Content, Context and Literal Meaning

Great Chain of Being - the belief that everything living and not living is part of a hierarchy.

Divine Right of Kings - the belief that the monarch is chosen by God

Supernatural - something that cannot be explained by science, e.g. ghosts

Imagery and Implied Meaning

Symbolism - the use of images to represent ideas

Motif- a recurring symbol or idea in a story

Structural Devices

Aside- A character's private words spoken only to the audience.

Soliloquy- A character speaking their inner thoughts alone.

Key Quotations

"To be, or not to be: that is the question."- Hamlet says when he debates whether to continue to living or end his life; Existential doubt which shows his deep struggles.

"How is it that the clouds still hang on you?" – Claudius says when notices that Hamlet is still grieving and is surprised that this is the case.

"The play's the thing / Wherein I'll catch the conscience of the King."- Hamlet decides to stage a play to expose Claudius's guilt. This moment shows his shift from passive thinking to **taking action**, and introduces the theme of appearance vs reality

"Fear it, Ophelia; fear it, my dear sister"- Laertes warns Ophelia to be cautious in love and protect her feelings for Hamlet carefully to avoid heartache

Unit 5 The Fragile Mind – Knowledge Organiser

Hamlet: A Shakespearean Tragedy

Act 1: Ghost of Hamlet's father reveals Claudius killed him. Hamlet vows revenge and pretends to be mad. Polonius warns Ophelia to stay away.
Act 2: Hamlet acts strangely. Claudius and Polonius spy on him. Hamlet enlists actors to stage a play mimicking his father's murder.
Act 3: Play exposes Claudius' guilt. Hamlet delays killing him, fearing his soul will go to heaven.
Act 4: Hamlet is sent to England; Claudius' plan fails. Ophelia goes mad and drowns.
Act 5: Hamlet returns, duels Laertes. Gertrude, Laertes, Claudius, and Hamlet die. Fortinbras takes the throne.

Key Characters	Mental state
Hamlet: Prince of Denmark	
Claudius: Hamlet's Uncle/King	
Ophelia: Hamlet's love interest	
The Ghost:	
Gertrude:	

Key Vocabulary

Fatal flaw-

Hamartia-

Hubris-

Betrayal-

Grief:

Revenge-

Paranoia-

Jealousy-

Corruption-

Hierarchy-

Content, Context and Literal Meaning

Great Chain of Being -

Divine Right of Kings -

Supernatural -

Imagery and Implied Meaning

Symbolism

Motif-

Structural Devices

Aside-

Soliloquy-

Key Quotations

"To be, or not _____: that is the _____."- Hamlet says when he debates whether to continue to living or end his life; Existential doubt which shows his deep struggles.

"How is it that the _____ still _____ on _____?" – Claudius says when notices that Hamlet is still grieving and is surprised that this is the case.

"The _____ the thing / Wherein I'll catch the _____ of the _____."- Hamlet decides to stage a play to expose Claudius's guilt. This moment shows his shift from passive thinking to **taking action**, and introduces the theme of appearance vs reality

"_____ it, Ophelia; _____ it, my dear _____"- Laertes warns Ophelia to be cautious in love and protect her feelings for Hamlet carefully to avoid heartache

Unit 6 - Identity Knowledge Organiser

Abstracts and Key Vocabulary

Identity - Who a person is, or the qualities of a person or group that makes them similar to/different from others.

Courage – The ability to do something that frightens you.

Avenge- to inflict harm in return for injury or wrong done to oneself or another

Grief- intense sorrow, especially caused by someone's death

Innocence – The quality of not having much life experience and not knowing about the bad things in life.

Morality – The principles of right and wrong.

Justice – The fairness in which people are dealt with. Justice should be equal.

Gender- identity which is described by different social and cultural identities and not just biological (e.g. male or female)

Hierarchy- a system of organising society by ranking members according to their status or authority

Social Norms – the standards that govern behaviour in a particular way. Not always written down 'rules' or expectations.

Nostalgia- an affection or longing for a time of the past

Evaluative Verbs

Insinuates- makes a vague suggestion beyond obvious meaning

Mirrors- a similar or the same visual image

Illustrates- creates a distinct image

Shape & Pattern:

Epimone- repetition of a phrase or question

Flashback- a story which is set in an earlier time

Juxtaposition- Putting things close together to create a contrasting effect (showing their differences).

Motif – Is a repeated theme, image, idea or character in a text because it stands for/symbolises something.

Whitespace- space in a poem which can symbolise many things such as time, absence, silence, train-of-thought.

Isocolon- Two or more sentence that share the same structure

Juxtaposition- Putting things close together to create a contrasting effect (showing their differences).

Narrative style- the form which the writer uses to tell the story

Narrative voice- the perspective the story is told from (who is sharing their view of the story)

Free Form Verse Poetry – poetry that does not rely on consistent patterns of rhyme and meter. Long Way Down is an example of free form verse poetry.

Prose Poetry- a story while not split into verse lines has other features such as metaphors, symbols which are common in poetry.

Non-Fiction- writing that is informative/factual and not made up stories (fiction). Examples: newspaper, diary, letter, article, speech

Symbolism

Allusion- a reference to call something to mind without mentioning it explicitly. A reference to another story/song.

Colloquial Language- non- standard English words which are easily understood by certain groups of people

Long Way Down- Plot

Long Way Down" by Jason Reynolds is a gripping novel in free form verse poetry form. Fifteen-year-old Will grapples with the cycle of violence after his brother, Shawn's, murder, contemplating revenge. Reynolds explores themes of grief, gun violence, and the impact of choices in this haunting exploration of one boy's journey toward redemption.

Will is the voice of the story and we get a real insight into his panic, upset and anger. He struggles with the concept of his own identity and how or if he should use this to help him make the challenging decision of whether or not to avenge or his brother's death.

Reynolds wrote Long Way Down to highlight the countless young people who face life's most difficult decisions. In particular, this story focusses on the voice of those who are caught up in youth violence in America. Reynolds is raising the point that it is not young people who are to blame for their wrong-doing when often these are situations they have not been educated about.

Key Quotes

- 'But I know ain't nothing sweet about blood. I know it ain't like chocolate syrup at all.'
- 'Beef…Never ironed out'
- 'Because crying is against The Rules'
- 'My mother stumbling to the bathroom, her sobs leading the way'
- 'Just two words like a joke he'd been saving. You coming?'

Unit 6 - Identity Knowledge Organiser

Abstracts and Key Vocabulary

Identity - Who a _____is, or the _____ of a person or group that makes them _____/_____from others.

Courage – The ability to _____

Avenge- to _____for _____

Grief- intense _____, especially caused by _____

Innocence – The quality of not having _____and not knowing about _____

Morality – The principles of _____ and _____.

Justice – The _____ in which people are dealt with. Justice should be _____.

Gender- identity which is described by different social and cultural identities and not just _____(e.g._____or_____)

Hierarchy- a system of organising society by ranking members according to _____

Social Norms – the standards that govern _____ in a particular way. Not always written down '_____' or _____.

Nostalgia- an affection or _____ for a time of _____

Evaluative Verbs

Insinuates- makes a _____beyond obvious meaning

Mirrors- a _____image

Illustrates- creates a _____image

Form & Structure

Epimone- repetition of a _____

Flashback- a story which is _____

Juxtaposition- Putting things close together to _____(showing their differences).

Motif – Is a repeated _____in a text because it stands for/symbolises something.

Whitespace- _____which can symbolise _____

Isocolon- _____sentence that share _____structure

Motif- Is a repeated _____in a text because it _____ something.

Juxtaposition- Putting things _____ to create a _____ effect (showing their differences).

Narrative style- the _____ which the writer uses to tell the story

Narrative voice- the _____ the story is told from (who is _____ their view of the story)

Free Form Verse Poetry – poetry that does not _____. _____is an example of free form verse poetry.

Prose Poetry- a story while not _____has other features such as _____, _____ which are _____ in poetry.

Non-Fiction- writing that is _____/_____and not made up stories (fiction). Examples: _____, _____, _____, _____, _____

Symbolism

Allusion- a reference to call something to _____ without mentioning it _____. A reference to another _____/_____.

Colloquial Language- ____-_____words which are easily understood by certain groups of people

Long Way Down- Plot

Long Way Down" by _____is a gripping novel in _____form. Fifteen-year-old _____ grapples with the cycle of _____ after his brother, _____, _____, contemplating _____. Reynolds explores themes of _____, _____ violence, and the impact of _____ in this haunting exploration of one boy's journey toward _____.

Will is the voice of the story and we get a real insight into his _____, _____ and _____. He struggles with the concept of his own _____ and how or if he should use this to help him make the challenging decision of whether or not to _____ his brother's death.

Reynolds wrote Long Way Down to highlight the _____who face life's most difficult decisions. In particular, this story focusses on the voice of those who are caught up in _____ in _____. Reynolds is raising the point that it is not young people who are to blame for their _____ when often these are situations they have not been _____ about.

Key Quotes

- 'But I know ain't nothing _____ about _____. I know it ain't like _____ _____ at all.'
- 'B_____…Never i_____ out'
- 'Because _____ is against The _____'
- 'My mother _____ to the _____, her _____ leading the way'
- 'Just _____ words like a _____ he'd been saving. You _____?'

Year 8 Number

Standard Form

A number between 1 & 10 × A power of 10

To add or subtract the powers must be the same first
To multiply or divide, deal with the number first then the powers

Compound Measures

Speed: distance travelled in 1 hour or second
Density: weight per 1 cm^3
Pressure: newtons per cm^2

Distance	Time
40 miles	2 hours
20 miles	1 hour

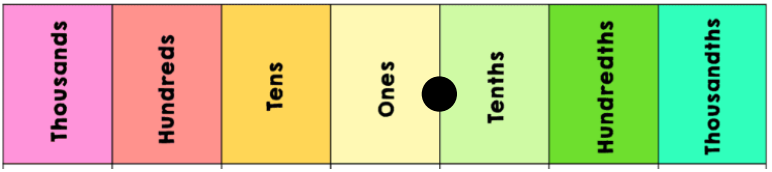
÷ 2 on Distance; ÷ 2 on Time

$= 20mph$

HCF/LCM

HCF (highest common factor) is the largest number that is a factor of both numbers
LCM (lowest common multiple) is the smallest number in both numbers list of multiples

Place Value



Rounding/estimation

0, 1, 2, 3, 4 round down
5, 6, 7, 8, 9 round up
To estimate, round all numbers to 1sf

13.679
1sf 1dp

sf – significant figure
dp – decimal place

Ratio

Simplify ratio like fractions

÷ 2: 4 : 10 → 2 : 5 :÷ 2

Draw out boxes and split total into the number of boxes given

Share £42 in the ratio 2:5

2: 6 6
5: 6 6 6 6 6

$342 \div 7 = 6$

£12 : £30

Fractions

- **Adding/Subtracting**

The denominator must be the same

$$\frac{1}{4}+\frac{2}{3}=\frac{3}{12}+\frac{8}{12}=\frac{11}{12}$$

- **Multiply**

Multiply numerators, then multiply denominators

$$\frac{1}{4}\times\frac{2}{3}=\frac{1\times 2}{4\times 3}=\frac{2}{12}$$

- **Dividing**

Dividing is the same as multiplying by the reciprocal

$$\frac{1}{4}\div\frac{2}{3}=\frac{1}{4}\times\frac{3}{2}=\frac{3}{8}$$

FDP

Decimal ⇄ Percentage (× 100 / ÷ 100)

$$34\% = \frac{34}{100} = \frac{17}{50}$$ (÷ 2, ÷ 2)

$$\frac{3}{4} = \frac{75}{100} = 75\%$$ (× 25, × 25)

Percentages

Means 'out of 100'

÷ 10	100%	320 ÷ 10
	10%	32
× 2	20%	64 × 2

You can add percentages together.
E.g. if 10% = 4 and 5%=2 then
15% = 10% + 5 % = 4+2 =6

Indices

$x^a \times x^b = x^{a+b}$

$x^a \div x^b = x^{a-b}$

$(x^a)^b = x^{ab}$

$x^1 = x$

$x^0 = 1$

Mixed Fractions

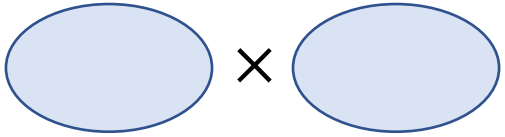
Whole and Part

$2\frac{1}{4}$

$\frac{14}{3}$ 3 goes into 14 4 times with 2 remaining giving us $4\frac{2}{3}$

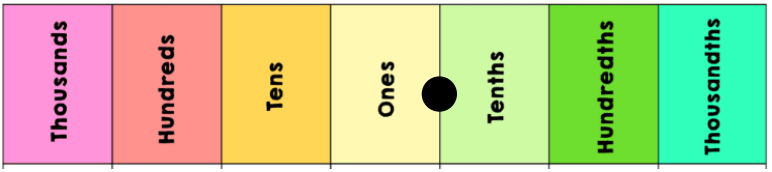
Year 8 Number Quiz

Standard Form



To add or subtract the powers must be the same first
To multiply or divide, deal with the number first then the powers

Place Value



Rounding/estimation

0, 1, 2, 3, 4 round ____
5, 6, 7, 8, 9 round ____
To estimate, first round all numbers to ___

247.81 3rd sf =
1st dp =

FDP

Decimal ⇄ Percentage

$20\% =$

$\frac{1}{4} =$

Percentages

Means 'out of 100'

100%	160
10%	
5%	

You can add percentages together.
E.g. if 10% = 12 and 5%= 6 then
15% =

Compound Measures

Speed: distance travelled in 1 hour or second
Density: weight per 1 cm^3
Pressure: newtons per cm^2

Distance	Time
40 miles	2 hours

$= \_\_\_ mph$

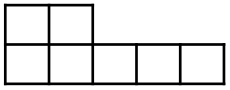
Ratio

Simplify ratio like fractions

4 : 10

Draw out boxes and split total into the number of boxes given

Share £70 in the ratio 2:5



Indices

$5^{11} \times 5^3 =$

$8^{10} \div 8^4 =$

$(y^3)^7 =$

$x^1 =$

$x^0 =$

HCF/LCM

HCF (highest common factor) is the

_____

LCM (lowest common multiple) is the

_____

Fractions

- **Adding/Subtracting**

The denominator must be the same

$$\frac{1}{2} + \frac{2}{7} = \frac{}{14} + \frac{}{14} =$$

- **Multiply**

Multiply numerators, then multiply denominators

$$\frac{1}{2} \times \frac{2}{7} =$$

- **Dividing**

Dividing is the same as multiplying by the reciprocal

$$\frac{1}{2} \div \frac{2}{7} =$$

Mixed Fractions

Whole and Part

$2\frac{1}{4}$

$\frac{13}{5}$ as a mixed number is …

Year 8 Algebra

Algebraic Notation

We do not use multiplication signs: $3 \times a = 3a$

We do not use division signs: $3 \div a = \frac{3}{a}$

To collect like terms we add/subtract terms with the same coefficient and power

$3x^2 + 4x - 5 + 2x + 10x^2 - 1$

$13x^2 + 6x - 6$

Substitution

Substitution means **replace**

If $x = -5$ we replace x with 5

So $2x^2 - 1$ becomes $2(-5)^2 - 1$

$2(25) - 1$

$50 - 1$

49

Solving

- Draw a line through the equals sign
- Get rid of numbers by doing the inverse operation
- Whatever you do to one side you MUST do to the other!

$2x + 5 = 17$

$-5 \quad -5$

$2x = 12$

$\div 2 \quad \div 2$

$x = 6$

- If x appears on both sides of the equals, you must first get rid of the smaller amount of x

$2x + 5 = 5x - 7$

$-2x \quad -2x$

$5 = 3x - 7$

$+7 \quad +7$

$12 = 3x$

$\div 3 \quad \div 3$

$4 = x$

Inequalities

- $x < 3$ "x is less than 3"
- $7 \leq y$ "7 is less than or equal to y"
- $e > f$ "e is greater than f"
- $14 \geq t$ "14 is greater than or equal to t"

$\leq \quad \geq$ (filled circle)

$< \quad >$ (open circle)

$x \leq 5$

$x > 3$

Inverse Operations

Operation	Inverse
Adding	Subtracting
Subtracting	Adding
Multiplying	Dividing
Dividing	Multiplying

Changing the Subject

Changing the subject follows the same rules as solving

Isolate the term that is becoming the subject

$5a + b = 9$

$-b \quad -b$

$5a = 9 - b$

$\div 5 \quad \div 5$

$a = \frac{9-b}{5}$

Expanding

Opposite things

Multiplying out brackets

$3x(4x - 1)$ means $3x$ multiplied by all of $4x - 1$

$\times$	$4x$	-1
$3x$	$12x^2$	$-3x$

Start on the outside and multiply to get the middle

Always write your answer separately

$12x^2 - 3x$

Factorising

Putting into brackets

You need to to identify common factors

$\times$	$3x$	$+7$
$5x$	$15x^2$	$+35$

Start in the middle and get the outside

Always write your answer separately

$5x(3x + 7)$

Sequences

$-5 \quad 1, \quad 7, \quad 13, \quad 19,$

$-6 \quad +6 \quad +6 \quad +6$

It goes up by 6 so the nth term is $6n$

Working backwards gets us to -5 which is what we add on the end

$6n - 5$

Finding the 20th term just means that $n = 20$

We find the 20th term by *substituting* $n = 20$ into $6n - 5$

$6(20) - 5 = 120 - 5 = 115$

Year 8 Algebra Quiz

Algebraic Notation

We do not use multiplication signs: $3 \times a = 3a$

We do not use division signs: $3 \div a = \frac{3}{a}$

To collect like terms we add/subtract terms with the same coefficient and power

$$3x^2 + 4x - 5 + 2x + 10x^2 - 1$$

Substitution

Substitution means **replace**

If $x = 4$ we replace x with __

So $2x^2 - 1$ becomes _____

Solving

- Draw a line through the equals sign
- Get rid of numbers by doing the inverse operation
- Whatever you do to one side you MUST do to the other!

$$20 = 3x - 1$$

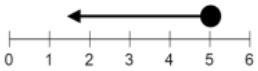
- If x appears on both sides of the equals, you must first get rid of the smaller amount of x

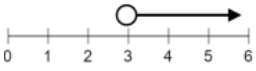
$$6x + 2 = 4x + 20$$

Inequalities

- $x < 3$ "x is ____ than 3"
- $7 \leq y$ "7 is less than _____y"
- $e > f$ "e is _____ than f"
- $14 \geq t$ "14 is _____t"

≤ ≥ < >





Inverse Operations

Operation	Inverse
Adding	
Subtracting	
Multiplying	
Dividing	

Changing the Subject

Changing the subject follows the same rules as solving

Isolate the term that is becoming the subject

$$5 = n^2 + r$$

Expanding

Opposite things

Multiplying out brackets

$5x(2x - 3)$ means __ multiplied by all of _____

×	$2x$	-3
$5x$		

Start on the outside and multiply to get the middle

Always write your answer separately

Factorising

Putting into brackets

You need to to identify common factors

×		
	$12x^2$	$+42$

Start in the middle and get the outside

Always write your answer separately

Sequences

3, 11, 19, 27,

Year 8 Geometry

Vectors

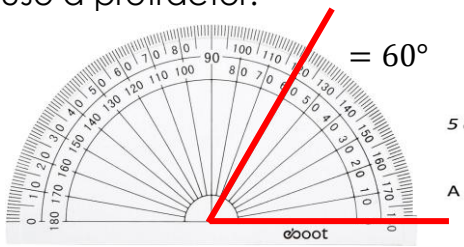
$\begin{pmatrix} x \\ y \end{pmatrix}$

+ moves right
- moves left

+ moves up
- moves down

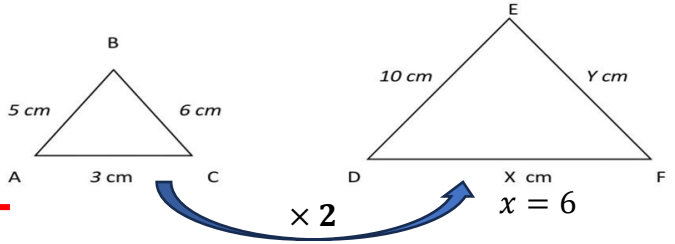
Measuring Angles

Use a protractor.



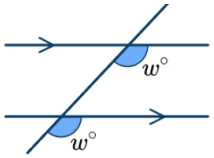
Similarity

Shapes are similar when they have all the same angles and a common scale factor

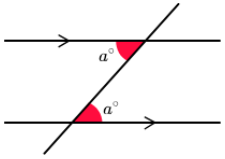


Scale factor $= \frac{10}{5} = 2$

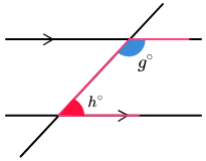
Angles in Parallel Lines



Corresponding angles are equal

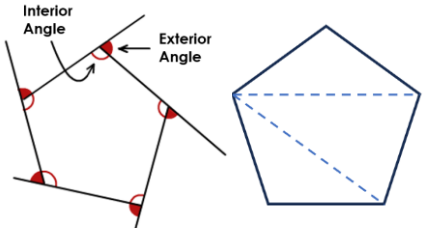


Alternate angles are equal



Co Interior angles sum to 180°

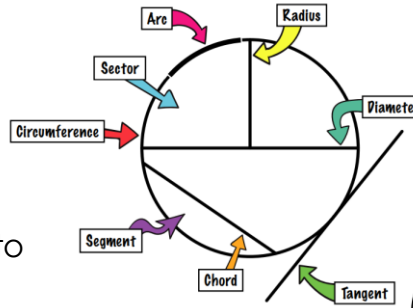
Angles in Polygons



Exterior angles sum to 360°

Interior angles sum to (when n is number of sides) $180(n-2)$

Circles



Area of a circle:
$A = \pi r^2$

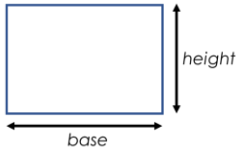
Circumference of a circle:
$C = \pi d$

Perimeter

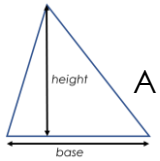
The distance around a 2D shape. Add all side lengths together.

Area

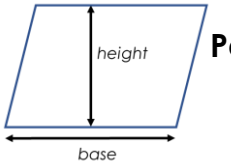
The space within a 2D shape.



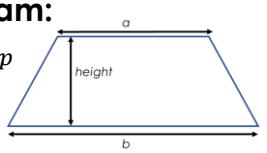
Square/ Rectangle:
$A = b \times h_p$



Triangle:
$A = \frac{1}{2} \times b \times h_p$

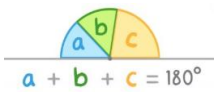


Parallelogram:
$A = b \times h_p$

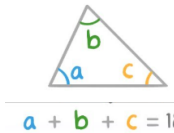


Trapezium:
$A = \frac{(a+b)}{2} \times h$

Angle Rules

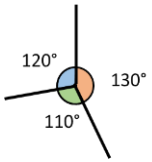


Angles on a straight line sum to 180°

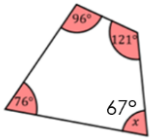


Angles in a triangle sum to 180°

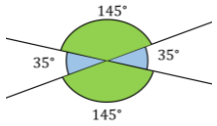
Base angles in an isosceles triangle are equal.



Angles around a point sum to 360°



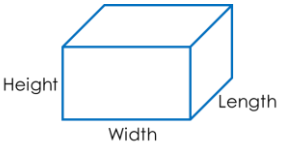
Angles in a quadrilateral sum to 360°



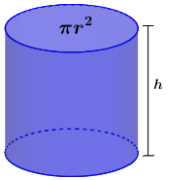
Vertically opposite angles are equal.

Volume

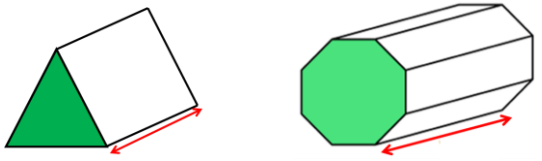
The space within a 3D shape.



Cuboid/Cube:
$V = l \times w \times h$



Cylinder:
$V = \pi r^2 \times h$



Prism:
V = Area of Cross-Section x Length

Surface Area

The total area of all faces of a 3D shape.

1. Find area of each face.
2. Add the areas together.

Year 8 Geometry Quiz

Vectors

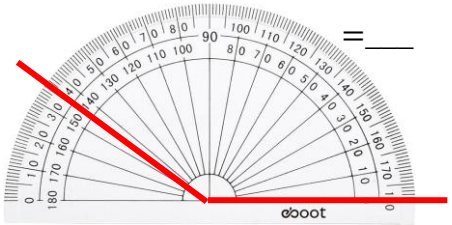
$\begin{pmatrix} 4 \\ -3 \end{pmatrix}$

4 to the left/right?

3 up/down?

Measuring Angles

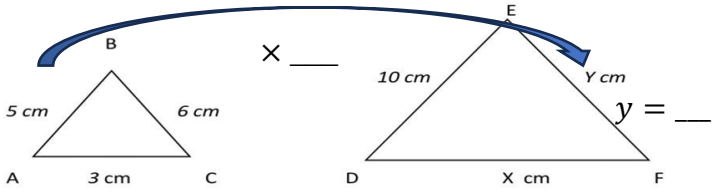
Use a protractor.



