YEAR 8 - DEVELOPING GEOMETRY...
Angles in parallel lines and polygons
@whisto_maths

What do I need to be able to do?

By the end of this unit you should be able to:
- Identify alternate angles
- Identify corresponding angles
- Identify co-interior angles
- Find the sum of interior angles in polygons
- Find the sum of exterior angles in polygons
- Find interior angles in regular polygons

Keywords

Parallel: Straight lines that never meet
Angle: The figure formed by two straight lines meeting (measured in degrees)
Transversal: A line that cuts across two or more other (normally parallel) lines
Isosceles: Two equal size lines and equal size angles (in a triangle or trapezium)
Polygon: A 2D shape made with straight lines
Sum: Addition (total of all the interior angles added together)
Regular polygon: All the sides have equal length; all the interior angles have equal size.

Basic angle rules and notation 🔴

The letter in the middle is the angle
The arc represents the part of the angle

Acute Angles
0°< angle <90°

Right Angles
90°

Right angle notation

Obtuse
90°< angle <180°

Reflex
180°< angle <360°

Straight Line
180°

Angle Notation: three letters ABC
This is the angle at B = 113°
Line Notation: two letters EC
The line that joins E to C

Vertically opposite angles
Equal
Angles around a point
360°

Parallel lines

Still remember to look for angles on straight lines, around a point and vertically opposite!!

Corresponding angles often identified by their "F shape" in position

Lines OF and BE are **transversals** (lines that bisect the parallel lines)

Alternate angles often identified by their "Z shape" in position

This notation identifies parallel lines

Alternate/ Corresponding angles

Because alternate angles are equal the highlighted angles are the same size

Because corresponding angles are equal the highlighted angles are the same size

Co-interior angles

Because co-interior angles have a sum of 180° the highlighted angle is 110°

As angles on a line add up to 180° co-interior angles can also be calculated from applying alternate/ corresponding rules first

Triangles & Quadrilaterals
Link to steps 🔴

Side, Angle, Angle

Side, Angle, Side

Side, Side, Side

Properties of Quadrilaterals

Square
All sides equal size
All angles 90°
Opposite sides are parallel

Rectangle
All angles 90°
Opposite sides are parallel

Rhombus
All sides equal size
Opposite angles are equal

Parallelogram
Opposite sides are parallel
Opposite angles are equal
Co-interior angles

Trapezium
One pair of parallel lines

Kite
No parallel lines
Equal lengths on top sides
Equal lengths on bottom sides
One pair of equal angles

Sum of exterior angles

Exterior angles all add up to 360°

Using exterior angles

Exterior Angles
Are the angle formed from the straight-line extension at the side of the shape

Exterior Angle

Interior Angle

Interior angle + Exterior angle = straight line = 180°
Exterior angle = 180 − 165 = 15°

Number of sides = 360° ÷ exterior angle
Number of sides = 360 ÷ 15 = 24 sides

Sum of interior angles

(number of sides − 2) x 180

Interior Angles
The angles enclosed by the polygon

Sum of the interior angles = (5 − 2) x 180

This shape can be made from three triangles
Each triangle has 180°

Sum of the interior angles = 3 x 180
= 540°

This is an **irregular** polygon – the sides and angles are different sizes

Remember this is **all** of the interior angles added together

Missing angles in regular polygons

Exterior angle = 360 ÷ 8 = 45°

Interior angle = $\frac{(8-2) \times 180}{8}$ = $\frac{6 \times 180}{8}$ = 135°

Exterior angles in regular polygons = 360° ÷ number of sides

Interior angles in regular polygons = $\frac{(number\ of\ sides - 2) \times 180}{number\ of\ sides}$

YEAR 8 - DEVELOPING GEOMETRY...
Area of trapezia and Circles

@whisto_maths

What do I need to be able to do?

By the end of this unit you should be able to:
- Recall area of basic 2D shapes
- Find the area of a trapezium
- Find the area of a circle
- Find the area of compound shapes
- Find the perimeter of compound shapes

Keywords

Congruent: The same
Area: Space inside a 2D object
Perimeter: Length around the outside of a 2D object
Pi (π): The ratio of a circle's circumference to its diameter.
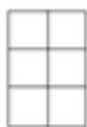**Perpendicular**: At an angle of 90° to a given surface
Formula: A mathematical relationship/ rule given in symbols. E.g. b x h = area of rectangle/ square
Infinity (∞): A number without a given ending (too great to count to the end of the number) — never ends
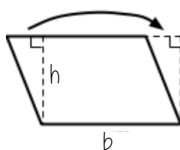**Sector**: A part of the circle enclosed by two radii and an arc.
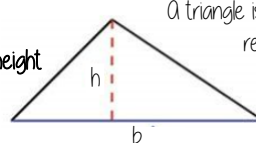
Area — rectangles, triangles, parallelograms