=___

Similarity

Shapes are similar when they have all the _____ and a common scale factor

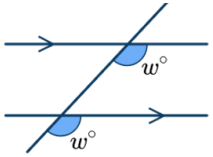


× ___

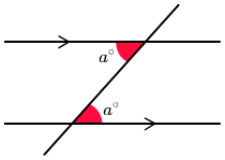
y = __

Scale factor = _____

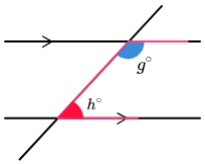
Angles in Parallel Lines



_____ angles are equal

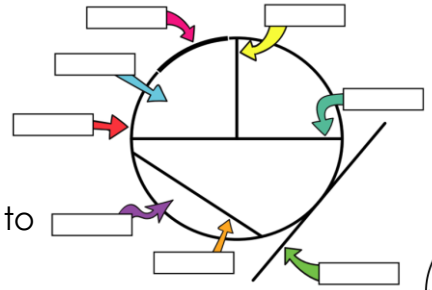


_____ angles are equal



Co Interior angles sum to _____

Circles



Area of a circle:

A = _____

Circumference of a circle:

C = _____

Perimeter

The distance around a 2D shape. Add all side lengths together.

Area

The space within a 2D shape.

Square/ Rectangle:

A = _____

Triangle:

A = _____

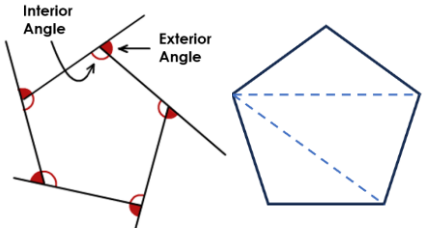
Parallelogram:

A = _____

Trapezium:

A = _____

Angles in Polygons

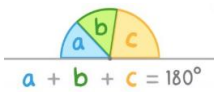


Exterior angles sum to ____°

Interior angles sum to (when n is number of sides)

_____

Angle Rules

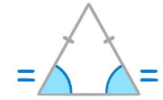


Angles on a straight line

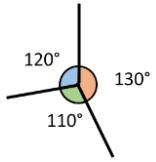
_____

Angles in a triangle

_____

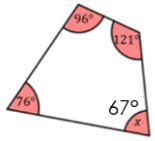


Base angles in an _____ triangle are _____.



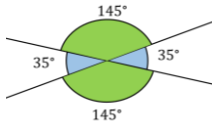
Angles around a point

_____



Angles in a quadrilateral

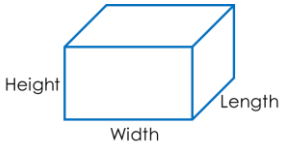
_____



_____ angles are equal.

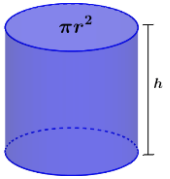
Volume

The space within a 3D shape.



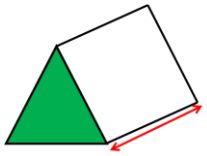
Cuboid/Cube:

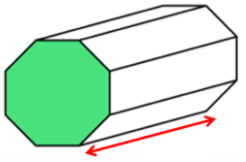
V = _____



Cylinder:

$V = \pi r^2 \times h$





Prism:

V = _____

Surface Area

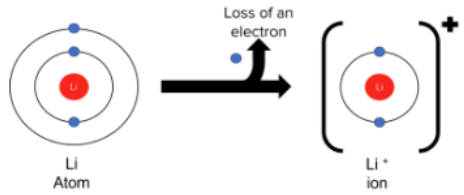
The total area of all faces of a 3D shape.

1. Find area of each face.
2. Add the areas together.

Metals and Ions knowledge organiser

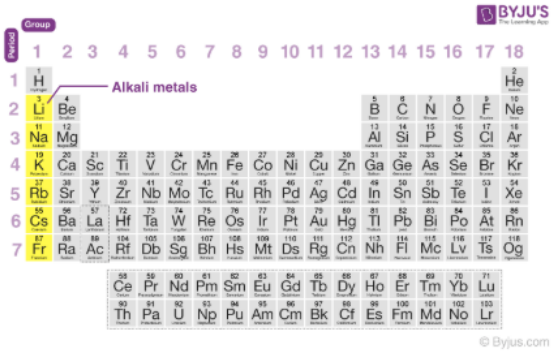
Metals:

- Lose electrons
- Form positive ions



Alkali metals:

- Are in group 1
- Have 1 electrons in their outer shell
- React violently with water to produce a metal hydroxide and hydrogen
- More reactive as you go down the group



Key Terms	Definitions
Metal	An atom which loses electrons to form positive ions
Ion	An atom which has gained or lost electrons, so now has overall charge
Reactivity	How likely something is to react
Corrosion	When a metal reacts with molecules around it and breaks down
Rusting	The corrosion of Iron
displacement	A more reactive metal displaces a less reactive metal from its compound
Ore	A rock with enough metal to be economical to extract
Electrolysis	Using electricity to cause a chemical reaction

Reactions of metals

metal + oxygen → metal oxide
metal + fluorine → metal fluoride
metal + chlorine → metal chloride
metal + bromine → metal bromide
metal + iodine → metal iodide
metal + water → metal hydroxide + hydrogen
metal + acid → salt + hydrogen

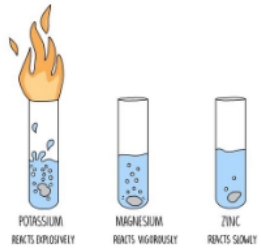
The salt depends on the acid used.

Hydrochloric acid produces chloride salts
Nitric acid produces nitrate salts
Sulphuric acid produces sulphate salts

Metal reactivity

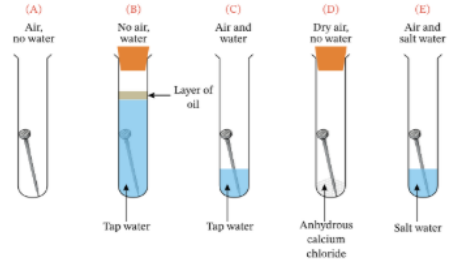
Metals in acid is an exothermic reaction so they give out energy
The most reactive metals:

- give out the most energy when reacting
- React the fastest



Metal corrosion

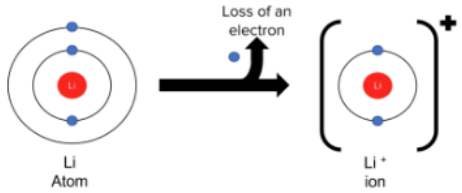
- Metals react with molecules around them and break down over time
- Corrosion of iron is called rusting
- Rusting needs oxygen and water to occur
- Rusting is fastest in salt water
- Corrosion can be prevented by a barrier to the metal like paint or using a more reactive metal as a sacrificial metal e.g. zinc



Metals and Ions knowledge organiser

Metals:

- Lose electrons
- Form positive ions



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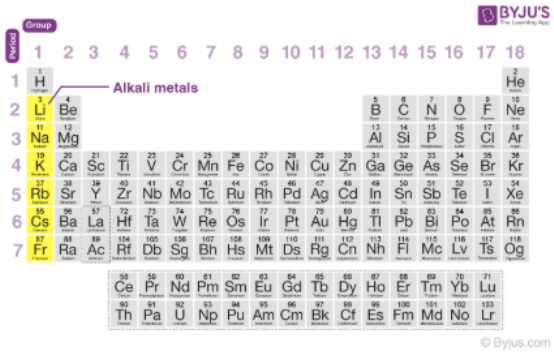
- Have 1 electrons in their outer shell
- React violently with water to produce a metal hydroxide and hydrogen
- More reactive as you go down the group



Key Terms	Definitions
Metal	
	An atom which has gained or lost electrons, so now has overall charge
Reactivity	How likely something is to react
	When a metal reacts with molecules around it and breaks down
Rusting	
displacement	
	A rock with enough metal to be economical to extract
	Using electricity to cause a chemical reaction

Reactions of metals

metal + oxygen → .....
metal + fluorine → metal fluoride
metal + chlorine → .....
metal + bromine → metal bromide
metal + iodine → metal iodide
metal + water → metal hydroxide + ...
metal + acid →..... + hydrogen

The salt depends on the acid used.

Hydrochloric acid produces ..... salts
Nitric acid produces ..... salts
Sulphuric acid produces ..... salts

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The most reactive metals:

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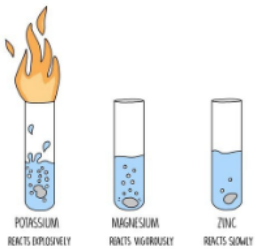
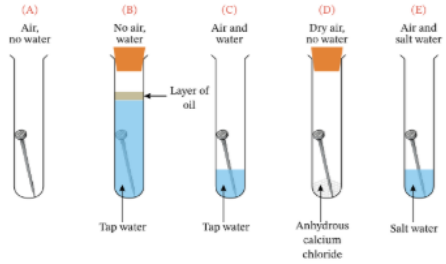


Metal corrosion

- Metals react with molecules around them and break down over time
- Corrosion of iron is called rusting
- Rusting needs ..... and ..... to occur
- Rusting is fastest in salt water
- Corrosion can be prevented by a barrier to the metal like ..... or using a more reactive metal as a sacrificial metal e.g. zinc

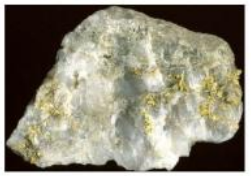


Metals and Ions knowledge organiser

Metals extraction

- Metals less reactive than hydrogen are found .....
- Metals more reactive than hydrogen are found as .....
- Ores require chemical processes to separate the metal from the compound
- If less reactive than carbon then can use ..... with carbon
- If more reactive than carbon then can use .....
- Extracting metal uses lots of energy and releases greenhouse gases
- Metal is a ..... resource
- Mining ores destroys habitats and require lots of .....

Gold Ore



Iron Ore

Copper Ore

POTASSIUM	MOST REACTIVE	K
SODIUM		Na
LITHIUM		Li
CALCIUM		Ca
MAGNESIUM		Mg
ALUMINIUM		Al
CARBON		C
ZINC		Zn
IRON		Fe
HYDROGEN		H
COPPER		Cu
SILVER		Ag
GOLD	LEAST REACTIVE	Au

Displacement reactions

A ..... reactive metal displaces a ..... reactive metal from its compound

calcium + iron oxide → Calcium oxide + iron

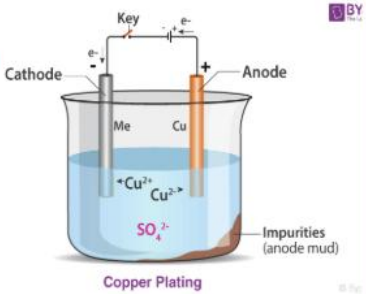
Displacement is an exothermic reaction so gives out .....
The heat given out depends on the difference in reactivities

Reduction with ..... is where carbon displaces a metal from its compound

carbon + iron oxide → carbon dioxide + iron

.....

- Metal compound in solution splits into a metal and non metal ion
- Electric current causes one electrode to be positive (anode) and one electrode to be negative (cathode)
- Metal ion goes to the cathode where it accepts electrons to form the metal atom
- Non metal ion goes to the anode where it donate electrons to form the non metal atom



Copper Plating

Metals and Ions knowledge organiser

Metals extraction

- Metals less reactive than hydrogen are found native
- Metals more reactive than hydrogen are found as ores
- Ores require chemical processes to separate the metal from the compound
- If less reactive than carbon then can use reduction with carbon
- If more reactive than carbon then can use electrolysis
- Extracting metal uses lots of energy and releases greenhouse gases
- Metal is a finite resource
- Mining ores destroys habitats and require lots of energy

Gold Ore

Iron Ore

Copper Ore

POTASSIUM	MOST REACTIVE	K
SODIUM		Na
LITHIUM		Li
CALCIUM		Ca
MAGNESIUM		Mg
ALUMINIUM		Al
CARBON		C
ZINC		Zn
IRON		Fe
HYDROGEN		H
COPPER		Cu
SILVER		Ag
GOLD	LEAST REACTIVE	Au

Displacement reactions

A more reactive metal displaces a less reactive metal from its compound

calcium + iron oxide → Calcium oxide + iron

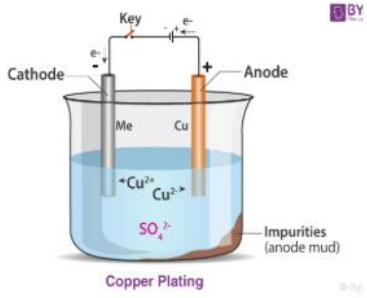
Displacement is an exothermic reaction so gives out heat
The heat given out depends on the difference in reactivities

Reduction with carbon is where carbon displaces a metal from its compound

carbon + iron oxide → carbon dioxide + iron

Electrolysis

- Metal compound in solution splits into a metal and non metal ion
- Electric current causes one electrode to be positive (anode) and one electrode to be negative (cathode)
- Metal ion goes to the cathode where it accepts electrons to form the metal atom
- Non metal ion goes to the anode where it donate electrons to form the non metal atom



Copper Plating

Year 8 Physics Knowledge Organiser
Waves

Oscillations produce Waves

Oscillations, for example vibrations, cause waves. Waves transfer energy without transferring matter.

There are two ways for matter to oscillate in a wave:

- **Longitudinally**: parallel to the direction of the wave.
- **Transversely**: perpendicular to the direction of the wave.

Longitudinal Waves

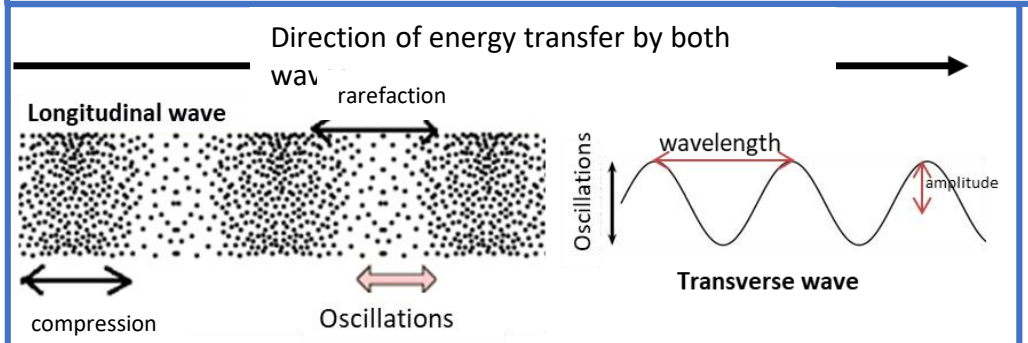
The features of longitudinal waves:

- The oscillations of the wave are **parallel** to the direction of movement of the wave (see diagram)
- These waves involve oscillations of the particles in a solid, liquid, or gas.
- There are areas of compression and areas of rarefaction.
- One wavelength can be measured from the centre of an area of compression to the centre of the next area of compression.

Transverse Waves

The features of transverse waves:

- The oscillations of the wave are at right angles to the direction of the wave.
- The oscillations can be in matter, like longitudinal waves, or in the **electromagnetic field** (these oscillations form electromagnetic waves).
- Transverse waves have peaks and troughs.
- The **amplitude** of a transverse wave is the maximum distance of the wave from the centre.



Key Terms	Definitions
oscillation	A rhythmic, back and forth or up and down movement (e.g. vibration).
wave	A whole series of oscillations that allows transfer of energy.
medium	The matter that is oscillating to produce a wave.
longitudinal wave	A wave made from oscillations parallel to the direction of the wave.
compression	A part of a wave where matter is made more dense by the oscillations of the wave.
rarefaction	A part of a wave where matter is made less dense by the oscillations of the wave.
frequency	The number of oscillations in a wave per second. This is also the number of waves passing a point per second.
transverse wave	A wave made from oscillations at right angles to the direction of the wave.
wavelength	The length of one complete wave – from one point on one wave to the equivalent point on the next wave.

Year 8 Physics Knowledge Organiser
Waves

Oscillations produce Waves

Oscillations, for example ....., cause waves. Waves travel through matter when the matter continues to oscillate. Waves transfer ..... without transferring .....

There are two ways for matter to oscillate in a wave:

- **Longitudinally**: ..... to the direction of the wave.
- **Transversely**: ..... to the direction of the wave.

Longitudinal Waves

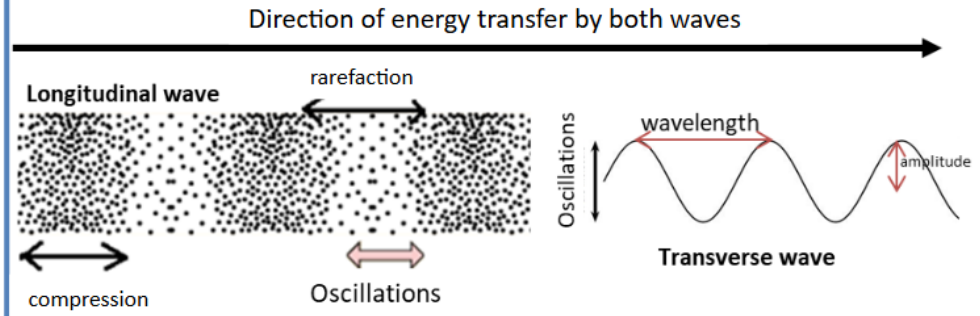
The features of longitudinal waves:

- The oscillations of the wave are **parallel** to the direction of movement of the wave (see diagram)
- These waves involve oscillations of the particles in a ....., ..., or .....
- There are areas of ..... and areas of .....
- One ..... can be measured from the centre of an area of compression to the centre of the next area of .....

Transverse Waves

The features of transverse waves:

- The oscillations of the wave are at .... to the direction of the wave.
- The oscillations can be in matter, like longitudinal waves, or in the .... (these oscillations form electromagnetic waves).
- Transverse waves have ..... and troughs.
- The **amplitude** of a transverse wave is the maximum distance of the wave from the .....



Key Terms	Definitions
.....	A rhythmic, back and forth or up and down movement (e.g. vibration).
wave	A whole series of oscillations that allows transfer of .....
medium	The matter that is oscillating to produce a wave.
..... wave	A wave made from oscillations parallel to the direction of the wave.
.....	A part of a wave where matter is made more dense by the oscillations of the wave.
rarefaction	A part of a wave where matter is made ..... dense by the oscillations of the wave.
frequency	The number of oscillations in a wave per ..... This is also the number of waves passing a point per .....
transverse wave	A wave made from oscillations at .... to the direction of the wave.
.....	The length of one complete wave – from one point on one wave to the equivalent point on the next wave.

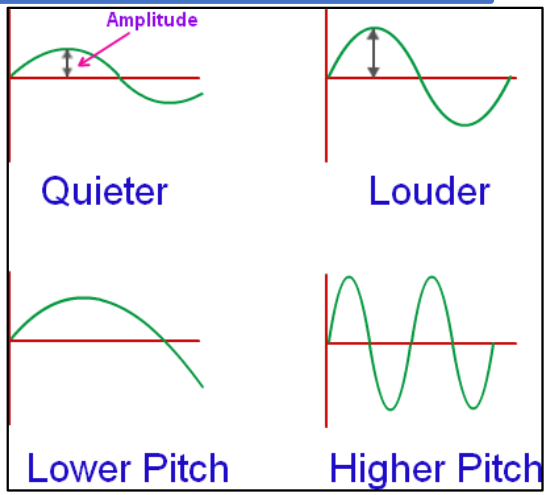
Year 8 Physics Knowledge Organiser
Waves

Sound Waves

- Sounds travel as waves.
- Sound waves can travel through any **medium** that contains particles – solid, liquid or gas. Sound waves cannot travel in a vacuum.
- The amplitude, wavelength and frequency of sound waves links to the sound.
- **Louder sounds** have larger **amplitudes.**
- Sounds with a **higher pitch** have a **shorter wavelength** and **higher frequency.**
- The diagram shows how the waveform is affected by the sound**.**

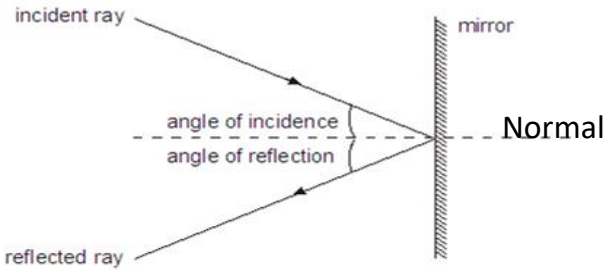
Sound compared to light waves

Sound	**Light Waves**
Requires a medium to travel	Does **not** require a medium – can travel in a vacuum
Involves **longitudinal** oscillations (vibrations) of **particles** in matter	Involves **transverse** oscillations of the electromagnetic **field**
Travels faster in more dense media	Travels slower in more dense media

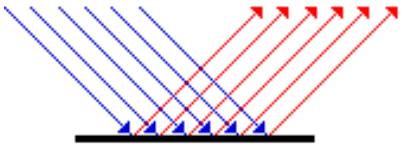


Reflection of Light

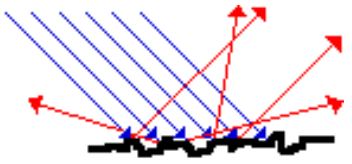
- When light interacts with some surfaces it will reflect.
- When light hits a smooth surface, it will reflect in one direction. This is called **specular reflection**
- When light is reflected from a mirror, the angle of incidence is equal to the angle of reflection. This is the **law of reflection**.



- When light hits a rough surface each ray of light will reflect in a different direction
- This is known as **diffuse scattering or diffuse reflection**



Specular Reflection (smooth surfaces)



Diffuse Reflection (rough surfaces)

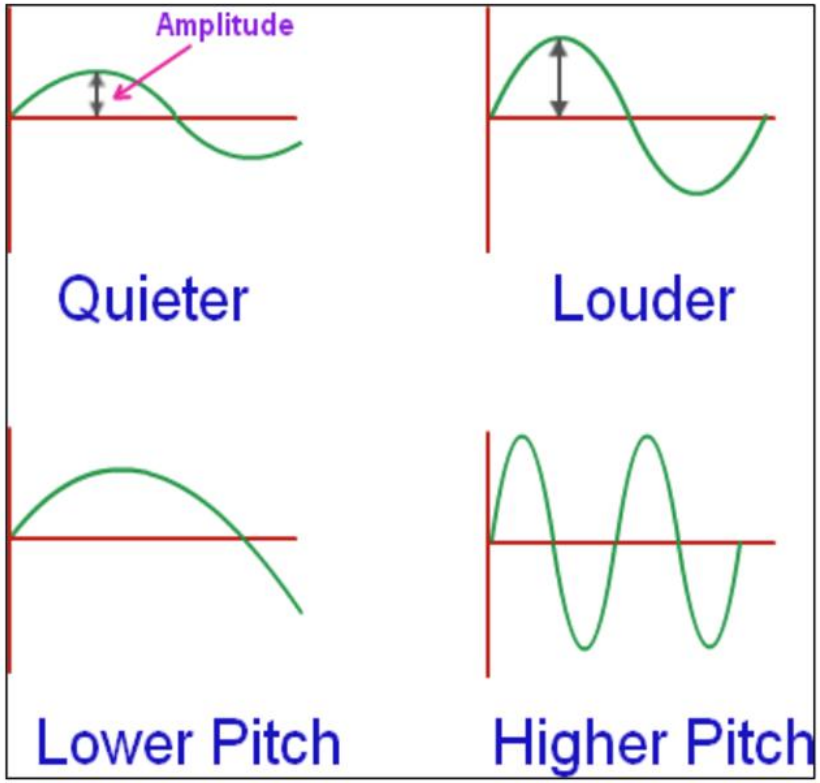
Key Terms	**Definitions**
Normal line	Imaginary line at 90 degrees to the mirror or glass block. Used to measure angles.
Angle of reflection	The angle between the normal and reflected ray
Angle of incidence	The angle between the normal and the incident ray
Refraction	When a wave changes speed and direction on passing through a

Year 8 Physics Knowledge Organiser
Waves

Sound Waves

- Sounds travel as .....
- Sound waves can travel through any ..... that contains particles – ....., liquid or ..... Sound waves ..... travel in a vacuum.
- The amplitude, wavelength and frequency of sound waves links to the sound.
- ..... **sounds** have larger .....
- Sounds with a **higher** ..... have a ..... **wavelength** and **higher** .....
- The diagram shows how the waveform is affected by the sound.

Key Terms	Definitions
sound	A type of wave caused by vibrations of matter.
.....	The highness/lowness of a sound.
intensity	The ..... of a sound.



Sound compared to light waves

Sound	Light Waves
Requires a ..... to travel	.... require a medium – ..... travel in a vacuum
Involves ..... oscillations (vibrations) of **particles** in matter	Involves ..... oscillations of the electromagnetic **field**
Travels faster in ..... dense media	Travels ..... in more dense media

Year 8 Biology Knowledge Organiser- Organisation Health and Disease

Microorganisms and the Spread of Disease

- Diseases can be **communicable** or **noncommunicable**.
- Communicable diseases are caused by **pathogens**.
- Pathogens are microorganisms that cause diseases and they include bacteria, viruses and fungi and protists
- Bacteria and fungi can be **cultured** (grown) in **Petri dishes** on **agar jelly.**
- **Aseptic technique** is used to prevent unwanted microorganisms growing on the agar jelly.
- In schools they are grown in an incubator at 25°C instead of 37°C to minimise the growth of harmful microorganisms.
- Microorganisms are too small to see and with our naked eye and require a light microscope
- Viruses are too small to see even with a light microscope

Pathogens can be spread from person to person by the following methods:

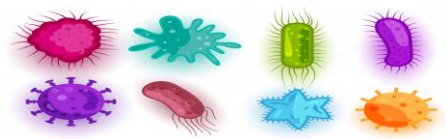
- Droplet infection (e.g. flu)
- Direct contact with contaminated objects (e.g. cold sores)
- Drinking contaminated water (e.g. cholera)
- Eating contaminated food (e.g. salmonella food poisoning)
- Sexually transmitted (e.g. chlamydia)
- Vector e.g. an insect bite

Immune system

- bacteria and viruses enter our bodies they quickly reproduce.
- Bacteria produce **toxins** (poisons) that make us feel unwell.
- Viruses reproduce inside living cells and damage these cells.

Microbes are all around us. We don't continually get ill because we have defences to stop the pathogens getting into our bodies.
The defences include:

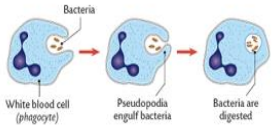
1. Skin is a barrier to pathogens.
2. Nose hairs and mucus trap pathogens
3. The stomach contains hydrochloric acid , which kills pathogens.
4. **Mucus** and **cilia** l s in the air we breathe in.



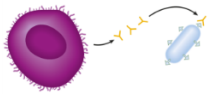
Key Terms	Definitions
Communicable disease	Infectious diseases that are caused by pathogens and spread from person to person .
Non-communicable disease	Diseases that are not infectious e.g. diabetes, coronary heart disease, lung cancer
Epidemiology	The study of how diseases spread.
Pathogen	A microorganism that causes disease.
Antibody	A chemical substance made by white blood cells that attaches to and destroys pathogens.
Immune	The white blood cells can rapidly produce the correct antibodies to destroy the pathogens before you become unwell.
Vaccination	Dead or weakened pathogens that trigger the white blood cells to produce antibodies.
Aseptic technique	A practical method to prevent contamination by unwanted microorganisms.
Cilia	Microscopic hair-like structures that cover the cells in the trachea and bronchi
Antibiotic	A drug that treats diseases caused by bacteria.

Immune system (continued)

White blood cells are part of our immune system. One type of white blood cell can change shape and **engulf** the pathogens.



A second type of white blood cell produces **antibodies**. These are chemical substances that are specific to the pathogen. They attach to the pathogen and destroy/kill it.



When encountering the same pathogen again:

- White blood cells remember the correct antibodies and produce it rapidly
- The pathogen is killed off before you develop symptoms
- You are said to be immune

Year 8 Biology Knowledge Organiser- Organisation Health and Disease

Microorganisms and the Spread of Disease

- Diseases can be **c…….** or **n……..**.
- Communicable diseases are caused by **…….**.
- Pathogens are …… that cause diseases and they include b……., v…….. and f…… and p……..
- Bacteria and fungi can be **cultured** (grown) in **P….. dishes** on **a…… jelly.**
- **Aseptic technique** is used to prevent unwanted microorganisms growing on the agar jelly.
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- Drinking contaminated …….. (e.g. cholera)
- Eating contaminated …… (e.g. salmonella food poisoning)
- ……. transmitted (e.g. c……)
- Vector e.g. an i……. b……

Immune system

- bacteria and viruses enter our bodies they quickly ……..
- Bacteria produce **……** (poisons) that make us feel unwell.
- Viruses reproduce ……. living cells and …… these cells.

Microbes are all around us. We don't continually get ill because we have defences to stop the pathogens getting into our bodies.
The defences include:

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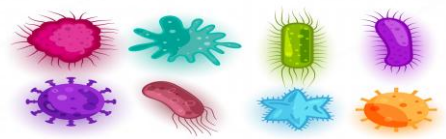

Key Terms	Definitions
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……	A chemical substance made by white blood cells that attaches to and destroys pathogens.
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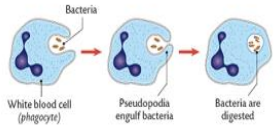
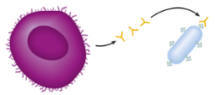
Vaccination	……. or …… pathogens that trigger the white blood cells to produce antibodies.
Aseptic technique	A practical method to prevent contamination by unwanted microorganisms.
Cilia	Microscopic ……..-like structures that cover the cells in the trachea and bronchi
Antibiotic	A drug that treats diseases caused by

Immune system (continued)

…… blood cells are part of our immune system. One type of white blood cell can change shape and **……** the ……



A second type of white blood cell produces **……** These are chemical substances that are …… to the pathogen. They attach to the pathogen and destroy/kill it.



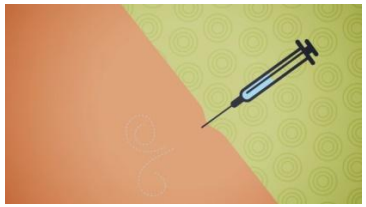
When encountering the same pathogen again:

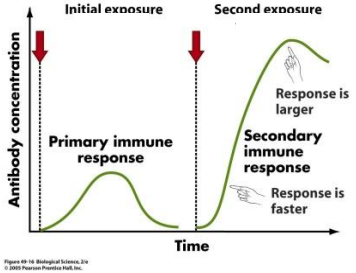
- White blood cells remember the …… antibodies and produce it ……
- The pathogen is killed off before you develop ……
- You are said to be ……

Year 8 Biology Knowledge Organiser- Organisation – Health and Disease – Page 2

Vaccination

- Injected by dead or weakened pathogen
- Body triggers immune response
- White blood cells produce antibodies and destroy dead or weakened version of pathogen





When infected with the real pathogen:

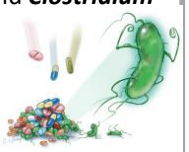
- White blood cells remember the correct antibodies and produce it rapidly
- The pathogen is killed off before you develop symptoms
- You are said to be immune

Antibiotics

- Antibiotics are medicines used to treat diseases caused by bacteria by killing the bacteria.
- Antibiotics cannot be used to treat diseases caused by viruses as viruses are inside your cells
- The antibiotic penicillin was discovered, by chance, by **Alexander Fleming** in the early 20th Century.

Antibiotic Resistance

- There is an increasing problem with bacteria becoming resistant to antibiotics.
- This means that the antibiotic no longer kills the bacteria.
- Examples of antibiotic resistance bacteria are ***MRSA*** and ***Clostridium dificile***



To prevent antibiotic resistance humans need to minimise the u
antibiotics and ensure they are used correctly and carefully suc

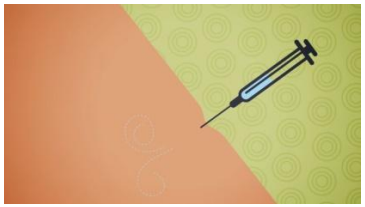
- only prescribe antibiotics for bacterial infections that haven t got better on their own.
- Antibiotics should not be prescribed or taken for viral infections such as colds, flu, most coughs and sore throats.
- When antibiotics are prescribed, the course should be finished even if you feel better.
- Antibiotics should be limited in their use for farm animals

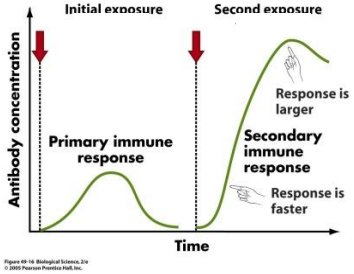
New drugs take years and costs lots of money to develop

Year 8 Biology Knowledge Organiser- Organisation – Health and Disease – Page 2

Vaccination

- Injected by …… or …… pathogen
- Body triggers …… response
- White blood cells produce …… and destroy dead or weakened version of ……





When infected with the real pathogen:

- White blood cells …… the correct …… and produce it ……
- The pathogen is killed off …… you develop symptoms
- You are said to be ……

The MMR controversy occurred because a scientific journal presented some poor science that the MMR vaccine caused autism. This claim was later proven by scientists to be wrong and the investigation had not been peer reviewed, but it was also published in a national newspaper. It caused a drop in the number of people being vaccinated and there have been outbreaks of measles because of this. There continue to be lots of unscientific claims about the safety of vaccinations on social media and on websites.

Antibiotics

- Antibiotics are medicines used to treat diseases caused by …… by killing the bacteria.
- Antibiotics …… be used to treat diseases caused by viruses as viruses are …… …… ……
- The antibiotic penicillin was discovered, by chance, by **Alexander Fleming** in the early 20th Century.

Antibiotic Resistance

- There is an increasing problem with bacteria becoming …… to antibiotics.
- This means that the antibiotic no longer kills the bacteria.
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To prevent antibiotic resistance humans need to …… the use of antibiotics and ensure they are used correctly and carefully such as through:

- only prescribe antibiotics for …… infections that haven't got better on their own.
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- When antibiotics are prescribed, the course should be …… even if you feel better.
- Antibiotics should be ……. in their use for farm ……

New drugs take years and costs lots of money to develop

Year 8 Science Knowledge Organiser
Forces 2 (page 1 of 2)

Force Arrows

Forces have a **size** and a **direction**. This means we show forces with arrows.

- The length of the arrows shows how large the force is.
- The direction the arrow points shows the direction the force pushes or pulls.

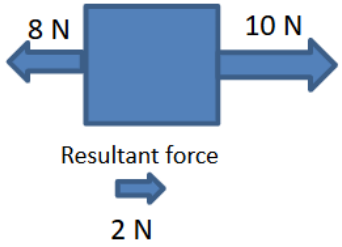
Diagrams that show the forces acting on objects, using arrows, are called **free body force diagrams**.

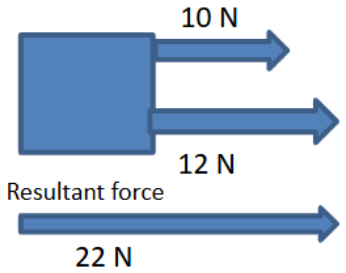
Resultant force and Newton's First Law

- The **resultant** force acting on an object is the single force *resulting* from all the separate forces acting on it. In other words, the resultant force is the single overall force.

To find resultant force:

- Add up forces acting in the same direction
- Subtract forces acting in opposite directions.





- If the forces are **balanced** the resultant force will be 0.
- Newton's first law states that if the resultant force on an object is 0 then the object will either be **stationary or moving at a constant speed**

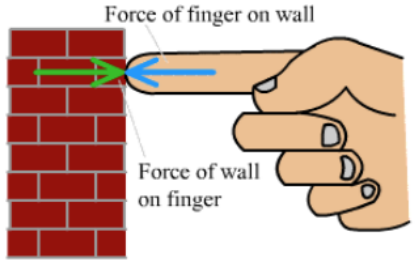
Unbalanced forces and Newton's Second Law

- If the resultant force on an object is not 0 we say that the forces are **unbalanced**
- If the forces on an object are unbalanced then the objects speed will be changing. It will either be accelerating (speeding up) in the direction of the force or decelerating (slowing down) in the direction of the force
- Knowing the resultant force does not tell you which way an object is moving. It just tells you that the speed will change.
- A LARGER resultant force is needed to accelerate an object at a higher acceleration. Also, a larger resultant force is needed to accelerate heavier objects

Key Terms	Definitions
Resultant force	The single overall force acting on an object
Newton's first law	If the resultant force on an object is 0 then it will either be stationary or move at a constant speed
Newton's Second law	If there is a resultant on an object they will either accelerate or decelerate
Newton's Third Law	for every action there is an equal and opposite reaction
Balanced force	An object that has a resultant force of 0
Unbalanced force	An object that has a resultant force of more than 0

Newton's third law

- Newton's third law states that 'for every action there is an equal and opposite reaction'
- In the example below if the person pushes on the wall with a force of 10 N. The wall will push back with a force of 10 N



Year 8 Science Knowledge Organiser
Forces 2 (page 1 of 2)

Force Arrows

Forces have a **s.....** and a **d.....**. This means we show forces with .....

- The length of the arrows shows how ..... the force is.
- The direction the arrow points shows the direction the force ..... or .....

Diagrams that show the forces acting on objects, using arrows, are called **..... ..... force diagrams**.

Resultant force and Newton's First Law

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To find resultant force:

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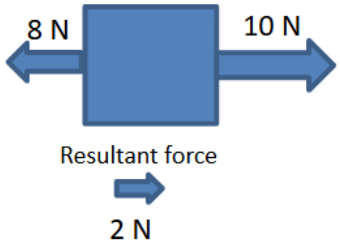
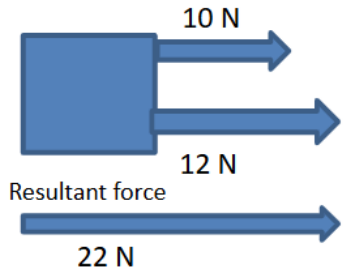
- ..... forces acting in opposite directions.





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Unbalanced forces and Newton's Second Law

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- If the forces on an object are unbalanced then the objects speed will be ..... It will either be ..... (speeding up) in the direction of the force or ..... (slowing down) in the direction of the force
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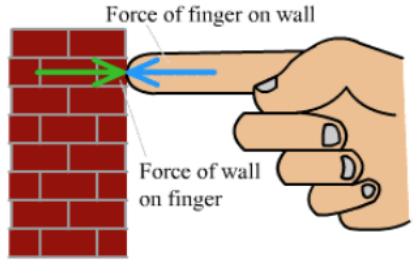
- A LARGER resultant force is needed to accelerate an object at a higher ..... . Also, a larger resultant force is needed to accelerate ..... objects

Key Terms	Definitions
....	The single overall force acting on an object
Newton's ..... law	If the resultant force on an object is 0 then it will either be ..... or move at a ....
Newton's ..... law	If there is a resultant on an object they will either ..... or .....
....	for every action there is an equal and opposite reaction
Balanced force	An object that has a ..... force of 0
Unbalanced force	An object that has a ..... force of more than 0

Newton's third law

- Newton's third law states that 'for every action there is an equal and opposite reaction'
- In the example below if the person ..... on the wall with a force of 10 N. The wall will .... with a force of ..... N



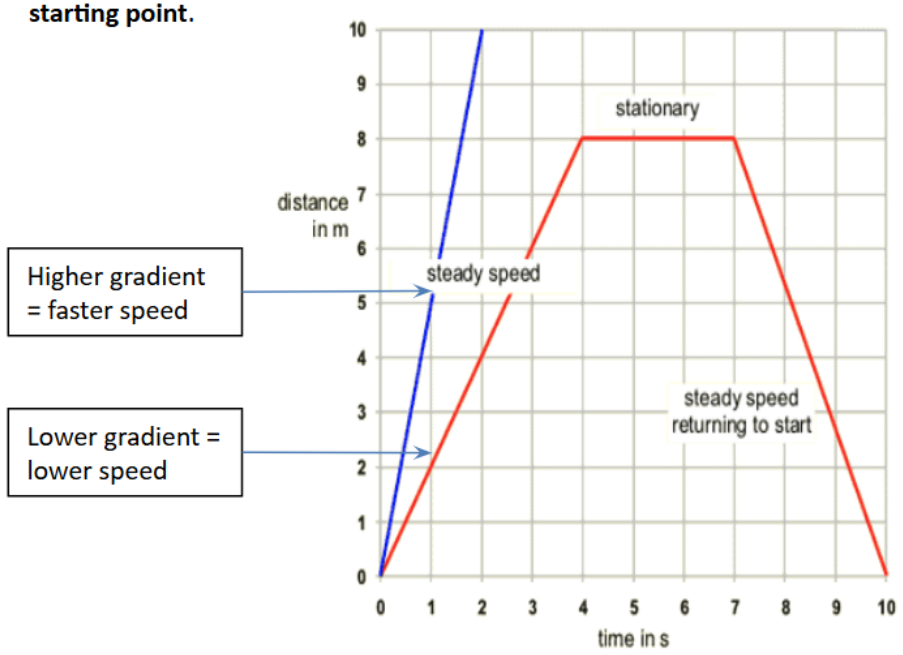
Year 8 Science Knowledge Organiser
Forces 2 (page 2 of 2)

Speed

- The speed of an object tells you how long it takes an object to cover a distance. **The unit for speed is m/s** (metres per second).
- Speed is calculated by **dividing distance by the time**
- If the speed of an object is increasing, then it is **accelerating.** If the speed is decreasing it is **decelerating.**

Distance Time Graphs

- A distance time graph has the time on the x axis and the distance on the y axis.
- If an object is stationary (not moving) the line **will be horizontal.**
- If the line is diagonal the object is moving at a constant speed.
- If the line has a larger gradient (steeper), it means the object is moving faster.
- If the line is going back towards the x axis the object is **returning to its starting point**.



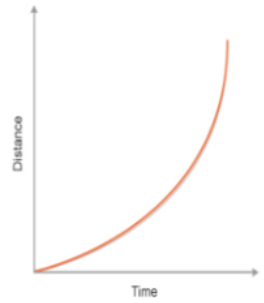
Key Terms	Definitions
Speed	How fast an object is moving, regardless of direction
Gradient	How steep the line on a graph is.
Stationary	Not moving
Acceleration	A measure of how quickly the speed of an object is increasing
Deceleration	A measure of how quickly the speed of an object is decreasing

Equation	Meanings of terms in equation
Speed = distance ÷ time	*v = speed* (m/s) *s = distance* (m) *t = time* (s)

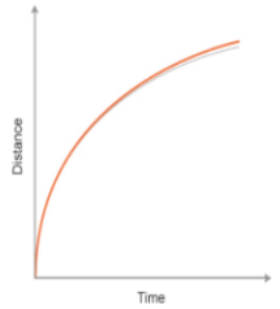
Acceleration and Deceleration

- When an object is accelerating, the distance time graph will **curve upwards.**
- When an object is slowing down an object will **curve towards the horizontal.**

Acceleration



Deceleration



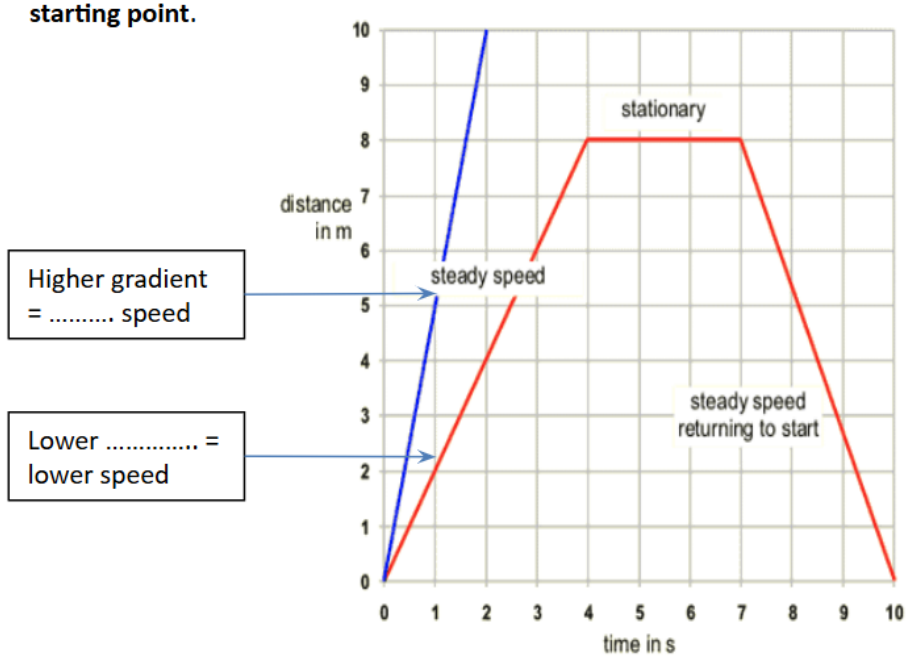
Year 8 Science Knowledge Organiser
Forces 2 (page 2 of 2)

Speed

- The speed of an object tells you how ..... it takes an object to cover a ..... **The unit for speed is m/s** (metres per .....).
- Speed is calculated by **dividing ..... by the .....**
- If the speed of an object is ....., then it is **accelerating.** If the speed is decreasing it is **.....**

Distance Time Graphs

- A distance time graph has the time on the x axis and the distance on the y axis.
- If an object is stationary (not moving) the line **will be .....**
- If the line is diagonal the object is moving at a constant speed.
- If the line has a larger ..... (steeper), it means the object is moving .....
- If the line is going back towards the ..... axis the object is **returning to its starting point**.



Key Terms	Definitions
Speed	How fast an object is moving, regardless of direction
.....	How steep the line on a graph is.
Stationary	Not .....
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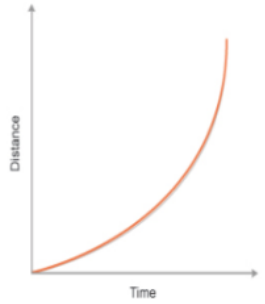
.....	A measure of how ..... the speed of an object is decreasing

Equation	Meanings of terms in equation
Speed = distance ÷ time	*v* = *speed* (m/s) *s* = *distance* (m) *t* = *time* (s)

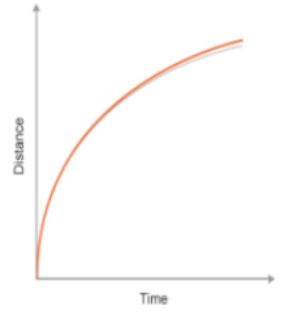
Acceleration and Deceleration

- When an object is ....., the distance time graph will **curve .....**
- When an object is .... an object will **curve towards the horizontal.**

Acceleration

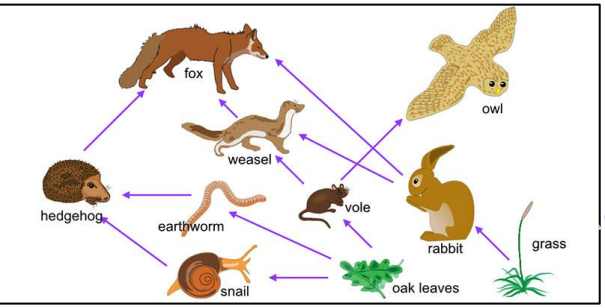


Deceleration

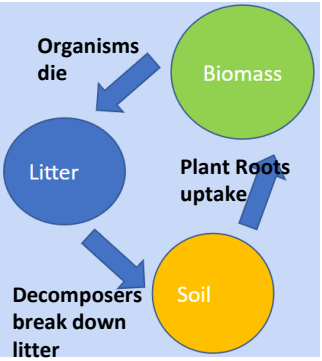


Year 8 Knowledge Organiser- Topic 1 Global Ecosystems

1. Food chains & Food webs



- Direction of arrow shows the transfer of energy (what is eaten by what)
- **Producer** - Gets energy from the sun (photosynthesis) E.g Grass
- **Primary Consumer** - An animal that eats producers E.g. Rabbit
- **Secondary Consumer** - An animal that eats primary consumers E.g Owl
- **Decomposer** - Breaks down the food chain and returns nutrients to the soil E.g. Fungi
- **Herbivore** - Only eats plants
- **Carnivore** - Only eats animals
- **Omnivore** - Eats both plants and animals.

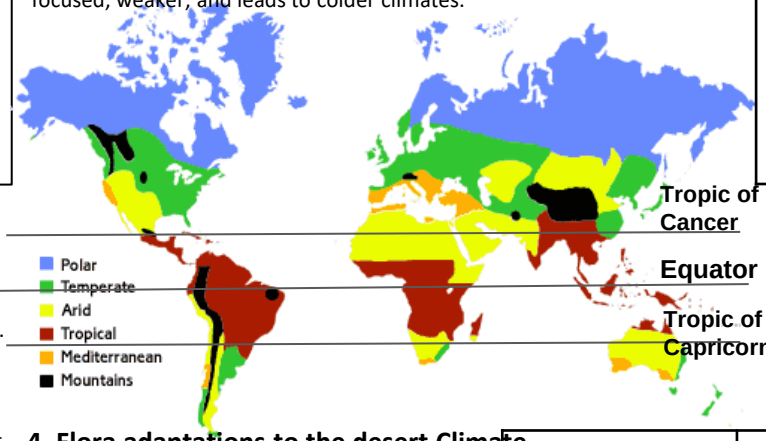


2. The Nutrient Cycle

Nutrients are needed to make every living thing (Biomass) grow and survive.
Nutrients move within a closed cycle between 3 nutrient stores.
Biomass - All living things (Plants and animals
Litter - Dead things E.g. Fallen leaves
Soil - Top soil where vegetation grows

3. Global Climates

Climate = Temperature and precipitation rate of an area, over a 30 year period.
This is dependant on distance from the equator. This is because the equator receives the most focused amount of the sun's energy. When we move further north or south from the equator this energy is spread over a larger area due to the earth being round, and so is less focused, weaker, and leads to colder climates.



4. Flora adaptations to the desert Climate

Flora = Plant life **Fauna** = Animal life

Umbrella Thorn Acacia

Athel Tree

Flora Adaptation	Why?
Deep roots	To get water from deep underground
Thorns	To protect from being eaten by animals
Small leaves	To retain moisture and not lose it through transpiration
Allelopathy (Umbrella Thorn Acacia) or Salt (Athel Tree)	Released into to the soil around the main plant to stop competition from its own seeds, or other flora

5. Fauna Adaptations to the desert climate

Fauna Adaptations	Why?
Giraffe: Long neck Thick lips and tongue Sleeps only 30min a day	**Giraffe:** Reach food in high places To protect it against thorns on flora Protection from predators
Gazelle Conserves water by concentrating urine Travels up to 60km/hr	**Gazelle**: Lack of water, particularly in dry season Evade predators

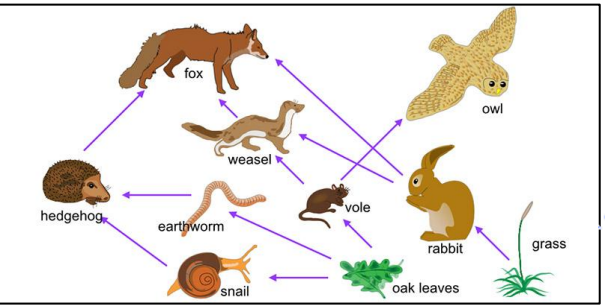
6. Interdependence

Most parts of an ecosystem rely on other parts to sustain themselves.

E.g Flora rely on Bees for pollination. An example in the desert is the Umbrella Thorn Acacia pollinating with other Acacia, by attaching pollen to the giraffe as it eats the tree, and then taking this pollen to another tree to pollinate it.

Year 8 Geography QUIZ YOURSELF
Global Ecosystems

1. Food chains & Food webs

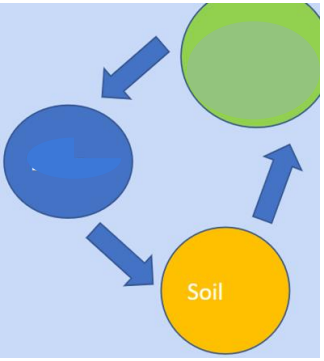


1) What does the direction of arrow show?_____
2) In this food web, name the:

Producers _____
Primary Consumers _____
Secondary Consumers _____
What is a decomposer?_____

1) **Give an example of a decomposer** _____
2) **Define Herbivore** _____
3) **Define Carnivore**_____
4) **Define Omnivore**_____

2. The Nutrient Cycle



1) Why do living organisms need nutrients?_____
_____
–

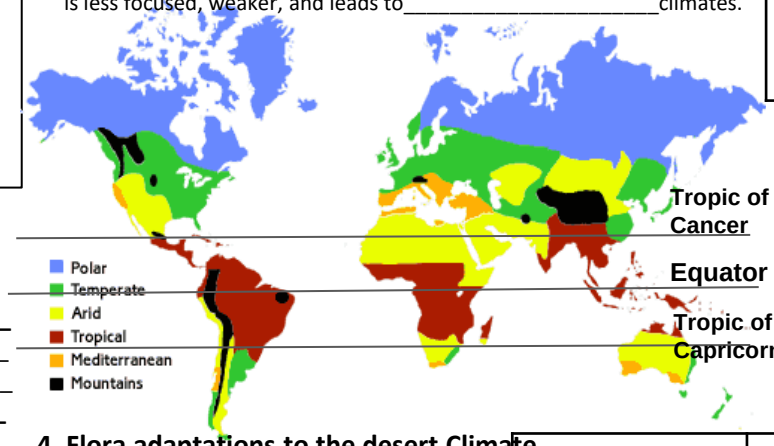
2) Label the 2 other nutrient stores on the diagram, and define below:

3) Label how nutrients move from one store to another

3. Global Climates

1) Define Climate = _____and _____ rate of an area, over a _____ year period.

2) The climate of an area is dependant on distance from _____. This is because the _____ receives the most focused amount of _____. When we move further _____or _____ from the _____ this energy is spread over a larger area due to the earth being round, and so is less focused, weaker, and leads to_____climates.



4. Flora adaptations to the desert Climate

Flora = _____life **Fauna** = _____life

Umbrella Thorn Acacia

Athel Tree

Name 3 Flora Adaptation	**What is the purpose of this adaptation?**
1)	
2)	
3)	
4)	

5. Fauna Adaptations to the desert climate

Name 3 Fauna Adaptations	**What is the purpose of this adaptation?**
1)	
2)	
3)	

6. Interdependence

Most parts of an ecosystem rely on other parts to sustain themselves.

1) Give an example of interdependence in an ecosystem

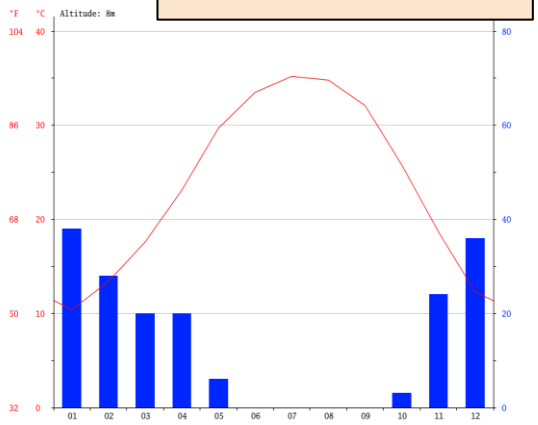
7. Where is Sudan

Fact File:
Continent: Africa (East)
Neighbouring countries: South Sudan, Ethiopia, Egypt, Chad
Capital: Khartoum
Climate: Arid/ Semi-Arid
Bodies of water: Red Sea, River Nile
Part of The Sahel region

Arid = Dry climate, without enough precipitation to support vegetation

8. Climate

Bars = Precipitation (mm)
Lines = Temperature (°C)



9. Desertification

The process by which land becomes **drier and degraded** as a result of climate change, human activity or both

Causes:
Vegetation needs to grow in soil, so its roots can bind the soil and hold it in place. If the vegetation does not bind the soil it is vulnerable to soil erosion.
This can happen in 3 way

Over cultivation - when farmers do not give time for nutrients to return to the soil (think nutrient cycle) and so the soil becomes infertile. Vegetation can no longer grow in it, leading to no roots to bind the soil

Overgrazing - When nomads and farmers have to graze their cattle and goats on a smaller area of land, they eat all the young vegetation. This will leave no vegetation to bind the soil.

Population rise & deforestation -
An increased population will lead to more pressure on resources such as water, fertile soil, and trees that may be cut down for building or firewood. This loss of trees will lead to less binding of sol with their roots

Impact:
Dry or degraded soil can be blown, or washed away. This is called **soil erosion.**
If good soil does not exist, vegetation can not grow.
This includes crops which farmers grow for food.
This can lead to:

- Conflict over resources
- Higher food prices
- Habitat destruction
- Migration (people moving away)
- Famine

Management strategies: "Methods to help control a situation"
2 methods to deal with desertification in Sudan

1) Use of appropriate technology
Cheap, sustainable and easily available materials to tackle desertification, while having a low impact on people's lives
E.g. - More efficient stoves, that use less firewood, such as Toyola Cooking Stoves, or Solar Stoves, so less trees are deforested
Benefits: Low cost, could provide jobs in making and selling,
Costs: Can be expensive compared with traditional methods of cooking, may not be available everywhere
Other example of appropriate technology
- Small rock walls to stop soil being washed or blown away and so reduce soil erosion

2) Afforestation - " the planting of trees"
E.g. The Great Green Wall -
Benefits: Roots will bind soil and reduce soil erosion, leaf litter adds nutrients to soil, creates habitats
Costs: Trees may die quickly in hot climate, trees can take 30+ years to grow

7. Where is Sudan

Describe the location of Sudan

Continent: _____

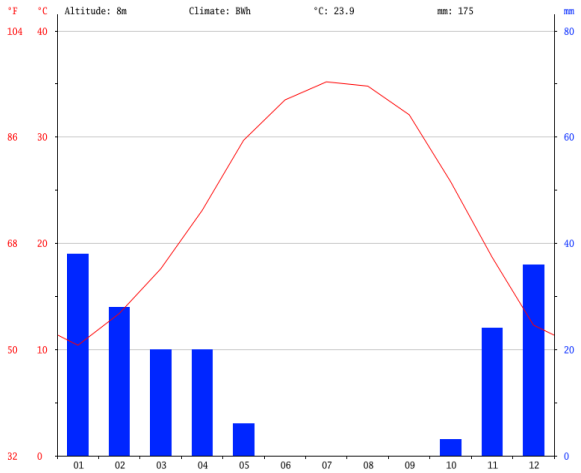
Neighbouring countries: _____

Capital: _____

Climate: _____

Bodies of water: _____

8. Climate



State the:
Wettest month
Driest month
Coldest month
Warmest month
What is the range in temperature

9. Desertification

Define Arid:

Define desertification: The process by which land becomes _____as a result of climate change, _____ or both.

Causes:

Vegetation needs to grow in soil, so its roots can_____. If the vegetation does not bind the soil it is vulnerable to_____

This can happen in 3 way

1) Explain Over cultivation - when farmers do not _____ and so the soil becomes _____. Vegetation can no longer grow in it, leading to no roots to bind the soil

2) Explain overgrazing -

_____

_____

_____

3) How can deforestation cause desertification?

Impact:

Dry or degraded soil can be blown, or washed away. This is called _____

If good soil does not exist, vegetation can not_____

This includes crops which farmers grow for food.

1) State 4 impacts of desertification

- .
- .
- .
- .

Define Management strategies:

_____

2 methods to deal with desertification in Sudan

1) State an appropriate technology used to tackle desertification

_____

2) State 2 Benefits: ,

3) State 2 costs:

Other example of appropriate technology

- Small rock walls to stop soil being washed or blown away and so reduce soil erosion

Explain how **Afforestation can tackle desertification**

_____

_____

_____

_____

_____

_____

_____

_____

Year 8 Geography Knowledge Organiser - Topic 3 - Population and Migration

1. The Census and the population of the United Kingdom

The Census is a national survey of all households.

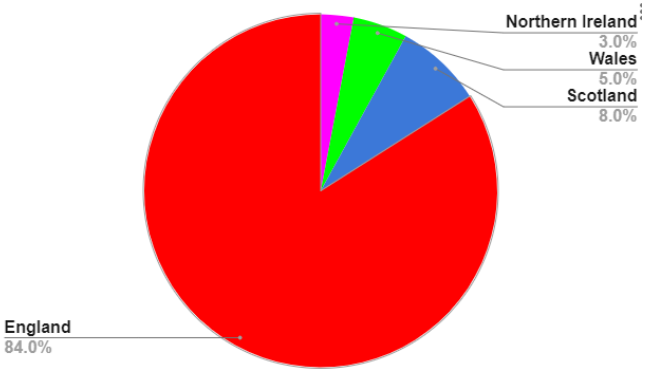
It collects information on:

- Population
- Age
- Education
- Household income

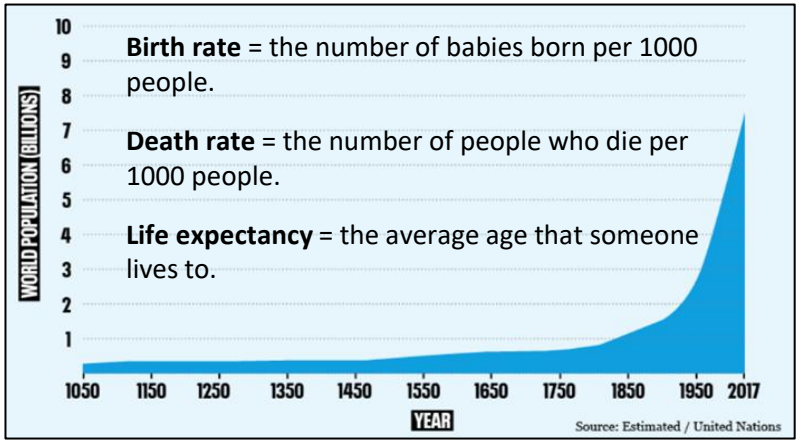
It supports planners in decision making around:

- Where to build schools, hospitals and libraries,
- Which parts of the country need roads and rail,

UK nations and population amounts



2. World Population Growth



Birth rate = the number of babies born per 1000 people.

Death rate = the number of people who die per 1000 people.

Life expectancy = the average age that someone lives to.

World **population** (the number of people) has increased rapidly in the last 200 years.

Reasons:

- **Reduced infant mortality**
  = fewer children dying before they are 5.
- **Improved healthcare** and **medicines**.
- **Improved standard of living**
  = better housing and food & water supplies.

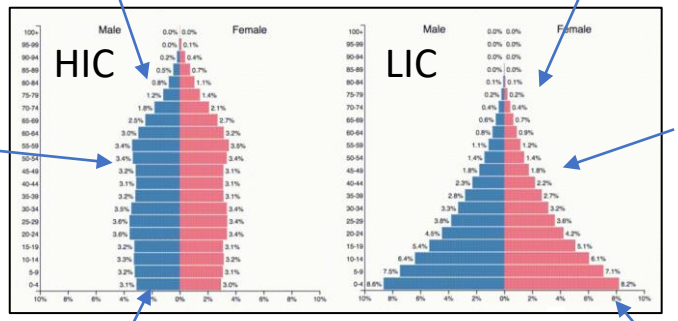
3. Population Pyramids

Population pyramids show information about a country's population. Their shape tells us about that country's birth rate, death rate, and life expectancy.

Wider top
= Ageing population
(long life expectancies)

Narrow top
= Youthful population
(short life expectancies)

Straight sides
= Low death rate (most people live to old age)



Steeply sloping sides
= High death rate (many people die young)

Narrow base =
Low birth rate

Wide base
= High birth rate

Year 8 Geography QUIZ YOURSELF -- Population and Migration

The Census and the population of the United Kingdom

1) What does the Census collect information on?

- .
- .
- .

2) Recall 2 things that this information can support.

- .
- .

UK nations and population amounts

1) State the 4 nations of the United Kingdom

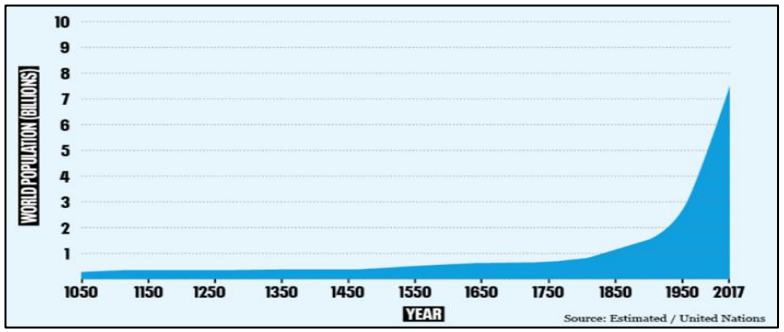
2) Which country has the highest population?

Birth rate = the number of _____ per 1000 people.

Death rate = the number of _____per 1000 people.

Life expectancy = the average_____

2. World Population Growth



1) What has happened to global population over the last 200 years?_____

State 3 reasons for this:

- **Reduced …**
- **Improved**…

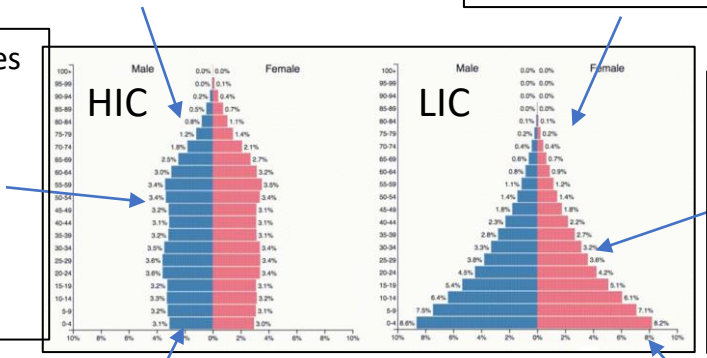
3. Population Pyramids

Label what these parts of these pyramids represent

Wider top
= Ageing population
(long life expectancies)

Narrow top
=

Straight sides
=



Steeply sloping sides
=

Narrow base =

Wide base
=

Urban = a built up, densely populated area (e.g. a city)

Rural = an area that is not built up, so is sparsely populated (e.g. the countryside)

Migration = the permanent movement of People to another place.

Push factor = something that makes you want to leave the area.

Pull Factor = something that makes you want to move to the area.

4. Migration: Push and Pull Factors

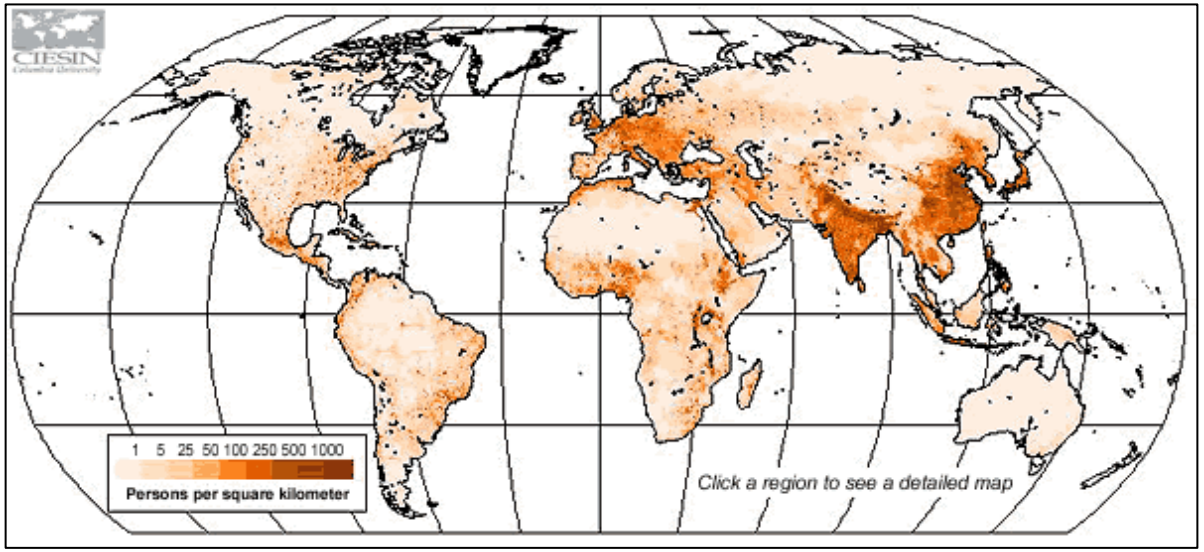
	Push Factors	Pull Factors
Rural	Lack of facilities Isolation Lack of jobs	Quiet Larger gardens Cheaper housing
Urban	Congestion Crowded space Expensive housing	More services Entertainment Job opportunities

National migration = people moving within a country.

International migration = people moving between countries.

5. Global Population Distribution

Distribution = where things are.



Sparsely Populated = not many people living there. People are spread out.

Reasons:

- **Mountainous** areas are hard to build on and difficult to travel through.
- **Harsh environments** = difficult areas to live, e.g. deserts with little water.
- **Landlocked** = not by the sea, so it's harder to trade (buy and sell things).

Densely populated = lots of people living there. People live close together.

Reasons:

- **Flat land near a river** is good for building on and gives a water source and way to trade.
- **Fertile soil** = soil that is good for growing crops.
- **Coastal** = by the sea, which allows easy trade by ship and food sources (fish).

Define Urban =

Define Rural =

Define Migration =

Define Push factor =

Define Pull Factor =

Recall Push and Pull Factors for rural and urban areas

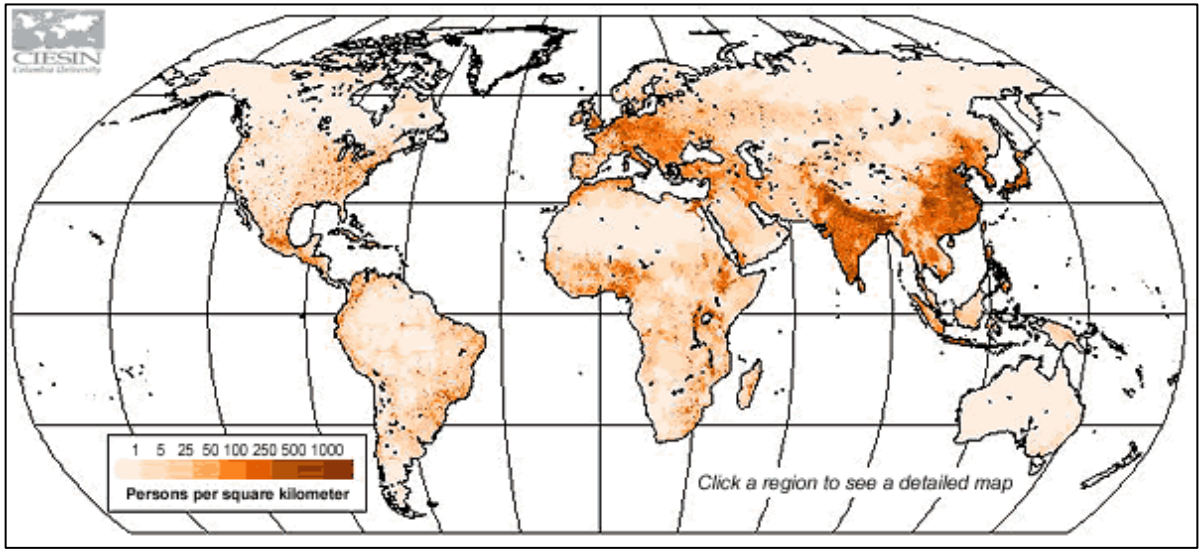
	Push Factors	Pull Factors
Rural		
Urban		

Define National migration =

Define International migration =

5. Global Population Distribution

Distribution = where things are.



Define Sparsely Populated =

Give Reasons why the following will lead to sparsely populated areas:

- **Mountainous**
- **Harsh environments =**
- **Landlocked**

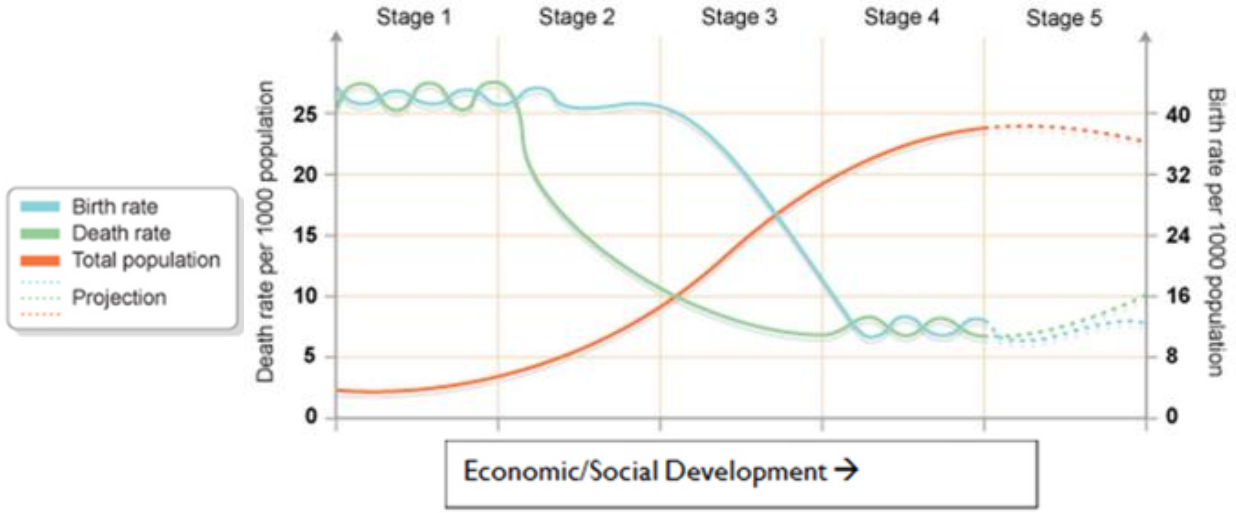
Define Densely populated =

Give **Reasons why the following will lead to densely populated areas:**

- **Flat land near a river**
- **Fertile soil =**
- **Coastal =**

6. The Demographic Transition Model (DTM)

The DTM is a graph which shows how a country's birth rate, death rate, and total population change over time as it develops.



	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Birth rate	High	High	Falling	Low	Low
Death rate	High	Falling	Falling	Low	Increasing
Total population	Low	Increasing	Increasing	High	Falling
Development	Remote tribes	LIC	NEE	HIC	Ageing HIC

7. Ageing and Youthful Populations

Ageing population = large percentage of older people in the population.

Youthful population = a large percentage of younger people in the population.

Dependent population = one with high costs, e.g. ageing or youthful populations.

	Ageing (Japan)	Youthful (Mexico)
Causes	• Low birth rates due to women choosing careers and having children later. • Long life expectancy due to improved medicine and housing.	• High birth rate due to young people having many children without cheap contraception. • Short life expectancy due to poor health care facilities and housing.
Impacts	• Strain (pressure) on the healthcare system and high costs.	• Strain (pressure) on schooling and high costs.

Impacts of International Migration for the UK:

Benefits

- More workers, so UK businesses can expand.
- Cultural advantages for the UK, e.g. new restaurants.

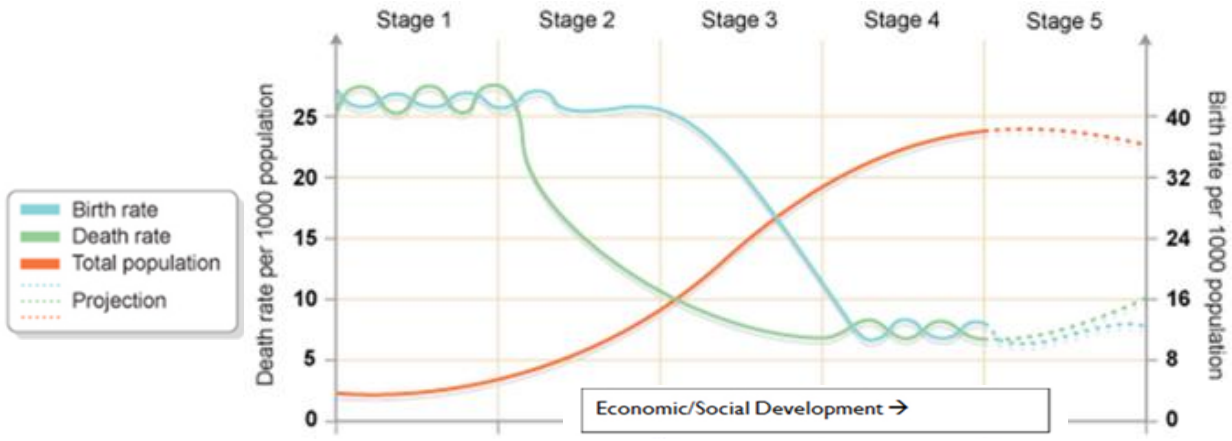
Costs

- Increased demand for housing and jobs.
- Racial tension between migrants and locals.

6. The Demographic Transition Model (DTM)

1) What is the DTM?

_____



2) Complete the following table with the Birth/Death and population levels at different stages of development.

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Birth rate	High	High	Falling	Low	Low
Death rate	High				
Total population	Low				
Development	Remote tribes				Ageing HIC

7. Ageing and Youthful Populations

Define Ageing population =

Define Youthful population =

Define Dependent population =

1) Complete the causes and impacts of a youthful or aging population in the table

	Ageing (Japan)	Youthful (Mexico)
Causes		
Impacts		

Complete 2 benefits of international migration to the UK

Complete 2 costs

8. Population control

To manage the population numbers in a country, so that it can function properly, and there are enough resources that everyone can live comfortably.

Country	Population control method
China - Decrease pop.	One Child Policy ran from 1980 - 2015.
Denmark - Increase	Do it for Denmark adverts
Scandinavia & France - Increase	Very good maternity pay
Singapore - Decrease	Stop at two campaign - propoganda

9. Causes and Impacts of Voluntary and forced migration

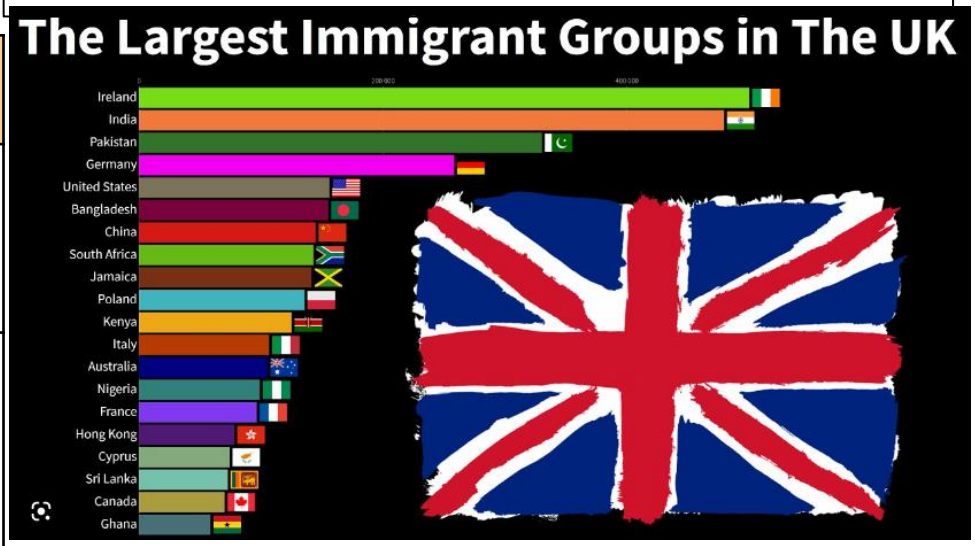
	Causes	Impacts
Voluntary Migration	Search for better jobs, better services	Larger skilled workforce, cultural diversity, potential for strain on local services
Forced Migration	Fleeing discrimination or persecution due to regligion, sexual orientation, gender or ethnicity Fleeing conflict or natural disaster	Increased cultural diversity (languages, food, music, etc) Increased pressure on public services or finances E.g food aid or management of a refugee camp

9. Types of migration

Migrant - Moving from one place to another for work or a better standard of living (this can be temporary)
Immigrant - A person who comes to live permanently in a forign country
Refugee - A person seeking safety in another country, fleeing from persecution or conflict.

10. Migration in the UK

The population of the UK is made of migrants from all over the world. Because of this it is known as being diverse and multicultural.
Multicultural = A society that contains several cultural or ethnic groups



How might populations change into the future?
As the world develops, the DTM predicts that population growth will slow due to increases in wealth, education and healthcare
The UN predicts that the world will never see its 12 Billionth child born.

8. Population control

To manage the _____ in a country, so that it can _____, and there are enough _____ that everyone can live comfortably.

1) Which countries did what as methods of population control?

Country	Population control method
China	
Denmark	
	Very good maternity pay
	National No Condom Day

What are the causes and impacts of Voluntary and forced migration

	Causes	Impacts
Voluntary Migration	Search for better jobs, better services	
Forced Migration		Increased cultural diversity (languages, food, music, etc)

9. Types of migration

Define Migrant -

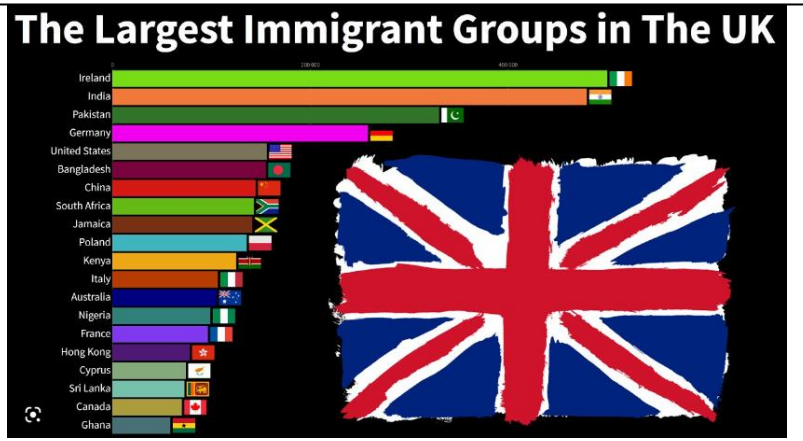
Define Immigrant -

Define Refugee -

10. Migration in the UK

The population of the UK is made of _____ Because of this it is known as being _____ and multicultural.

Define Multicultural =



How might populations change into the future?

As the world develops, the DTM predicts that population growth will_____ due to _____and healthcare

The UN predicts that the world will never see its 12 Billionth child born.

Year 8 Geography Knowledge Organiser - Topic 3 - Climate Change

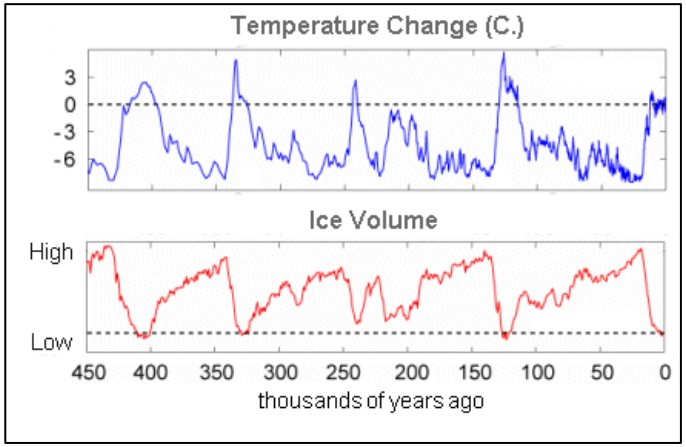
Climate Change: **A global change in the Earth's climate. This can be global warming or global cooling.**

1. Past evidence

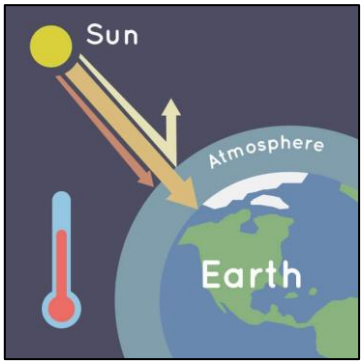
The Earth is 4.55 Billion years old. Throughout that time there have naturally been **Glacial periods** (colder) and **Interglacial periods** (warmer). During a Glacial period there is more ice stretching from polar regions

Ways to measure historical climates of the earth thousands of years ago:

- Ice cores
- Fossilized pollen/ sediment cores
- Tree rings



2. Natural causes of Climate change



The greenhouse effect:
Solar radiation is sent to earth (short wave radiation). This heats up the ground. Much of this heat escapes to space (long wave radiation). But some is trapped by naturally occurring molecules of greenhouse gases in the atmosphere leading to a warm and livable planet

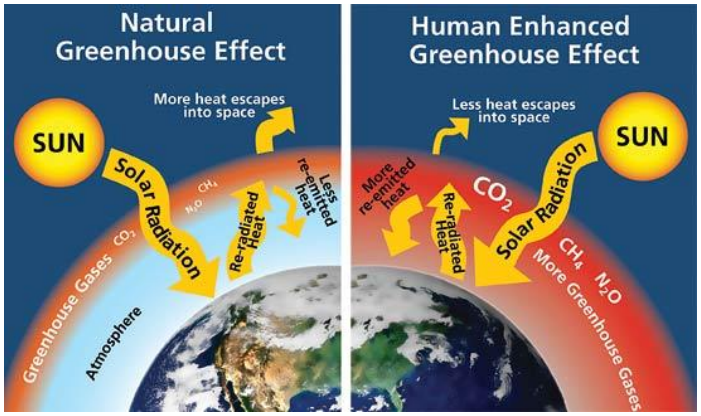
2 factors influencing the Earth's climate

- The amount of Solar radiation
- The amount of Greenhouse gases in the atmosphere

Causes of Natural changes in Earth's climate

- Solar output/ sunspots (increased solar radiation
- Change in Earth's orbit around the sun (increased/ decreased solar radiation)
- Volcanic eruptions (increased sulfur in atmosphere reflecting solar radiation)

3. Human causes of climate change



The Enhanced Greenhouse Effect.
More greenhouses gases released into the atmosphere = more of heat being trapped in the atmosphere rather than escaping to space.

Greenhouse Gasses = Carbon Dioxide and Methane

- **Burning of fossil fuels**
- Coal - Generating Electricity in power stations
- Oil - Transport
- Gas - Electricity and Heating

Agriculture
Crops: Carbon Dioxide is used in fertiliser
Livestock (animals): generate methane from digestion

Deforestation
Releases Carbon dioxide when cut down and burnt or decomposed

Landfill - releases methane during decomposition

Year 8 Geography Knowledge Organiser - Topic 3 - Climate Change

Climate Change: **A global change in the Earth's climate. This can be global warming or _____.**

1. Past evidence

The Earth is 4.55 Billion years old. Throughout that time there have naturally been _____**periods** (colder) and _____ **period**s (warmer). During a Glacial period there is more ice stretching from _____regions

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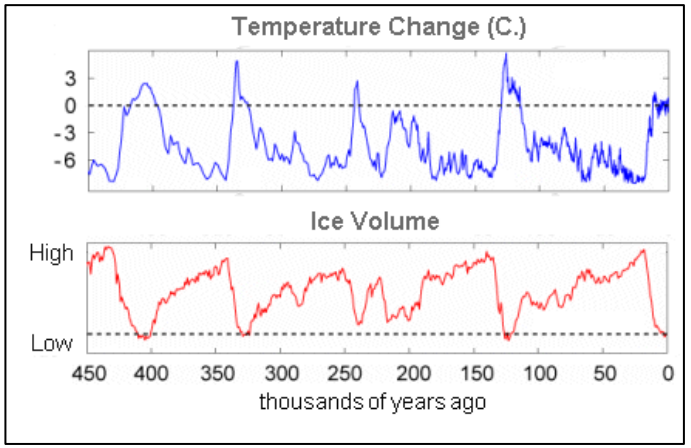

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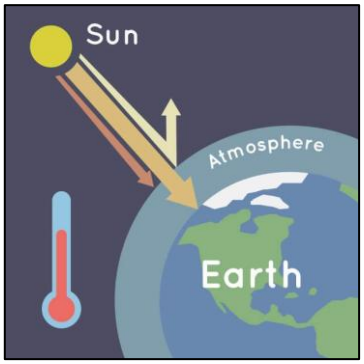

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Solar _____ is sent to earth (_____ wave radiation). This heats up the _____. Much of this heat escapes to space (_____). But some is trapped by naturally occurring molecules of _____ in the atmosphere leading to a warm and livable planet

2 factors influencing the Earth's climate

- The amount of _____ radiation
- The amount of _____ in the atmosphere

Causes of Natural changes in Earth's climate

- 1) Solar _____
- 2) Change in Earth's orbit around the sun (increased/ decreased _____)
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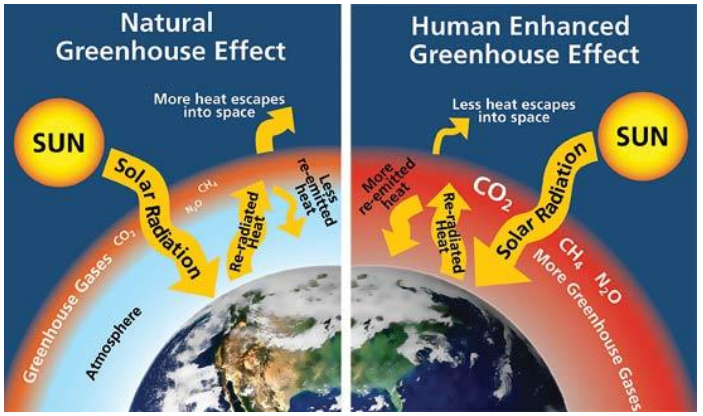


The Enhanced Greenhouse Effect.
More greenhouses gases released into the atmosphere
=_____.

Greenhouse Gasses =
_____ and Methane

- **Burning of fossil fuels**
- Coal- _____
- _____- Transport
- _____ - Electricity and _____

Agriculture
Crops: Carbon Dioxide is ----------

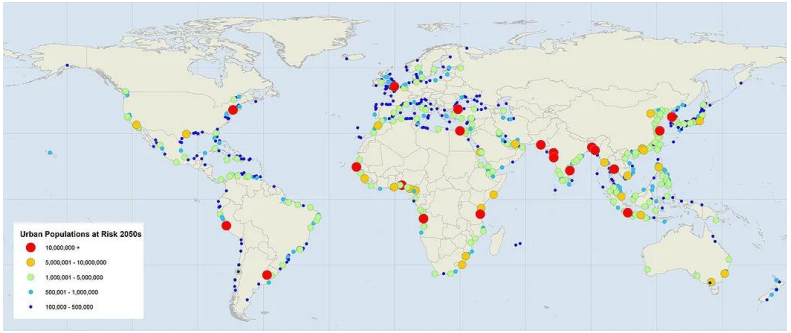
Livestock (animals): generate _____

Deforestation
Releases C_____
_____

Landfill - releases _____during decomposition

Year 8 Geography Knowledge Organiser - Topic 3 - Climate Change

4. Impacts of climate change



Global:

- Ice sheets and glaciers melting
- Sea levels rising
- Extreme weather increases
    - Droughts
    - Tropical storms

Local (in the UK)

Weather patterns are more extreme.

- Wetter colder winters
- Dryer warmer summers
- Extreme weather: heat waves, droughts, blizzards, flooding

Economic, social, environmental effects of this.

Glaciers melting - loss of habitats, loss of fresh water source, loss of reflective power of white ice on solar radiation, impacts on ocean currents and wider climates

Sea level rise - coastal cities and communities at risk of flooding, beach erosion

Droughts - Farmers unable to grow and sell crops, unable to provide food - famine, migration, lack of security, lack of water for wild flora and fauna, loss of habitats

Tropical Storms - People killed/ injured, damage to houses and infrastructure, damage to businesses and the economy,

In the UK - Extreme and wilder weather impacting infrastructure, homes, daily life, the economy, death from heat exhaustion of the elderly

5. Mitigation and Adaptation

Mitigation *- Reducing the amount of Greenhouse Gasses in the Atmosphere*

Adaptation *- Action taken to reduce the risk and live with the impacts of climate change*

Examples of Mitigation

1) Change in Transportation

- Public transport
- Electric cars
- Encourage cycle routes

2) International agreements to reduce greenhouse gasses

3) Individual actions

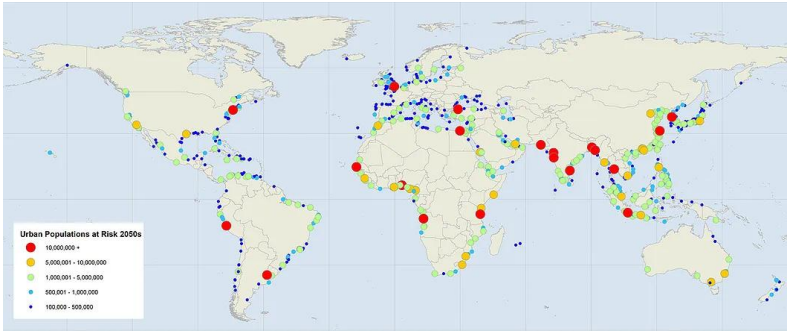
- Diet
- Turn off appliances
- Lower heating in homes

Examples of Adaptation

1) **Build flood defences such as sea walls**
2) **Change infrastructure and build house on stilts**
3) **Develop drought resistant crops**

Year 8 Geography Knowledge Organiser - Topic 3 - Climate Change

4. Impacts of climate change



Global:

- _____melting
- Sea levels _____
- Extreme weather _____
  - _____
  - Tropical storms

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- Extreme weather:_____s, droughts, _____, _____

Economic, social, environmental effects of this.

Glaciers melting - loss of _____, loss of fresh water source, loss of _____ on solar radiation, impacts on ocean _____ and wider climates

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5. Mitigation and Adaptation

Mitigation *- Reducing the amount of*

_____

_____

Adaptation *- Action taken to*

_____

_____

Examples of Mitigation

1) Change in Transportation

- 1)
- 2)
- 3)

2) International agreements to

_____

_____

3) Individual actions

- Diet
- _____

Examples of Adaptation

1) .

1) .

1) .

Year 8 Geography Knowledge Organiser - Topic 3 - Tectonic Hazards

Natural event = something that happens naturally in the world, e.g. heavy rain.

Natural hazard = a natural event which poses a risk for human lives, communities or property, e.g. a risk of flooding.

Flood

Natural disaster = when a natural hazard actually happens and harms humans, it becomes a natural disaster, e.g. an actual flood.

Types of Plate Margin

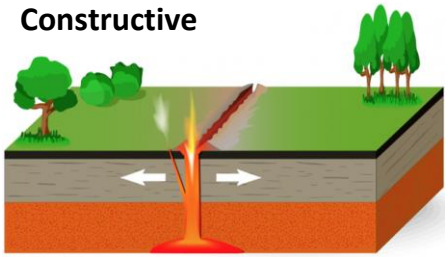
Tectonic plate = a section of the Earth's crust (surface).

Plate margin = the edge of two tectonic plates. Where different plates meet.

Magma = molten (melted) rock underneath tectonic plates.

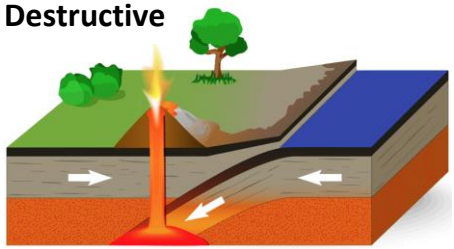
Hotspot = where magma rises through a tectonic plate in the middle, forming volcanoes away from plate margins, e.g. in Hawaii.

Constructive



1. Two plates move apart.
2. Magma rises to fill the gap producing constant, gentle shield volcanoes

Destructive

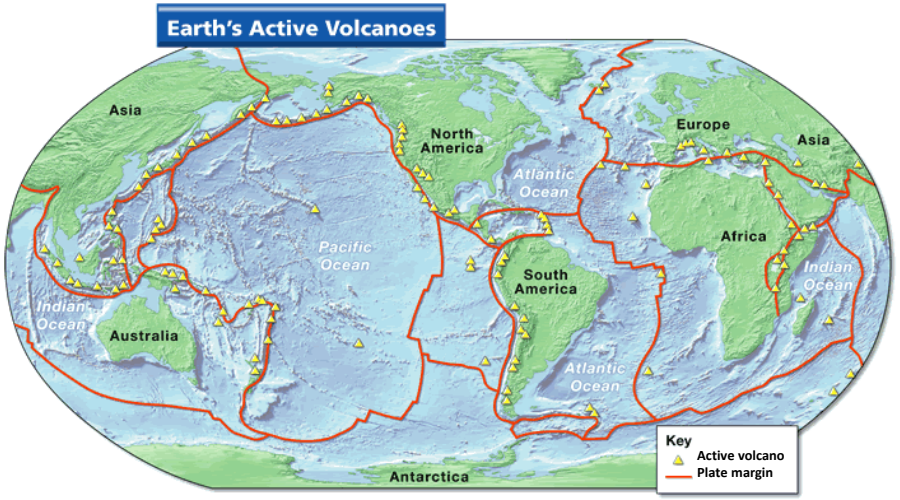


1. Two plates move together.
2. The lower plate sinks and melts. This is called **subduction**.
3. This melting produces light magma, which rises to the surface and produces violent composite volcanoes.

Volcano Distribution

Distribution = the pattern of where things are located.

Volcanoes are mostly located on or near constructive and destructive plate margins.



Primary and Secondary Effects of Volcanoes

Eruption = when magma and gases are released from a volcano.

	Social	Environmental	Economic
Primary Effects (Immediate)	Homes destroyed and people killed by lava flows gases or buried by ash	Plants destroyed and animals killed by lava flows or covered in ash	Very costly damage to buildings and **infrastructure** (roads, cables, etc.)
Secondary Effects (Happen later because of primary effects)	Homelessness and some children become orphans	Biodiversity decreases and plants die as they get less sunlight for photosynthesis	Expensive repairs needed and businesses may have to close down

Year 8 Geography Knowledge Organiser - Topic 3 - Tectonic Hazards

Natural event = something that happens

_____

Natural hazard = a natural event which poses a risk for

_____

Flood

Natural disaster = when a natural hazard actually happens and harms _____, it becomes a_____ _____, e.g. an actual flood.

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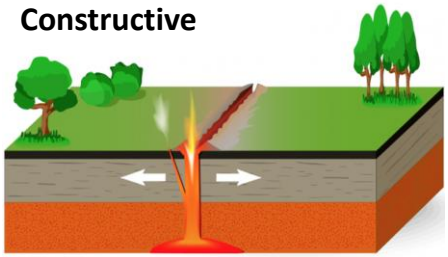
Constructive



1. Two plates _____.

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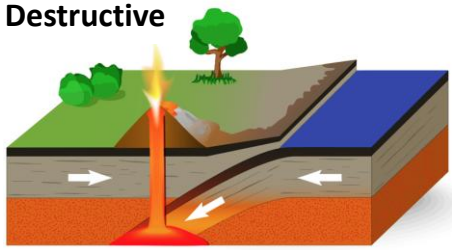
Destructive



1. Two plates move _____.

2. The lower plate sinks and melts. This is called _____.

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Volcano Distribution

Distribution = _____.

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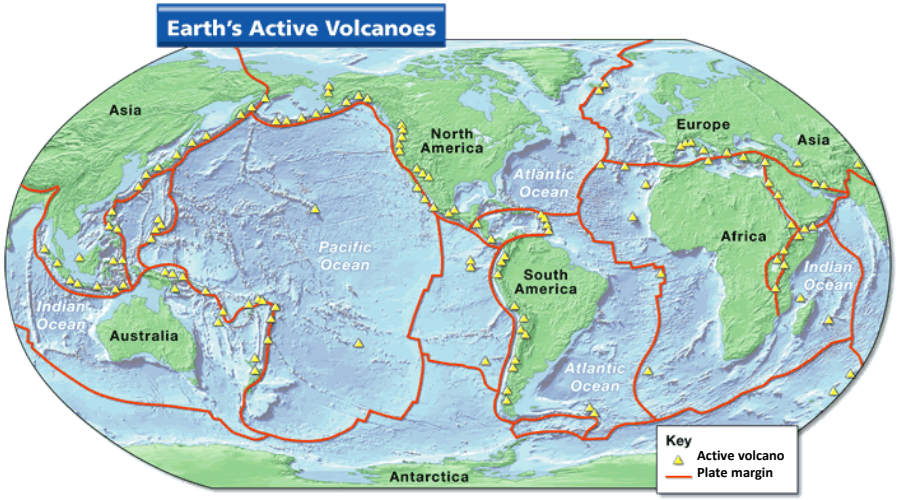

Primary and Secondary Effects of Volcanoes

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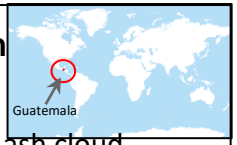
Secondary Effects (Happen later because of primary effects)	Homelessness and some children become orphans		

Pyroclastic flow = a fast flowing mix of hot gas, rock, and lava released during an eruption. Travels at over 60 miles per hour and destroys and burns everything in its path.

VEI = Volcanic Explosivity Index. A scale measuring the 'explosiveness' of eruptions. VEI is measured from 0 (smallest eruptions) to 8 (largest eruptions ever recorded).

2018 Volcán de Fuego Eruption



Location: Guatemala, Central America
Eruption: VEI 4. Produced a 15 km tall ash cloud. Smaller eruptions continued for a week.
Effects:

- 190 deaths + 2000 people missing under ash.
- 81 km^2 of crops destroyed by pyroclastic flows.
- Guatemala's International Airport closed for 24 hours due to thick ash on the runway

1983-2018 Kīlauea Eruption

Location: Hawaii, Pacific Ocean

Eruption: Ranged from VEI 0 to VEI 3. Up to a 9 km tall ash cloud. Erupted nearly continuously for 35 years.
Effects:

- 214 homes destroyed by slow lava flows.
- 2 km^2 of new land formed by lava cooling lava.
- Roads blocked by lava and tourist beaches destroyed.

Why People Live Near Volcanoes

Areas near volcanoes do have some benefits, e.g:

Fertile soil
Tourism jobs

People may also live there because of:

Friends & family
Low income
(no option to leave)

Low perceived risk
(they think there's a low risk when there's not)

Responses to Volcanoes

Immediate responses = things done straight after an eruption to help the affected people and area, e.g:

- **Evacuation** (people leaving the area).
- Providing food, water, and medical **aid**.

Long term responses = things done in the weeks and months after an eruption to help, e.g:

- Rebuilding damaged buildings.
- Investing (putting money) into local businesses which may be damaged.

Reducing the Risk of Volcanoes

Monitoring = watching what is happening to a volcano over time, e.g. using **thermal imaging** to measure changes in the ground's temperature.

Prediction = using the information from monitoring to warn people if there's a risk of an eruption, so they can **evacuate**.

Planning = Planning the quickest and safest **evacuation routes**. Also things like having an **emergency bag** packed and ready with food, water, spare clothes, a phone, and medication can help you evacuate quickly.

Protection = Pyroclastic flows, lava flows, lahars and ash fall cannot be defended against. **Earth embankments** (walls/ridges) or explosives can help to divert lava flows away from property in some cases.

Supervolcanoes

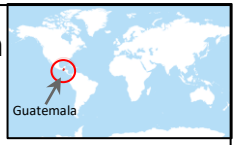
Supervolcano = a massive volcano which forms a **caldera** (dip) in the land after erupting. Supervolcanoes have a VEI of 8.

Supervolcanoes occur when a large **magma chamber** builds up under the Earth's crust, causing the land above to **bulge** (get bigger). Supervolcano eruptions are hundreds of thousands of years apart.

Pyroclastic flow = a fast flowing mix of_____, rock, and _____ released during an eruption. Travels at over _____miles per hour and destroys and burns everything in its path.

VEI = Volcanic Explosivity Index. A scale measuring the '_____' of _____-.
VEI is measured from 0 (_____ eruptions) to 8 (_____ eruptions ever recorded).

2018 Volcán de Fuego Eruption



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1) _____ **jobs**

People may also live there because of:

1) **Friends & family**

2)

3) **Low perceived risk** (they think there's a low risk when there's not)

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Immediate responses = things done _____an eruption to help the affected people and area, e.g:

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- Providing food, _____, and medical **aid**.

Long term responses = things done in the weeks and months after an eruption to help, e.g:

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- Investing (putting money) into _____.

A Supervolcano is formed when…

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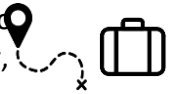
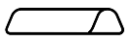


Planning = Planning the quickest and safest _____**routes**. Also things like having an _____ packed and ready with food, water, spare clothes, a phone, and medication can help you evacuate quickly.



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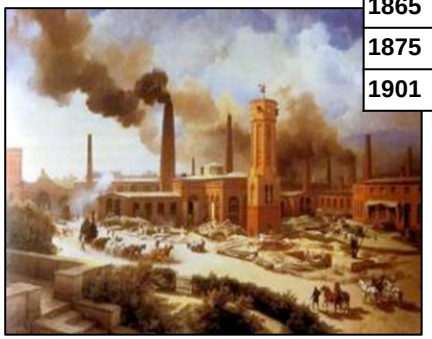
Y8 History Knowledge Organiser: Industrial Revolution

BRITAIN 1700

- Vastly Rural
- Most working on farms and producing products by hand
- Growing population in Britain
- Countryside



BRITAIN 1825

- Towns began to develop
- People began to migrate to towns for work in industries.
- Factories and workhouses developed new ways of production as part of the **industrial revolution.**
- This saw the introduction of an urban lifestyle and the landscape shifting towards built up areas rather than rural countryside.

BRITAIN 1900

- Industry was now a major part of everyday life in Britain.
- Mass migration to towns and cities,
- Populations rise considerably
- London, Manchester, Liverpool and Glasgow.

1760	Industrial Revolution begins in Britain with textiles
1779	Spinning Mule invented by Samuel Crompton
1796	Edward Jenner uses vaccinations for the first time against smallpox
1801	Population of Britain is 9 million
1825	First passenger railway opens
1833	Law bans under 9s from working in mills. Children 13-18 not to work for more than 69 hours a week
1848	Cholera strikes
1865	Antiseptic surgery introduced
1875	Law banning chimney boys
1901	Population of Britain is 41 million

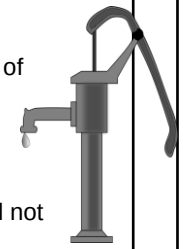
Population	number of people living in an area
Jenner	English scientist who was the inventor of the smallpox vaccine, the world's first vaccine in 1796.
Textiles	cloth made by weaving or knitting fibres together.
Cholera	Disease causing diarrhoea and was spread by faeces in the streets.
Agriculture	process of farming and producing food and crops
Canals	Transportation around Britain affordable and quick along man-made waterways
Sanitation	Cleanliness of the streets and environment.
Poverty	Lack fo basic human needs: water, nutrition, health, education and shelter
Industry	process of making products by using machines and factories.
Mass production	process of making products by using machines and factories on huge scale through factory system
Richard Arkwright	lead inventor and entrepreneur during the Industrial period.
John Snow	Discovered the link between water, sewage and cholera in 1849.

Y8 History Knowledge Organiser: Industrial Revolution

HEALTH AND MEDICINE

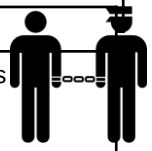
- Poor living conditions and overcrowded slums meant that diseases spread quickly.
- People caught diseases such as; tuberculosis, typhoid, cholera, influenza and many other killer disease.
- Some 'Quack' doctors who pretended to have medical skills were used by people as they couldn't afford doctors

John Snow



- 1842 government report to find out causes of poor health in urban London
- 140000 died of cholera in London in 1848
- Snow found it was contaminated water and not **miasma** (foul air) that caused cholera
- Removed the handle of the water pump and people became healthier

Urbanisation + poverty + lack of law = CRIME



75% Crime involved theft – Overcrowded cities provided excellent opportunities for pickpockets.

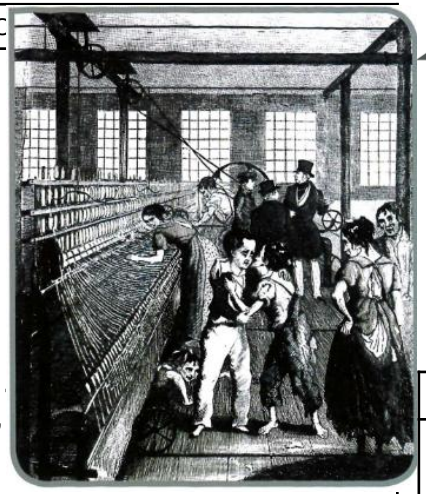
Metropolitan Police – 1829, saw 3200 police men introduced onto the streets of London. Police had to be literate, fairly healthy, under 35 and taller than 1.65cm. They wore dark blue uniforms with tall hats and carried truncheons.

Developments in Science and Technology – Forensic science developed e.g. photography and fingerprinting

LIVING CONDITIONS

- Poor working class lived in cramped and dirty housing, shared by numerous families.
- These conditions led to the spread of disease.
- Unhygienic, had little air or sunlight, however, rent was low which was seen as one positive.

WORKING CONDITIONS



Common industries:

- Mining
- Factories
- Mills.

As many of the working class were poor, families including **children had to go to work.**

Working Conditions
Serious risk of death , injury

Wages – Low and people worked long hours, up to 16 hrs a day.

Child Labour –

- Children as young as two were employed and worked up to 12 hours a day.
- Punished if not working hard enough
- Orphans like Esther Price also employed with employers providing food and shelter for them, without an actual wage.

TRANSPORTATION

Canals

- Transporting goods around Britain.
- By 1830, around 40,000 people working on the canal network.
- They were more dependable than roads.

Road -

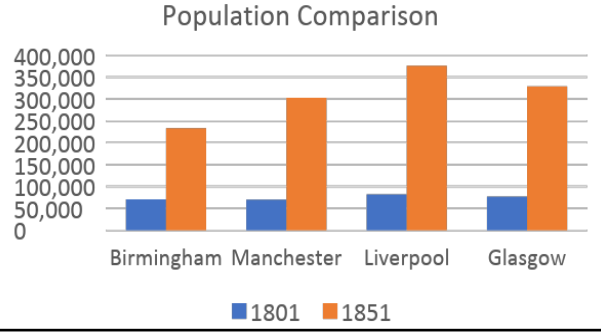
- Badly surfaced which could damage transport
- These were improved towards the end of the Industrial revolution.

Railway -

- Cost effective method to transport goods and people
- Building and running of the rail network created a demand for coal and iron, meaning more people were put to work

POPULATION

Unemployment in rural countryside + Demand for work in cities + improved transport = **urbanisation**



1. **In what year did the Industrial Revolution begin in Britain, and which industry did it start with?**
2. **What was Britain’s population in 1801 compared to its population in 1901?**
3. **Who invented the "Spinning Mule" in 1779?**
4. **What did Edward Jenner use for the first time in 1796 to fight smallpox?**
5. **In 1833, a new law banned children under what age from working in mills?**
6. **According to the "Britain 1700" box, how were most products produced before the revolution?**
7. **Name two of the major cities mentioned in the "Britain 1900" section that saw mass migration.**
8. **What is the definition of "Textiles" according to the vocabulary box?**
9. **Who discovered the link between water, sewage, and cholera in 1849?**
10. **What is "Mass Production"?**
11. **What were "Quack" doctors?**
12. **John Snow discovered that cholera was caused by contaminated water, but what did people *previously* believe caused it?**
13. **In 1848, how many people died of cholera in London?**
14. **According to the "Living Conditions" section, what was seen as the one "positive" of the unhygienic housing?**
15. **How many hours a day could wages-earners work in the common industries?**
16. **Children as young as what age were employed, and how many hours could they work?**
17. **What percentage of crime in the overcrowded cities involved theft?**
18. **In 1829, the Metropolitan Police were introduced. Name two requirements a person needed to meet to become a police officer.**
19. **Why were canals considered better than roads for transporting goods in the early Industrial Revolution?**
20. **Looking at the Population Comparison graph, which city saw the biggest jump in population between 1801 and 1851?**

Timeline:

Victorian Era - 1838-1901

1897 - Millicent Fawcett creates the NUWSS, the Suffragist movement

1903 - Suffragettes formed through the WSPU

May 1911 - Conciliation Bill

November 1911 - Franchise Bill (not Conciliation)

1913 - Epsom Race, where Emily Davison was hit by the King's horse

August 1914 - World War One

Did women achieve equality in Britain 1900-1930? Knowledge Organiser

In Victorian England:

- Middle-class women treated differently to lower-class women.
- Middle-class women meant to be **'angels of the house',** meaning they had to look after children, be pure and beautiful, be domestic servants to their husbands and be treated as **property**.
- They could legally be **abused** and **divorced** (only by the husband's command). Women were not expected to be 'intelligent' **(blue stocking),** but delicate, subservient and submissive to the husband.

"Beautiful but not sexual.. Learned but not intelligent.."

Despite the fact that **women had to pay tax,** they were **not allowed the vote.** This was unfair because they contributed to Britain's wealth without having any say in how that wealth was spent.

1897 Millicent Fawcett set up the **NUWSS (National Union of Women's Social Suffrage)**. (**suffragists**) This group campaigned through peaceful means;

- Posters
- Rallies
- Lobbying
- Writing letters
- Speeches
- Petitions

Fawcett believed this movement would move **'like a glacier'** ; huge changes, slowly, over a long period of time.

Taking the **'high moral ground'** could enfranchisement be achieved.

The NUWSS inspired other groups to form, such as the **WSPU (Women's Social and Political Union)**, formed by the Pankhurst family.

S**uffragettes** believed that traditional tactics had not worked, but violence would. Their slogan was **'deeds not words'**, meaning action, not promises.

- Peaceful means (see Suffragists)
- Bombing
- Arson of property and mail boxes
- Vandalism
- Chaining to rails
- Hunger Strikes
- Refusing to pay taxes

Hunger strikes led to the **Cat and Mouse Act**, where they would release suffragettes from prison and re-arrest them when they were healthier.

Vocabulary:

- **Enfranchisement** - the vote
- **Inequality** - Not fair
- **Suffrage** - equality
- **Suffragette** - more violent protest
- **Suffragists** - more peaceful protest
- **Martyr** - Someone who died for a cause
- **Patriarchy** - Society dominated by men
- **High Moral Ground -** Deciding to be virtuous
- **Unemployment Benefit** - income when ill, disabled or unemployed
- **Pensions** - income after retirement

Emily Davison was a suffragette who died by being hit by the **King's Horse at Epsom in 1913.** Interpretations differ on Emily Davison's real intentions that day.

Intentional?	Not Intentional?
•She must have known she'd be seriously injured •History of extreme protest (hunger strike)	•She practiced pinning pennants to horses •She had bought a return ticket

November 1918 - Armistice (end of WWI)

1918 - Representation of the People Act

1919 - Nursing becomes a profession

1921 - Women can claim unemployment benefit and pensions

1928 - Amendment to the Representation of the People Act (women over 21 without property can vote)

1975 - Sex Discrimination Act

World War One in 1914 caused a **radical** change to many Votes for Women campaigns. Some Votes for Women groups fought the government, many helped by **temporarily halting the campaign.**

Women started working in:

- Education as teachers
- Agricultural workers as farmers (Women's Land Army)
- Heavy Industry (steel and iron) manufacturing
- Bus and train conductors

Many women, like Kate Shephard joined the **Voluntary Aid Detachment (VAD)**: driving ambulances, nursing, supplying ammunition and gathering intelligence for the army.

Some helped Britain by manufacturing armaments. Known as **'canaries'** because of toxic chemicals which stained their skin, and often killed them through disease.
Warehouses of ammunition would explode, also killing women workers in their hundreds.

The Votes for Women Campaigns had long-term impacts

Britain did not necessarily achieve full equality.

Equality means more than having the right to vote, but the **right of opportunity, freedom from harm and harassment, liberty to be heard and to be able to express your identity.**

1970 Women's earnings were half of men's
1970 Equal pay was introduced
1975 Sex Discrimination Act
1989 Women's average earnings still ¾ of men's

Social and Economic Consequences of WWI

Women became more **independent** and wealthier from the work and opportunities afforded to them because of World War One.

1. Women experienced greater social freedoms, such as **smoking**, dressing in more liberal clothes such as **shorter dresses**, **dining out alone**.

1. Women enjoyed greater **economic** opportunities: **unemployment benefits and pensions in 1921**, more more to spend in society on cafes, new career opportunities such as **nursing**

1. Women enjoyed new **legal** freedoms: in **1918 women over 30 could vote**, in 1919 women could do **jury service,** be lawyers and work in the Civil Service.

Was the War or campaigning which won women the vote?

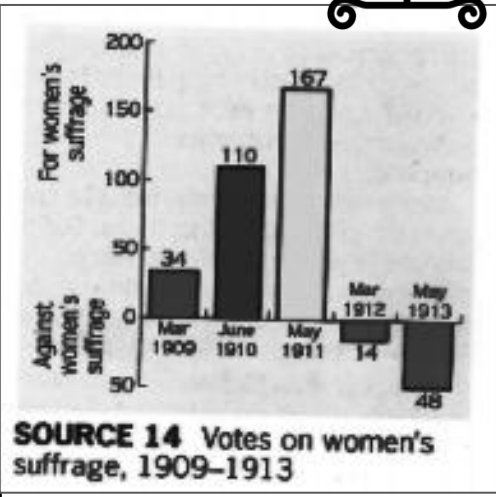
Reasons For:

- In **1918** Parliament passed the **Law for the Representation of the People Act.** This meant women over 30 with property could vote.

Reasons Against:

- Only women over 30 with property were given the vote, not the poorer class, because they could threaten the main structure of **patriarchal power.**

- **Conciliation Bill** was dropped in November 1911 (despite having a majority of 167 votes) suggesting it wouldn't happen



SOURCE 14 Votes on women's suffrage, 1909–1913

1. **In Victorian England, what did the term "angels of the house" mean for middle-class women?**
2. **What was a "blue stocking"?**
3. **According to the timeline, in what year did Millicent Fawcett create the NUWSS?**
4. **In the vocabulary box, what is the difference between a "Suffragist" and a "Suffragette"?**
5. **What was the slogan of the WSPU, and what did it mean?**
6. **Millicent Fawcett believed the suffrage movement would move "like a glacier." What did she mean by this?**
7. **Name three violent or radical methods used by Suffragettes to campaign for the vote.**
8. **What was the "Cat and Mouse Act"?**
9. **Who died after being hit by the King's horse at the Epsom Race in 1913?**
10. **Give one piece of evidence suggesting Emily Davison's actions at the Epsom Race were NOT intentional.**
11. **What major event happened in November 1918 that marked the end of World War One?**
12. **Name two types of jobs women started doing during the war while men were away fighting.**
13. **Why were some women who manufactured armaments known as "canaries"?**
14. **According to the "Social and Economic Consequences" section, what were two examples of new social freedoms women experienced?**
15. **The Representation of the People Act was passed in 1918. Which specific group of women was granted the vote by this law?**
16. **In what year were women first able to claim unemployment benefits and pensions?**
17. **What legal change in 1919 allowed women to become lawyers and work in the Civil Service?**
18. **According to the graph (Source 14), in which month and year was the support "For women's suffrage" at its highest?**
19. **An amendment to the Representation of the People Act was made in 1928. How did this change who could vote?**
20. **Despite achieving the vote, inequality remained. By 1989, what were women's average earnings compared to men's?**

Timeline

1171: Henry II declared 'Lord of Ireland'

1534: Act of Supremacy

1542: Henry VIII declared King of Ireland

1594-1603: Nine Years' War

1609-: Plantation of Ulster

1641-53: Eleven Years' War

1649: Massacres of Drogheda and Wexford

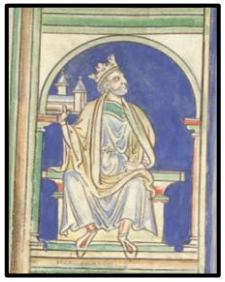
1690: Battle of the Boyne

Richard 'Strongbow' de Clare

How did Britain's relationship with Ireland change 1534-1998?

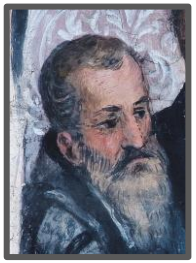
How did England first become involved in Ireland?

- Norman Conquest of England (1066) and Angevin Empire (1154) leads to rich, powerful and aggressive new English lords and kings.
- Richard 'Strongbow' de Clare invades Leinster for wealth and power (1170)
- Henry II recognised as 'Lord of Ireland' by the Pope through Laudabiliter (1171).
- Ireland divided into two communities: **Irish** and **Old English**



Henry II 'Lord of Ireland'

James II



Hugh O'Neill

The Reformation and Tudor Conquest

- Henry VIII passes the 'Act of Supremacy', separating England from the Catholic Church and joining the Reformation. He (and his children Edward VI and Elizabeth I) drag Ireland along with them.
- Ireland was no more or less Catholic than England had been previously. But from now on, Protestantism becomes associated with English imperialism - and Catholicism with Irish patriotism.
- Nine Years' War: Hugh O'Neill leads resistance to English (Protestant) rule, with the support of England's Catholic enemy, Spain. To some extent unites the 'Old English' with the native Irish through their shared Catholicism. Ultimate English victory at the Battle of Kinsale (1602).
- A third group is created in Ireland: the **New English** - these were Protestant, English colonists given farmland in Ireland to begin spreading English rule and the Reformation.

Battle of the Boyne (1690)

Plantations

- Ulster Plantation: land in Ireland given to Protestant English and Scottish colonists. This is particularly strong in the northern counties of Ireland (Ulster).
- The Eleven Years' War in Ireland (1641-53) as part of the 'Wars of the Three Kingdoms': alongside the Bishops' Wars in Scotland and the English Civil War. This is a Catholic rebellion against the Plantations.
- After Parliament wins the English Civil War in 1649, Oliver Cromwell is sent to deal with the Irish. Drogheda massacre: nearly 3000 people (including 200 women) killed by the English.

Protestant Ascendancy

- In 1660 the British monarchy is restored under Charles II, who tolerates Catholics. But the next king, his brother James II, actually is a Catholic! He tries to undo the Reformation, so is overthrown by William of Orange in the 'Glorious Revolution' (1688). Catholics in Ireland, with French support, stand by James II.
- Battle of the Boyne (1690): William III defeats James II and conquers Ireland. Still celebrated in Belfast every year with marches by the 'Orange Order'.
- This gave Protestants dominance in Ireland. The Penal Laws (1695) banned Catholics from buying land, working for the government or joining the army.
- 1829: Catholic Emancipation. Fearing rebellion, Parliament gives Catholics back these rights.

Timeline

1800: Act of Union (GB and Ireland)

1829: Catholic Emancipation

1845-52: Great Famine

1912: Ulster Covenant

1916: Easter Rising

1922: Irish Free State

1937: Irish Republic

1972: Bloody Sunday

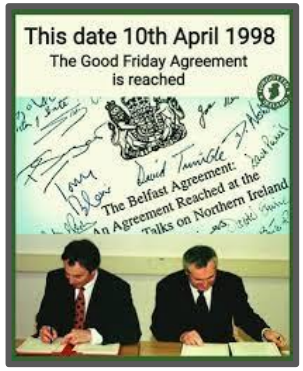
1974: Birmingham Pub Bomb

1998: Belfast Agreement

Great Famine

- Even by the early 19th century, most Irish people were peasant farmers. They survived by eating potatoes, as all other crops were given to the landlords as rent.
- When the potato crop became diseased in 1845, the British government did not act to prevent disaster.
- The population fell from 8.4 million in 1844 to 6.6 million in 1851. About one million died of starvation, and 2 million emigrated - mainly to the USA. This established powerful Irish-American communities in towns like Boston and Chicago.

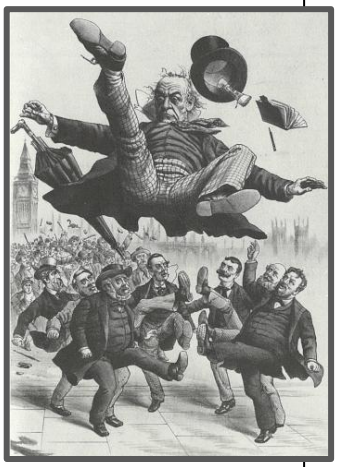
Chicago river dyed green for St Patrick's day (USA)



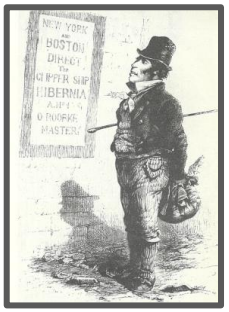
Belfast Agreement (1998)
Agreement between two sides to work together in peace in Northern Ireland

The Troubles

- The British government is finally able to pass Irish Home Rule through Parliament in 1912, but Ulster fights back. Almost 500,000 people sign the 'Ulster Covenant', promising never to accept Home Rule. The UK appears to be on the verge of civil war until 1914, when this is interrupted by WWI.
- Easter Rising (1916): nationalist rebellion with German support (during WWI).
- In 1922, after WWI, the British government returns to Home Rule. But the sacrifice of Ulstermen in WWI means the government no longer wishes to force Ulster to leave the UK. While the rest of Ireland becomes independent in 1922, Northern Ireland stays in the UK.
- The Troubles (1922-1998): Northern Ireland divided between Unionists (pro-UK) and Nationalists (pro-Ireland). Each side has their own political parties and their own terrorist groups, with horrible crimes committed by both sides.
- Bloody Sunday (1972): 26 civilians killed by British soldiers.
- Birmingham Pub Bombings (1974): 21 British civilians killed by IRA (nationalist) terrorists.



Defeat of Home Rule (1886)



Home Rule and Northern Ireland

- Act of Union (1800): Ireland joins the UK
- When William Gladstone became Prime Minister of the UK in 1868, he declared "My mission is to pacify Ireland". This meant he wanted to bring peace and calm there.
- In 1868 Gladstone disestablished the Church of Ireland (Protestant). This meant Irish people would no longer have to pay taxes to a Protestant Church that most of them didn't believe in.
- Land Act (1870): protected Irish tenant farmers from being unfairly evicted by landowners.
- Charles Stewart Parnell: Irish politician. Leader of the 'Home Rule Party' and of the Irish National Land League, who campaigned in Parliament and by organising boycotts of British goods. He wanted Ireland to rule itself (Home Rule).
- Gladstone decides to work with him, even despite the Phoenix Park Murders (1882) of a British official in Dublin. He proposed a Home Rule Bill to Parliament in 1886, but it is rejected. Many MPs viewed it as a betrayal of Protestants in Ireland, particularly in Ulster, who preferred to live in a Protestant Britain to a Catholic Ireland.
- Home Rule is granted in 1922, but Northern Ireland is allowed to stay in the UK.

1. **Who was the first person to be declared ‘Lord of Ireland’ in 1171?**
2. **How did the Reformation change the way Protestantism and Catholicism were viewed in Ireland?**
3. **Who led the Irish resistance during the "Nine Years' War" against English rule?**
4. **What was the "Ulster Plantation"?**
5. **Which group is described as "New English," and what was their role in Ireland?**
6. **Following the English Civil War, which leader was sent to Ireland and responsible for the massacre at Drogheda?**
7. **Why was James II overthrown by William of Orange in the ‘Glorious Revolution’ of 1688?**
8. **In which 1690 battle did William III defeat James II to conquer Ireland?**
9. **What were the ‘Penal Laws’ of 1695, and who did they target?**
10. **In what year did Catholic Emancipation occur, giving Catholics back their rights to buy land and work for the government?**
11. **In the early 19th century, what was the main crop Irish peasant farmers relied on for survival?**
12. **By how much did the Irish population fall between 1844 and 1851?**
13. **What was William Gladstone’s stated "mission" when he became Prime Minister in 1868?**
14. **What did the Land Act of 1870 do for Irish tenant farmers?**
15. **Who was the leader of the "Home Rule Party" who campaigned for Ireland to rule itself?**
16. **What was the "Ulster Covenant" of 1912?**
17. **What happened in 1922 regarding the status of Ireland and the UK?**
18. **During "The Troubles," what was the main difference between Unionists and Nationalists?**
19. **Which 1972 event involved the killing of 26 civilians by British soldiers?**
20. **What is the common name for the Belfast Agreement reached on April 10, 1998?**

Year 8 Religious Studies Knowledge Organiser - Buddhism

Key vocab:

Buddha = The title given to an enlightened being.

Bodhisattva = The ultimate aim of Mahayana Buddhists - to remain in the cycle of samsara and assist others towards their own enlightenment.

Enlightenment = A state of perfect wisdom and compassion.

Nirvana = The state of complete contentment and being free from all suffering.

Parinirvana = The final complete release after death (no longer being reborn).

Ascetic = A person who practices extreme mental and physical discipline.

Samsara = The cycle of birth, death and rebirth

Dharma = The teachings of the Buddha

Karma = Could be compared to a cosmic points system, where good acts bring positive karma whilst bad acts amount to negative karma

Pali = The ancient language that Buddhist texts were originally written in.

Alms = Donations given to monks who do not have any personal possessions.

Mantra = A short chant that is recited during worship as a skillful act which helps to focus the mind.

The **Theravada** Buddhist community is one of the oldest and most traditional schools of Buddhism, primarily based on the teachings found in the **Pali Canon**, which is considered the earliest and most authoritative scripture in the Buddhist tradition. The name *Theravada* means "Teaching of the Elders," highlighting its connection to the earliest practices and teachings of the Buddha. They believe that the Buddha cannot be reached through meditation.

The goal of Tibetan Buddhists is to become a **Bodhisattva** , the altruistic wish to attain enlightenment not only for oneself but for the benefit of all beings.

Tibetan Buddhism places significant importance on the role of the **lama** (spiritual teacher), especially the **Dalai Lama**, who is believed to be the earthly incarnation of **Avalokiteshvara**, the bodhisattva of compassion. Practitioners engage in visualizations, **mantra recitations**, and other esoteric rituals designed to speed up the path to enlightenment.

Siddhartha's early life:

Siddhartha Gautama was born around 563 BCE in Lumbini, Nepal, as a prince to King Suddhodana and Queen Maya. His birth is said to be miraculous, with his mother experiencing no pain, and Siddhartha taking seven steps, a lotus flower growing where he took each step and declaring "This is my last birth; now there is no more becoming." His father shielded him from the harsh realities of life, providing him with a life of luxury and comfort, hoping he would grow up to be a great ruler.Upon encountering the Four Sights at age 29, he left his family and wealth behind to seek the truth about suffering. After years of rigorous ascetic practices, he meditated under the Bodhi Tree in Bodh Gaya, where he achieved Nirvana and became the Buddha (meaning "the awakened one").

The Four Sights:

An old man: Representing the inevitability of aging.

A sick man: Representing the inevitability of illness.

A dead man: Representing the reality of death.

A wandering ascetic: Representing a path to spiritual liberation and enlightenment.

Samatha meditation, also known as calm-abiding or concentration meditation, is primarily used to develop deep concentration and mental stillness. It involves focusing on a single object, such as the breath, a mantra, or a visual object, to calm the mind and create a state of mindfulness.

Vipassana meditation (insight meditation) focuses on the cultivation of **wisdom** through deep observation and understanding of the nature of reality. It involves observing bodily sensations, thoughts, and emotions without attachment, gaining insight into the impermanence, suffering, and non-self (anicca, dukkha, anatta). The goal is to develop a profound understanding of the three marks of existence, leading to enlightenment.

The Three Marks of Existence

These three marks describe the nature of all things in the world:

1. **Dukkha (Suffering):** Suffering is an inherent part of life because of attachment to impermanent things.
2. **Anicca (Impermanence):** Everything in the world is constantly changing. All phenomena are temporary and subject to decay. 1. Living things 2. Non-living things 3. The mind.
3. **Anatta (No-Soul):** There is no permanent self or soul. The belief in a fixed self is an illusion, and what we consider "self" is simply a collection of impermanent parts.

The Noble Eightfold Path is a set of practical guidelines that lead to the cessation of suffering and the attainment of enlightenment:

1. **Right Understanding** (Wisdom) – Understanding the Four Noble Truths and the impermanent, interconnected nature of existence.
2. **Right Intention** (Wisdom) – Cultivating intentions of renunciation, loving-kindness, and compassion, and refraining from harmful thoughts.
3. **Right Speech** (Ethical Conduct) – Speaking truthfully, avoiding gossip, harsh speech, and lying.
4. **Right Action** (Ethical Conduct) – Acting ethically, including refraining from killing, stealing, and immoral sexual conduct.
5. **Right Livelihood** (Ethical Conduct) – Choosing a career that does not cause harm or contribute to suffering, avoiding jobs that involve deceit, violence, or exploitation.
6. **Right Effort** (Mental Discipline) – Developing and maintaining positive states of mind while overcoming negative mental habits.
7. **Right Mindfulness** (Mental Discipline) – Developing awareness of the body, feelings, thoughts, and mind, and practicing mindfulness in daily life.
8. **Right Concentration** (Mental Discipline) – Developing deep meditation concentration (samadhi) that leads to mental clarity and insight.

Buddhist Death ceremonies and rituals:

A Tibetan sky burial is a traditional funerary practice in which a deceased person's body is placed on a mountaintop to be consumed by vultures. It reflects the belief in the impermanence of life and the cycle of rebirth. Buddhists see the body as an empty shell after death, and offering it to birds symbolizes generosity and detachment. This ritual also aligns with the Buddhist principle of compassion, feeding living beings, and minimizing harm to the environment. Sky burials are practical in Tibet's harsh terrain, where cremation or traditional burial is often impractical.

By contrast, most Theravada Buddhists will either be cremated or buried, with very little being spent on a funeral which is instead donated to good causes to gain positive karma (merit) for the deceased.

Year 8 Religious Studies Knowledge Organiser - Buddhism

Key vocab:

_____ = The title given to an enlightened being.

_____ = The ultimate aim of Mahayana Buddhists - to remain in the cycle of samsara and assist others towards their own enlightenment.

_____ = A state of perfect wisdom and compassion.

_____ = The state of complete contentment and being free from all suffering.

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_____ = A person who practices extreme mental and physical discipline.

_____ = The cycle of birth, death and rebirth

_____ = The teachings of the Buddha

_____ = Could be compared to a cosmic points system, where good acts bring positive karma whilst bad acts amount to negative karma

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____ = Donations given to monks who do not have any personal possessions.

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The goal of Tibetan Buddhists is to become a _____ , the altruistic wish to attain enlightenment not only for oneself but for the benefit of all beings.

Tibetan Buddhism places significant importance on the role of the _____ (spiritual teacher), especially the_____ , who is believed to be the earthly incarnation of Avalokiteshvara, the bodhisattva of compassion. Practitioners engage in visualizations, _____ , and other esoteric rituals designed to speed up the path to enlightenment.

_____'s early life:

_____ _____ was born around 563 BCE in Lumbini, Nepal, as a prince to King Suddhodana and Queen Maya. His birth is said to be miraculous, with his mother experiencing no pain, and Siddhartha taking seven steps, a lotus flower growing where he took each step and declaring "This is my last birth; now there is no more becoming." His father shielded him from the harsh realities of life, providing him with a life of luxury and comfort, hoping he would grow up to be a great ruler. Upon encountering the Four Sights at age 29, he left his family and wealth behind to seek the truth about suffering. After years of rigorous ascetic practices, he meditated under the Bodhi Tree in Bodh Gaya, where he achieved _____ and became the _____ (meaning "the awakened one").

The Four Sights:

_____: Representing the inevitability of aging.

_____: Representing the inevitability of illness.

_____: Representing the reality of death.

_____: Representing a path to spiritual liberation and enlightenment.

_____ **meditation**, also known as calm-abiding or concentration meditation, is primarily used to develop deep concentration and mental stillness. It involves focusing on a single object, such as the breath, a mantra, or a visual object, to calm the mind and create a state of mindfulness.

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1. _____ **(Suffering):** Suffering is an inherent part of life because of attachment to impermanent things.
2. _____ **(Impermanence):** Everything in the world is constantly changing. All phenomena are temporary and subject to decay. 1. Living things 2. Non-living things 3. The mind.
3. _____ **(No-Soul):** There is no permanent self or soul. The belief in a fixed self is an illusion, and what we consider "self" is simply a collection of impermanent parts.

_____ is a set of practical guidelines that lead to the cessation of suffering and the attainment of enlightenment:

1. **Right** _____ (Wisdom) – Understanding the Four Noble Truths and the impermanent, interconnected nature of existence.
2. **Right** _____(Wisdom) – Cultivating intentions of renunciation, loving-kindness, and compassion, and refraining from harmful thoughts.
3. **Right** _____(Ethical Conduct) – Speaking truthfully, avoiding gossip, harsh speech, and lying.
4. **Right** _____(Ethical Conduct) – Acting ethically, including refraining from killing, stealing, and immoral sexual conduct.
5. **Right** _____ (Ethical Conduct) – Choosing a career that does not cause harm or contribute to suffering, avoiding jobs that involve deceit, violence, or exploitation.
6. **Right** _____ (Mental Discipline) – Developing and maintaining positive states of mind while overcoming negative mental habits.
7. **Right** _____(Mental Discipline) – Developing awareness of the body, feelings, thoughts, and mind, and practicing mindfulness in daily life.
8. **Right** _____(Mental Discipline) – Developing deep meditation concentration (samadhi) that leads to mental clarity and insight.

Buddhist Death ceremonies and rituals:

A _____ is a traditional funerary practice in which a deceased person's body is placed on a mountaintop to be consumed by vultures. It reflects the belief in the _____ of life and the cycle of rebirth. Buddhists see the body as an empty shell after death, and offering it to birds symbolizes _____ and_____. This ritual also aligns with the Buddhist principle of compassion, feeding living beings, and minimizing harm to the environment. Sky burials are practical in Tibet's harsh terrain, where cremation or traditional burial is often impractical.

By contrast, most Theravada Buddhists will either be_____ or _____, with very little being spent on a funeral which is instead donated to good causes to gain positive karma (merit) for the deceased.

YEAR 8 FRENCH KNOWLEDGE ORGANISER
Term 2 - Sentence Builder 5

sometimes	**quelquefois**
from time to time	**de temps en temps**
often	**souvent**
generally	**générelement**

I go shopping	**je fais les magasins**
I go grocery shopping	**je fais les courses**
I make purchases	**je fais les achats**

at the (super)market	**au (super)marché**
at the shopping centre	**au centre commercial**
in fashion shops	**aux magasins de mode**
in brand shops	**aux magasins de marque**
online	**en ligne**

it's expensive	**c'est cher**
it's cheap	**c'est bon marché**
there are more sizes	**il y a plus de tailles**
there are crowds	**il y a des foules**
it's trendy	**c'est tendance**

normally	**normalement**
I buy	**j'achète**
recently	**récemment**
I bought	**j'ai acheté**

Grammar rule: noun + colour
eg: a black dress = une robe noire

black	**noir(e) (s)**
green	**vert(e) (s)**
red	**rouge(s)**
white	**blanc(he)(s)**

a present	**un cadeau**
a book	**un livre**
a mobile phone	**un portable**
a computer	**un ordinateur**
a bag	**un sac**

a hat	**un chapeau**
a dress	**une robe**
a skirt	**une jupe**
shoes	**des chaussures**
(designer) clothes	**des vêtements (de marque)**

Practice Translations

Sometimes I go grocery shopping at the supermarket because it's cheap	
Normally I buy a black phone	
Recently I bought a red dress	
From time to time I make purchases online because there are more sizes	
Generally I go shopping in the shopping centre because it's trendy	

YEAR 8 FRENCH KNOWLEDGE ORGANISER
Term 2 - Sentence Builder 5

sometimes	
from time to time	
often	
generally	

I go shopping	
I go grocery shopping	
I make purchases	

at the (super)market	
at the shopping centre	
in fashion shops	
in brand shops	
online	

it's expensive	
it's cheap	
there are more sizes	
there are crowds	
it's trendy	

normally	
I buy	
recently	
I bought	

Grammar rule: noun + colour
eg: a black dress = une robe noire

black	
green	
red	
white	

a present	
a book	
a mobile phone	
a computer	
a bag	

a hat	
a dress	
a skirt	
shoes	
(designer) clothes	

Practice Translations

Sometimes I go grocery shopping at the supermarket because it's cheap	
Normally I buy a black phone	
Recently I bought a red dress	
From time to time I make purchases online because there are more sizes	
Generally I go shopping in the shopping centre because it's trendy	

YEAR 8 FRENCH KNOWLEDGE ORGANISER
Term 2 - Sentence Builder 6

tomorrow	**demain**
next month	**le mois prochain**
next week	**la semaine prochaine**
next year	**l'année prochaine**

I'm going to buy	**je vais acheter**
we are going to buy	**nous allons acheter**

bread	**du pain**
cheese	**du fromage**
fish	**du poisson**
cake	**du gâteau**

meat	**de la viande**
ice-cream	**de la glace**
eggs	**des oeufs**
vegetables	**des legumes**
milk	**du lait**
water	**de l'eau**
tea	**du thé**
coffee	**du café**

I'm going to pay….	**je vais payer…**
at the till	**à la caisse**
by card	**par carte**
in cash / in change	**en monnaie**
in pounds	**en livres**
in euros	**en euros**

Practice Translations	
Tomorrow I'm going to buy bread	
I'm going to pay in cash	
Next week we are going to buy meat	
I'm going to pay by card at the till	
Next month I'm going to buy milk and eggs and I'm going to pay in pounds	

YEAR 8 FRENCH KNOWLEDGE ORGANISER
Term 2 - Sentence Builder 6

tomorrow	
next month	
next week	
next year	

I'm going to buy	
we are going to buy	

bread	
cheese	
fish	
cake	

meat	
ice-cream	
eggs	
vegetables	
milk	
water	
tea	
coffee	

I'm going to pay….	
at the till	
by card	
in cash / in change	
in pounds	
in euros	

Practice Translations	
Tomorrow I'm going to buy bread	
I'm going to pay in cash	
Next week we are going to buy meat	
I'm going to pay by card at the till	
Next month I'm going to buy milk and eggs and I'm going to pay in pounds	

YEAR 8 FRENCH KNOWLEDGE ORGANISER
Term 2 - Sentence Builder 7

I always listen to	**j'écoute toujours**
I prefer to listen to	**je préfère écouter**
I never listen to	**je n'écoute jamais de (~~du/de la~~)**

my best friend listens to	**mon meilleur ami écoute**
my friends and I listen to	**moi et mes amis écoutons**
my parents listen to	**mes parents écoutent**

classical music	**de la musique classique**
rap	**du rap**
electronic music	**de la musique électronique**

the singer	**le chanteur…**
the group	**le groupe…**
the artist	**l'artiste…**

I like	**j'aime**
I don't like	**je n'aime pas**
I can't stand	**je ne supporte pas**

he/she loves	**il/elle adore**
we like	**nous aimons**
they love	**ils adorent**

their songs	**leurs chansons**
their lyrics	**leurs paroles**
their voice	**leur voix**

their sound	**leur son**
their music	**leur musique**
their rhythm	**leur rythme**

Practice Translations	
I always listen to electronic music because I like their rhythm.	
My mother listens to the group Cold Play because she loves their voice.	
My friends and I listen to the singer Ed Sheeran because we like their music	
My brother listen to rap but I can't stand the lyrics	
I never listen to classical music because I don't like their sound.	

YEAR 8 FRENCH KNOWLEDGE ORGANISER
Term 2 - Sentence Builder 7

I always listen to	
I prefer to listen to	
I never listen to	

my best friend listens to	
my friends and I listen to	
my parents listen to	

classical music	
rap	
electronic music	

the singer	
the group	
the artist	

I like	
I don't like	
I can't stand	

he/she loves	
we like	
they love	

their songs	
their lyrics	
their voice	

their sound	
their music	
their rhythm	

Practice Translations	
I always listen to electronic music because I like their rhythm.	
My mother listens to the group Cold Play because she loves their voice.	
My friends and I listen to the singer Ed Sheeran because we like their music	
My brother listen to rap but I can't stand the lyrics	
I never listen to classical music because I don't like their sound.	

YEAR 8 FRENCH KNOWLEDGE ORGANISER
Term 2 - Sentence Builder 8

yesterday	**hier**
last month	**le mois dernier**
last week	**la semaine dernière**
last year	**l'année dernière**
I went to a festival with	**je suis allé(e) à un festival avec**

how lucky!	**quelle chance!**
what a treat!	**quel régal!**
what a nightmare!	**quel cauchemard!**
what a shame!	**quel dommage!**

on the first day	**le premier jour**
on the last day	**le dernier jour**
what I liked the most was when	**ce que j'ai aimé le plus c'était quand**

we sang	**on a chanté**
we saw our favourite groups	**on a vu nos groupes préférés**
we enjoyed the music	**on a profité de la musique**
we lost our phones	**on a perdu nos portables**
we spent too much money	**on a dépensé trop d'argent**

in the rain	**sous la pluie**
in the sun	**sous le soleil**
together	**ensemble**
outside	**dehors**

I must admit that	**je dois avouer que**
my parents say that	**mes parents disent que**
it would have been great but	**ça aurait été génial mais**

it was	**c'était**
a dream come true	**un rêve devenu réalité**
the best moment of my life	**le meilleur moment de ma vie**
my worst nightmare	**mon pire cauchemard**

amazing	**étonnant**
exciting	**passionnant**
boring	**ennuyeux**
awful	**affreux**

Practice Translations

Last year I went to a festival with my parents	
On the first day we sang together in the sun	
On the last day, we lost our phones, what a nightmare!	
I must admit that it would have been great but it was awful	
my parents say that it was a dream come true	

YEAR 8 FRENCH KNOWLEDGE ORGANISER
Term 2 - Sentence Builder 8

yesterday	
last month	
last week	
last year	
I went to a festival with	

how lucky!	
what a treat!	
what a nightmare!	
what a shame!	

on the first day	
on the last day	
what I liked the most was when	

we sang	
we saw our favourite groups	
we enjoyed the music	
we lost our phones	
we spent too much money	

in the rain	
in the sun	
together	
outside	

I must admit that	
my parents say that	
it would have been great but	

it was	
a dream come true	
the best moment of my life	
my worst nightmare	

amazing	
exciting	
boring	
awful	

Practice Translations

Last year I went to a festival with my parents	
On the first day we sang together in the sun	
On the last day, we lost our phones, what a nightmare!	
I must admit that it would have been great but it was awful	
my parents say that it was a dream come true	

YEAR 8 FRENCH KNOWLEDGE ORGANISER
Term 3 - Sentence Builder 9

when I go to 6th form	**quand je vais au lycée**
if I go to university	**si je vais à l'université**
when I'm older	**quand je serai plus âgé(e)**
when I'm 18	**quand j'aurai dix-huit ans**

in the future	**à l'avenir**
later in life	**plus tard dans la vie**
one day	**un jour**

I will continue to study	**je continuerai à étudier**
I will go to 6th form to study	**j'irai au lycée pour étudier**

I will study	**j'étudierai**
I will learn	**j'apprendrai**

art	**l'art**
French	**le français**
drama	**le théâtre**

DT	**la technologie**
languages	**les langues**
English	**l'anglais**

which will be…	**ce qui sera….**
great	**génial**
useful	**utile**
easy	**facile**

difficult	**difficile**
rubbish	**nul**
hard	**dur**
useless	**inutile**

Practice Translations	
When I'm older, I will continue to study languages which will be useful	
If I go to university I will learn DT which will be hard and useless	
Later in life, I will continue to study drama which will be great	
When I'm 18. I will study English which will be easy but rubbish.	
In the future, I will go to 6th form to study art, which will be easy.	

YEAR 8 FRENCH KNOWLEDGE ORGANISER
Term 3 - Sentence Builder 9

when I go to 6th form	
if I go to university	
when I'm older	
when I'm 18	

in the future	
later in life	
one day	

I will continue to study	
I will go to 6th form to study	

I will study	
I will learn	

art	
French	
drama	

DT	
languages	
English	

which will be…	
great	
useful	
easy	

difficult	
rubbish	
hard	
useless	

Practice Translations	
When I'm older, I will continue to study languages which will be useful	
If I go to university I will learn DT which will be hard and useless	
Later in life, I will continue to study drama which will be great	
When I'm 18. I will study English which will be easy but rubbish.	
In the future, I will go to 6th form to study art, which will be easy.	

YEAR 8 SPANISH KNOWLEDGE ORGANISER
Sentence Builder 5

Normally	**Normalmente**
Generally	**Generalmente**
From time to time	**De vez en cuando**
Often	**A menudo**
Sometimes	**A veces**

Recently	**Recientemente**
Yesterday	**Ayer**
I went shopping	**fui de compras**
I bought	**compré**

because/since	**porque/ ya que**
it's expensive	**es caro**
it's cheap	**es barato**
there are offers	**hay ofertas**
there is more variety	**hay más variedad**
there are bargains	**hay gangas**
there are lots of sizes	**hay muchas tallas**

I go shopping	**voy de compras**
I buy	**compro**

in the supermarket	**en el supermercado**
in the market	**en el mercado**
in the shopping centre	**en el centro comercial**
in second hand shops	**en tiendas de segunda mano**
in designer shops	**en tiendas de diseño**
in the city	**en la ciudad**
online	**en línea**

a gift	**un regalo**
a t-shirt	**una camiseta**
a tie	**una corbata**
some shoes	**unos zapatos**
new (m/f/s/pl)	**nuevo/a/os/as**
white (m/f/s/pl)	**blanco/a/os/as**
black (m/f/s/pl)	**negro/a/os/as**
red (m/f/s/pl)	**rojo/a/os/as**

Practice Translations

Generally I buy a gift in a market because it is cheap	
Yesterday I bought a black tie in a second hand shop	
Recently I went shopping in the city	
There are lots of sizes and there is more variety	

YEAR 8 SPANISH KNOWLEDGE ORGANISER
Sentence Builder 6

Tomorrow	**Mañana**
next week	**La semana próxima**
next weekend	**El fin de semana próximo**
next month	**el mes próximo**
next year	**el año próximo**

I'm going to buy	**voy a comprar**
I'm going to pay	**voy a pagar**

by card	**con tarjeta**
with coins	**con monedas**
in pounds	**en libras**
in cash	**en efectivo**

and	**y**
but	**pero**
also	**también**

a box of	**una caja de**
a packet of	**un paquete de**
half a portion of	**media ración de**
a bottle of	**una botella de**

bread	**pan**
ham	**jamón**
cheese	**queso**
rice	**arroz**
sugar	**azúcar**
fruit	**fruta**
eggs	**huevos**
milk	**leche**

Practice Translations

Tomorrow I am going to buy a bottle of milk	
Next week I am going to buy half a portion of cheese	
Next weekend I am going to pay with coins	
Next month I am going to pay by card	

YEAR 8 SPANISH KNOWLEDGE ORGANISER
Sentence Builder 7

I always listen to	**Siempre escucho**
I never listen to	**Nunca escucho**
I prefer to listen to	**Prefiero escuchar**
I like	**me gusta/n**
I love	**me encanta/n**
I hate	**odio**
I can't bear	**no soporto**
I can't stand	**no aguanto**
I admire	**admiro**
I prefer	**prefiero**

pop music	**la música pop**
classical music	**la música clásica**
electronic music	**la música electrónica**
latin music	**la música latina**
rock	**el rock**
the band	**la banda**

its songs	**sus canciones**
its lyrics	**sus letras**
its sound	**su sonido**
its rhythym	**su ritmo**
its voice	**su voz**
its concerts	**sus conciertos**
its music	**su música**

My mum listens to	**Mi madre escucha**
My brother listens to	**Mi hermano escucha**
My best friend (m/f) listens to	**Mi mejor amigo/a escucha**
he/she admires	**admira**
he/she prefers	**prefiere**
my … likes	**a mi … le gusta/n**
my … loves	**a mi … le encanta/n**

Practice Translations

I always listen to rock because I love its sound	
I never listen to classical music because I hate its concerts	
My best friends loves the band because she prefers its lyrics	
My dad hates latin music and he prefers pop music	

YEAR 8 SPANISH KNOWLEDGE ORGANISER
Sentence Builder 8

Last weekend	**El fin de semana pasado**
Last week	**La semana pasada**
last month	**El mes pasado**
last year	**El año pasado**

during the festival	**Durante el festival**
on the first day	**el primer día**
on the second day	**el segundo día**
on the last day	**el último día**
the best thing was when	**lo mejor fue cuando**

in my opinion the festival was	**en mi opinión el festival era**
I must admit that it was	**debo admitir que era**

fun	**divertido**
extraordinary	**extraordinario**
wonderful	**maravilloso**
incredible	**increíble**
exciting	**emocionante**
cool	**guay**

I went to a music festival with	**fui a un festival de musica con**
my best friend (m/f)	**mi mejor amigo/a**
my parents	**mis padres**
my friends	**mis amigos**
my family	**mi familia**

we sang	**cantamos**
we danced	**bailamos**
we ate	**comimos**
we drank	**bebimos**
we saw our favourite band	**vimos a nuestra banda favorita**
we enjoyed the music	**disfrutamos de la música**

boring	**monótono/aburrido**
tiring	**cansador**
expensive	**caro**
dangerous	**peligroso**

Practice Translations

Last weekend I went to a music festival with my family	
During the festival we ate, danced and sang	
On the last day we saw our favourite band	
I must admit that it was expensive and tiring	

YEAR 8 SPANISH KNOWLEDGE ORGANISER

Sentence Builder 9

Next year	**El año próximo**
After my exams	**Después de mis exámenes**
If I go to university	**Si voy a la Universidad**
I will study	**estudiaré**
I will learn	**aprenderé**
which it (they) will be	**que será(n)**
I want to study	**quiero estudiar**
I am going to study	**voy a estudiar**

fun	**divertido/a/os/as**
interesting	**interesante/s**
exciting	**emocionante/s**
incredible	**increíble/s**
useful	**útil/es**
easy	**fácil/es**
educational	**educativo/a/os/as**

art	**arte**
drawing	**dibujo**
science	**ciencias**
maths	**matemáticas**
business studies	**empresariales**
history	**historia**
geography	**geografía**

because	**porque**
in my opinion	**en mi opinión**
I would say that	**diría que**
(it) is	**es**
(they) are	**son**

boring	**aburrido/a/os/as**
useless	**inútil/es**
difficult	**difícil/es**
tiring	**cansador/a/es/as**
terrible	**terrible/s**

Practice Translations	
Next year I am going to study science	
When I finish my exams, I will learn drawing	
In my opinion it is useful and interesting	
I would say that they are tiring and difficult	
If I go to university, I will learn maths because they are educational	

Year 8 Possession & support Knowledge

Possession definition - Possession refers to the control of the ball or implement of play by a team or individual.

Support definition - The purpose of support in sport is to contribute effectively as a team to reach a collective goal.

Keywords associated with Possession

Retention
Shape
Regain
Dictate

Keywords associated with Support

Assisting
Back someone
Encourage
Contribute

What is an attack?

The phase where a team actively tries to score by moving the ball/p **object towards the opponent's goal**, **creating scoring chances**, and **overcoming the defense**, involving skills like passing, dribbling, and shooting, aiming to gain an advantage or score points

Unit of attack

Forward line	Primary attackers who pin defenders, create space and score
Midfield playmakers	Link defense and attack through passing and forward runs
Wingers/ wide players	Provide width, stretch defenses, and deliver crosses

Principles of attack

Penetration	Playing through or behind the defense to progress and score.
Support	Providing nearby passing options to maintain possession.
Width	Stretching the defense horizontally to create gaps
Mobility	Off-the-ball movement to create space and disrupt defenders
Creativity	Using skill and surprise to break down organized defenses
Depth	Stretching the defense vertically to open space.
Speed of Play	Moving the ball quickly to prevent defensive organization.

Year 8 Possession & support Knowledge

Possession definition -

Support definition -

Keywords associated with Possession

Keywords associated with Support

What is an attack?

Unit of attack

Principles of attack

What is defence?

In simple terms: **defense is about stopping, delaying, and forcing mistakes**, not just reacting but controlling space and opponents.

Units of defence

Defensive line	Lines up at the line of scrimmage to stop the run and pressure the quarterback
Linebackers	Versatile defenders behind the line, defending both run and pass
Secondary/ defensive backs	Deepest defenders focused on pass coverage and last-line support.

Formations

Formations in sport are the **structured arrangement of players on the field or court** at a given moment, usually defined by their positions and roles. They provide a team with balance, organization, and clarity in both attack and defense

Principles of defence

Pressure	Nearest defender closes down the ball to limit time and space.
Delay	Slows the attack to allow defensive recovery and organization
Cover	Supporting defender provides backup and blocks direct threats
Balance	Weak-side positioning maintains shape and tracks runners
Compactness	Reduces space by keeping the team close together
Control & Restraint	Defending with patience to avoid being bypassed.
Communication	Coordinates movement, alerts threats, and organizes the defense

How to keep possession

Support	Always giving the ball carrier safe passing options	**Quick passing**	Moving the ball faster than the defense can react
Ball movement	Off-the-ball runs to create space and angles	**Decision making**	Knowing when to pass, dribble, or reset play
Ball security	Good first touch, shielding, and protecting the ball.	**Communication**	Coordinating actions and signaling intentions

What is defence?

Units of defence

	Lines up at the line of scrimmage to stop the run and pressure the quarterback
	Versatile defenders behind the line, defending both run and pass
	Deepest defenders focused on pass coverage and last-line support.

Formations

Principles of defence

Pressure	
Delay	
Cover	
Balance	
Compactness	
Control & Restraint	
Communication	

How to keep possession

Support			Moving the ball faster than the defense can react
	Off-the-ball runs to create space and angles	**Decision making**	
Ball security			Coordinating actions and signaling intentions

Year 8 Reduce Space & length & Width

Reduce Space definition - When the playing area you are working in is made smaller, or you attempt to make the playing area smaller for the opposition

Keywords associated with Reduce Space

Narrow
Press
Closing down
Squeeze

Keywords associated with Length & width

Depth
Channels
Touchline
Goal line

Length & width definition -

Length - Typically refers to the measurement along the longer boundary lines of the playing area. For a rectangular pitch or court, this is often called the *touchline* in rugby.

Width - Refers to the measurement across the shorter boundary lines, perpendicular to the length. This is often called the *goal line* in netball or the *try* line in rugby.

Ways to defend

Breaking through	When you find the gap
Slow up or shut down	Not allowing the runner through.
Man to man	Follow one person
Zone	Mark the space

How can the shape of the space impact the game?

Movement	Open areas allow fast travel; narrow corridors or mazes slow players and create choke points.
Strategy	Symmetrical spaces are fair; asymmetrical or vertical layouts favor tactical advantages.
Visibility	Long sightlines favor ranged combat; obstacles encourage stealth or cover-based play
Player interaction	Central spaces increase encounters; spread-out areas encourage exploration.
Psychological impact	Tight spaces feel tense; open spaces feel freeing; irregular shapes can disorient players.

Year 8 Reduce Space & length & Width

Reduce Space definition -

Keywords associated with Reduce Space

Length & width definition -

Length -

Width -

.

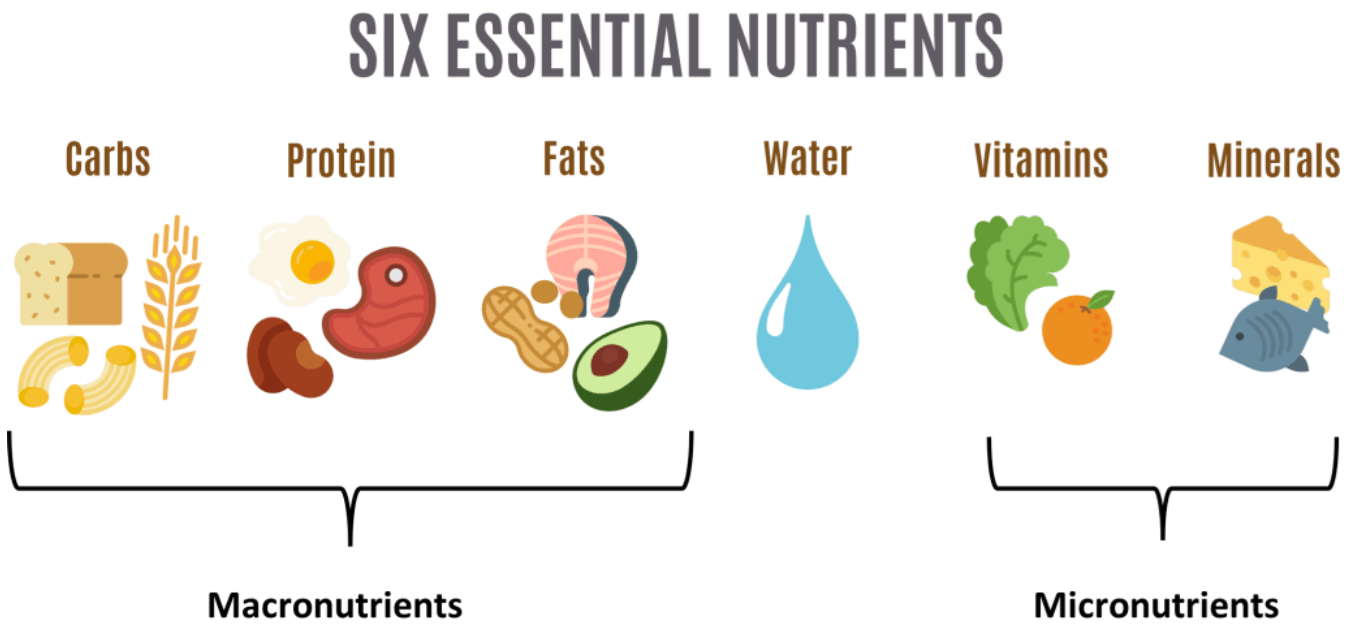
Keywords associated with Length & width

Ways to defend

How can the shape of the space impact the game?

	.

Year 8 Food & Nutrition Knowledge Organiser (Summer Term)



Water

- Sometimes water is included as a fourth macronutrient.
- **Job:** Keeps you hydrated, helps with digestion, temperature control, and more.

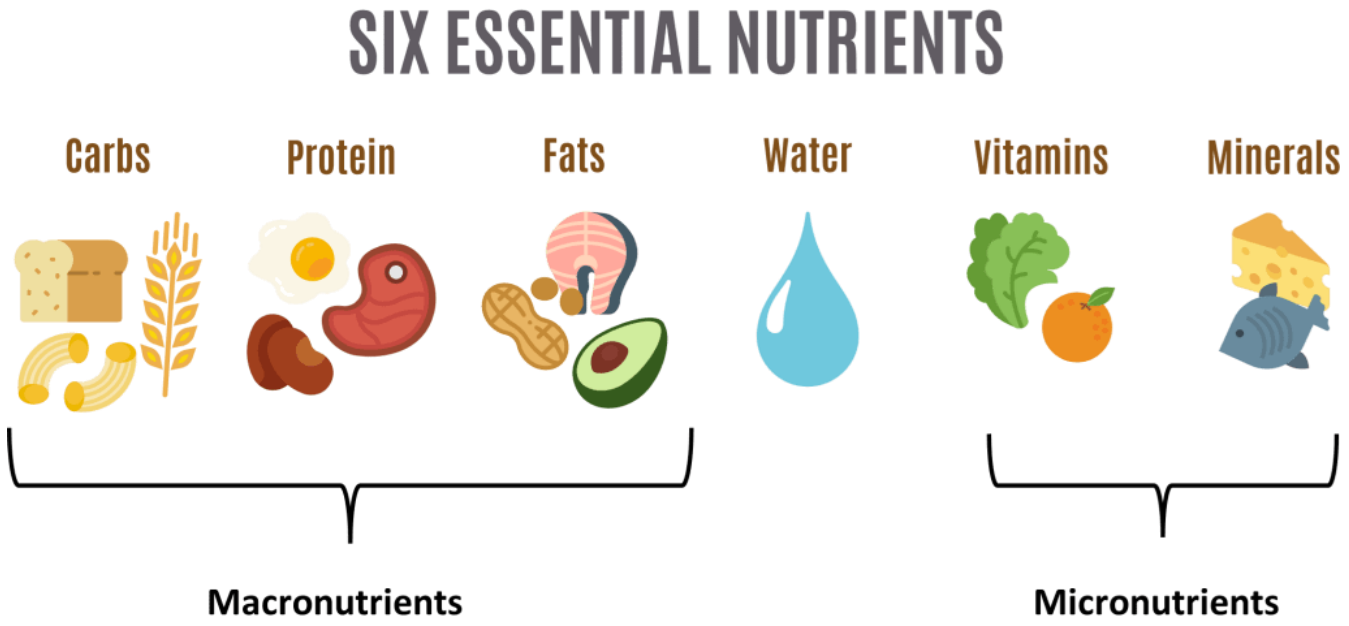
Macronutrients (needed in large amounts)

Nutrient	Function	Food Sources
Carbohydrates	Main source of energy	Bread, rice, pasta, potatoes
Protein	Growth and repair	Meat, fish, eggs, beans
Fat	Energy, insulation, protection	Butter, oils, nuts

Micronutrients (needed in small amounts)

Nutrient	Function	Deficiency
Vitamin C	Healthy skin, healing	Scurvy
Vitamin D	Helps absorb calcium	Weak bones
Calcium	Strong bones & teeth	Weak bones
Iron	Carries oxygen in blood	Anaemia

Year 8 Food & Nutrition Knowledge Organiser (Summer Term)



Water

- Sometimes water is included as a fourth macronutrient.
- **Job:** Keeps you hydrated, helps with digestion, temperature control, and more.

Macronutrients (needed in ……..amounts)

Nutrient	Function	Food Sources
Carbohydrates		
Protein		
Fat		

Micronutrients (needed in …….amounts)

Nutrient	Function	Deficiency
Vitamin C		
Vitamin D		
Calcium		
Iron		

Diet Type	Key Rules
Vegan	No animal Products
Vegetarian	No meat but can eat dairy/eggs
Halal	Foods allowed in Islam
Kosher	Foods allowed in Judaism
Medical eg Coeliac)	Avoid Gluten

Hazardous Bacteria & Food Safety

Key Term	Meaning
Salmonella	Bacteria in raw chicken
Danger Zone	5°C–63°C (bacteria grow fast)
Cross-contamination	Bacteria spreading between foods
Prevention	Wash hands, cook properly, refrigerate

Quick Check Questions

- Which nutrient gives the most energy?
- What happens if you don't get enough iron?
- What temperature do bacteria grow fastest?
- What is cross-contamination?
- What does "use-by date" mean?

Food Poisoning & Ill Health

Cause	Effect
Bacteria	Food poisoning
Undercooked food	Illness
Too much sugar	Tooth decay
Poor diet	Ill health

Common symptoms: vomiting, diarrhoea, stomach pain

Food Laws & Legislation (UK)

Law/Rule	What it Means
Food labelling	Must list ingredients
Use-by date	Do not eat after this date
Food hygiene laws	Food must be safe
Allergens	Must be clearly labelled
Food Standards Agency	Ensures food safety in UK

Diet Type	Key Rules
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Vegetarian	
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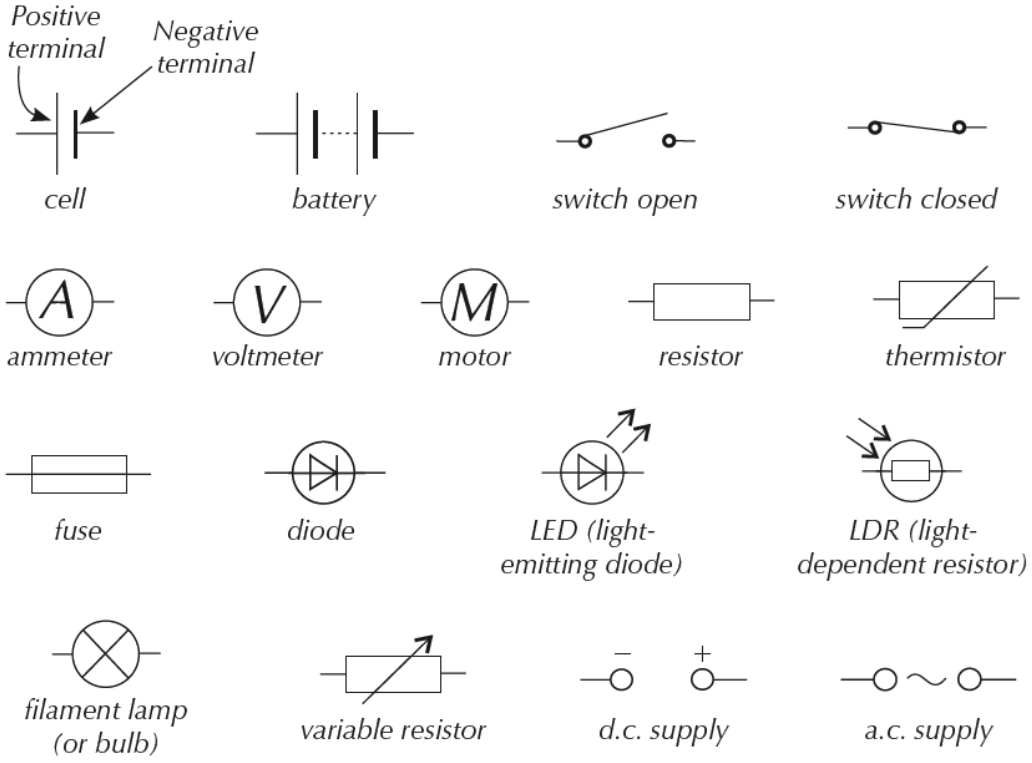
Design and Technology Year 8 - Knowledge organiser

Electronic Systems

A system is a collection of parts that work together to do a particular function. Electronic systems are made up of components that are connected to form a circuit. Circuits can be drawn using a circuit diagrams - symbols are used to represent components, and the straight lines linking them represent how they're connected up.



Circuit symbols for a variety of circuit components.

Shaping materials - hand tools	
	**Rip saw** - for cutting along the wood grain
	**Tenon saw** - for making straight cuts in small pieces of wood
	**Hacksaw** - for metals and plastics
	**Coping saw** - for cutting curves in wood or plastic
	**Chisels** - used to cut away and shape wood and metal
	**Files** - have small teeth to cut away at a material

Design and Technology Year 8 - Knowledge organiser

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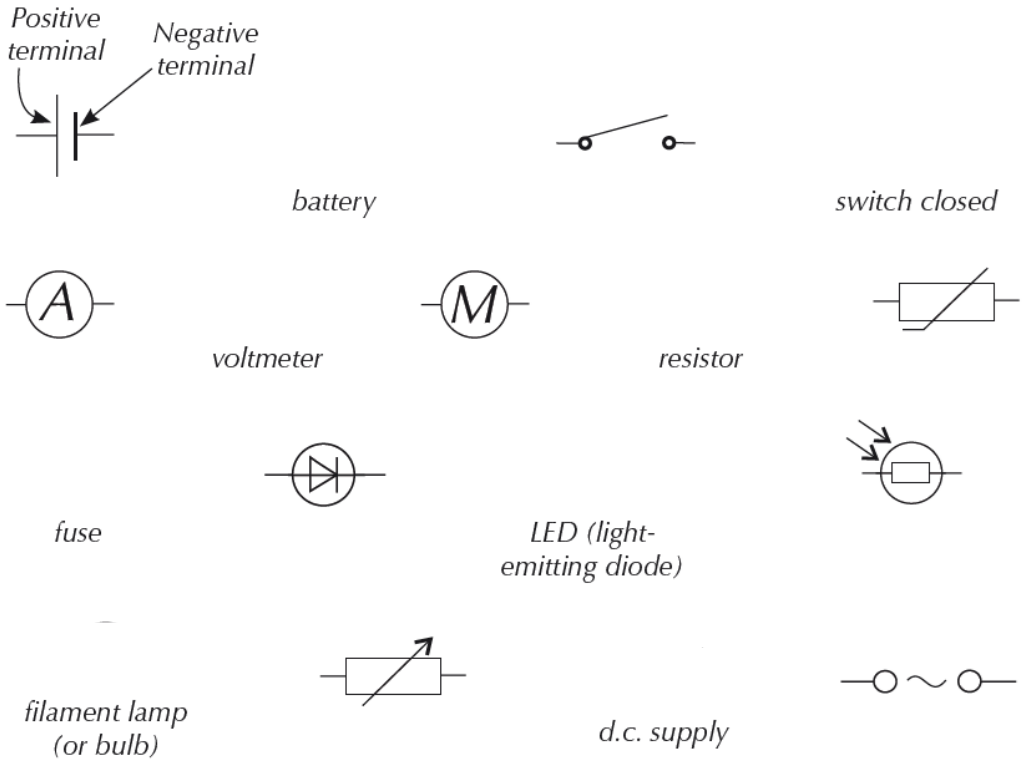

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	- have small teeth to cut away at a material

Design and Technology Year 8 - Knowledge organiser

Soldering	Joining two pieces of metal using a melted filler metal (solder) at a low temperature.
Brazing	Joining metals using a melted filler metal at a higher temperature than soldering, but without melting the metals being joined.
Welding	Joining metals by melting them so they fuse together to form a strong bond.
PCB	A board used in electronics to hold and connect components using conductive tracks.

	**Morag Myerscough** is a British designer known for creating **bold, colourful public art and installations**. Her work often uses **strong patterns, typography, and bright colours** to transform public spaces such as schools, hospitals, and city areas. She aims to make places feel **positive, welcoming, and engaging for communities**.Her work shows how design can communicate messages and create a sense of identity and belonging.

Architecture	The design and construction of buildings and structures.
Typograhy	The style and arrangement of letters and text to make written communication clear and visually effective.
Art installation	A large-scale artwork created for a specific space, designed to change how people experience that environment.

Design and Technology Year 8 - Knowledge organiser

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Computer Science Year 8 - Knowledge organiser

Computer Components

Name	Function
Motherboard	Connects all of the components together
Central Processing Unit (CPU)	Carries out all of the instructions / calculations
Memory (RAM)	Short-term storage used by the processor
Hard Disk Drive (HDD)	Long-term storage to save data / documents / work
Power Supply Unit (PSU)	Provide power to all of the parts of a computer

Bytes - Kilobytes - Megabytes - Gigabytes - Terabytes

X1000 x1000 x1000 x1000

Spreadsheets

Function	Operation	Example
=sum()	Adds the values from the range	=sum(a2:b5)
=max()	Finds the highest value in the range	=max(d2:d10)
=min()	Finds the lowest value in the range	=min(a3:f3)
=average()	Finds the mean average of the values in a range	=average(a2:b9)

Computer Storage	Type
Memory	Volatile
Hard Disk Drive (HDD)	Persistent
Solid State Drive (SSD)	Persistent
Optical Disks (CD / DVD / Blu-Ray)	Persistent

Computer Science Year 8 - Knowledge organiser

Computer Components

Name	Function
Motherboard	Connects all of the components together
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	Short-term storage used by the processor
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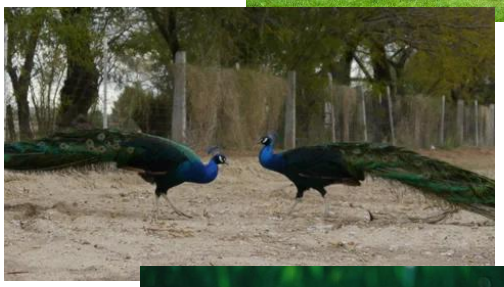
Computer Storage	Type
Memory	
Hard Disk Drive (HDD)	
Solid State Drive (SSD)	
	Persistent

Stage Combat

Key Vocabulary

- ***Trust:*** Having confidence in someone, believing in them and what they say/do
- ***Trust exercise:*** Exercises to build trust, e.g. trust falls and counter balances
- ***Safety measures:*** An action or procedure to lower the risk of injury e.g. doing a move in slow motion first
- ***Reassuring:*** Trying to remove someone's fears and doubts. This might be through talking to them and practicing.
- ***Tension:*** A build up of pressure, the feeling that something is going to happen -in our case, that there is going to be a fight
- ***Proxemics:*** The distance between people on stage
- ***Knap:*** The sound effect created to make a stage combat move seem more realistic
- ***Sightlines:*** What the audience can and cannot see
- ***Sell the move:*** Using your physical and vocal skills to make the move look realistic
- ***Blocking:*** Setting where you are going to stand and move on stage



Trusting

- In stage combat it's so important that you trust each other. If you do not, this can be dangerous and lead to injury.
- You can tell someone isn't trusting you if:
  - They are giggling
  - They are not talking to you
  - They are messing around
  - They refuse to try a move
- To help people trust you, you can reassure them and talk to them. Make sure you go through the moves in slow motion and until both of you are comfortable and confident before going at full speed.

Moves we've looked at:

- Slap
- Punch
- Hair Pull
- Kick to the abdomen
- Kick on the ground
- Head smash

Key Takeaways

- The 'victim' always leads the move
- You must do the move in slow motion at least 3 times before a normal speed
- Proxemics will get closer before a fight -often people will circle each other

Stanislavski

Naturalism

- Naturalism in drama refers to the belief that a play should try to represent reality as closely as possible.
- Stanislavski's techniques created the foundation of modern, realistic acting.
- When an actor plays the role and tries to make it as realistic as possible, this is naturalism
- Naturalism should create a world that could almost be our own. Everything in the play should also be as realistic as real life.
- Naturalism is a *style of acting*

Realism

Realism in the theatre was a *theatre movement* that began in the 19th-century theatre, around the 1870s, and remained present through much of the 20th century.

Realism, in theatre, demands that the performance represent life as truthfully as possible and requires actors to behave as if the play is happening in real time.

Konstantin Stanislavski

Born: 1863 | Died: 1938.

Konstantin Stanislavski was a Russian practitioner who created the serious theatre style of Naturalism.

Stanislavski was born into a very wealthy family and founded the Moscow Art Company in 1898.

He didn't like the melodrama performances which were popular at that time and instead wanted to create something which was emotionally real.

Key Vocabulary

Characterisation: How a character appears, thinks, moves and speaks

Theatre Practitioner: A person who creates theatre

Sense memory: Using your past senses to influence your acting - touch, smell, hear, taste, see

Ensemble: A group of actors

Stanislavski Method

Stanislavski thought actors were becoming lazy so he invented the Stanislavski Method to allow actors to hone their craft.

1. ***Given Circumstance:*** the information about the character that you start off with from the play. Stanislavski had 7 main questions for Given Circumstance: Who am I? Where am I? When is it? What do I want? Why do I want it? How will I get it? What do I need to overcome?
2. ***Magic If:*** The technique were an actor puts themselves in the characters place and asks 'What would I do if I was in this situation?'.
3. ***Units and Objectives: Units-*** when the mood or atmosphere changes. ***Objective -***A character's goal for a scene.
4. ***Super Objectives:*** an objective which runs throughout the whole play. The main objective for a character.
5. ***Emotional Memory:*** Using previous emotions and memories to influence your acting so that you are not pretending but actually feeling those emotions.
6. **Subtext**: Subtext is the actual meaning and motivation behind the lines that are spoken. It's what a character really wants to say.

Stage Combat

Key Vocabulary

- _____***:*** Having confidence in someone, believing in them and what they say/do
- ***Trust exercise:*** Exercises to build trust, e.g. _____ and _____
- _____***:*** An action or procedure to lower the risk of injury e.g. doing a move in slow motion first
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- _____***:*** A build up of pressure, the feeling that something is going to happen -in our case, that there is going to be a fight
- _____***:*** The distance between people on stage
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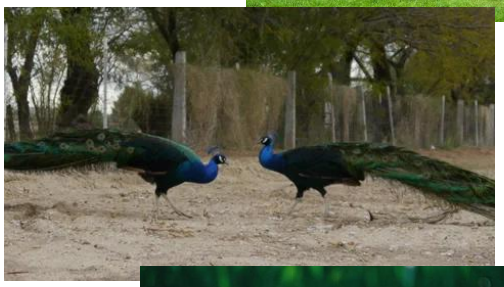

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- Naturalism is a _____

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