R

Rectangle
Base x Height
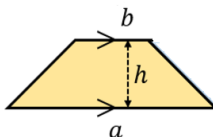
Parallelogram/ Rhombus
Base x Perpendicular height
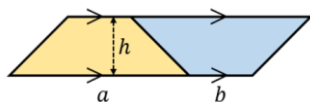
Triangle
½ x Base x Perpendicular height

A triangle is half the size of the rectangle it would fit in

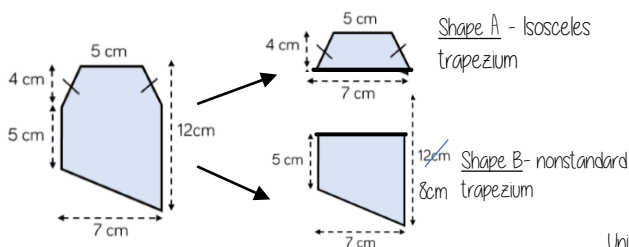## Area of a trapezium

Area of a trapezium
$$\frac{(a + b) \times h}{2}$$

Why?

- Two congruent trapeziums make a parallelogram
- New length (a + b) x height
- Divide by 2 to find area of one

Area of a circle (Non-Calculator)

Read the question — leave in terms of π or if $\pi \approx 3$ (provides an estimate for answers)

Area of a circle
π x radius^2
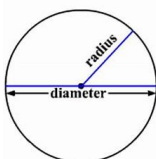
Diameter = 8cm
∴ Radius = 4cm

Radius = 4cm

π x radius^2
= π x 4^2
= π x 16
= 16π cm^2

Find the area of one quarter of the circle

4 cm

Circle Area = 16π cm^2
Quarter= 4π cm^2

Area of a circle (Calculator)

SHIFT ×10^x

Area of a circle
π x radius^2

How to get π symbol on the calculator
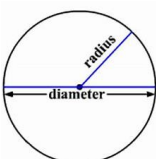
It is important to round your answer suitably — to significant figures or decimal places. This will give you a decimal solution that will go on forever!

Compound shapes

To find the area compound shapes often need splitting into more manageable shapes first. Identify the shapes and missing sides etc. first.

5 cm
4 cm
4 cm
5 cm
12cm
7 cm

5 cm
4 cm
7 cm
<u>Shape A</u> - Isosceles trapezium

5 cm
12cm
8cm
7 cm
<u>Shape B</u>- nonstandard trapezium

Units

Shape A + Shape B = total area
$$\frac{(5 + 7) \times 4}{2} \quad + \quad \frac{(5 + 8) \times 7}{2} \quad = 24 + 45.5 = 69.5cm^2$$

Compound shapes including circles

Circumference
π x diameter

Compound shapes are not always area questions. For Perimeter you will need to use the circumference

<u>Spotting diameters and radii</u>

64 m
150 m
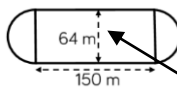
This dimension is also the diameter of the semi circles.

Arc lengths = π x 64
= 64 π

Don't need to halve this because there are 2 ends which make the whole circle

Arc lengths + Straight lengths = total perimeter

= 64 π + 150 + 150
= (300 + 64 π) m
OR = 501.1 m

Still remember to split up the compound shape into smaller more manageable individual shapes first

YEAR 8 – DEVELOPING GEOMETRY....
Line symmetry and reflection

@whisto_maths

What do I need to be able to do?

By the end of this unit you should be able to:
- Recognise line symmetry
- Reflect in a horizontal line
- Reflect in a vertical line
- Reflect in a diagonal line

Keywords

Mirror line: a line that passes through the center of a shape with a mirror image on either side of the line
Line of symmetry: same definition as the mirror line
Reflect: mapping of one object from one position to another of equal distance from a given line.
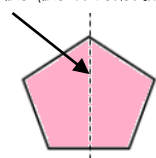**Vertex**: a point where two or more-line segments meet.
Perpendicular: lines that cross at 90°
Horizontal: a straight line from left to right (parallel to the x axis)
Vertical: a straight line from top to bottom (parallel to the y axis)

Lines of symmetry

Mirror line (line of reflection)

Rhombus two lines of symmetry

Parallelogram No lines of symmetry

Shapes can have more than one line of symmetry....
This regular polygon (a regular pentagon has 5 lines of symmetry)

A circle has an infinite amount of lines of symmetry
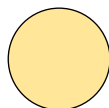
Reflect horizontally/ vertically (1)

Note: a reflection doubles the area of the original shape
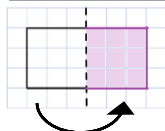
Reflection in a vertical line
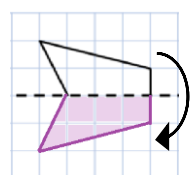
Reflection in a horizontal line

Reflection on an axis grid
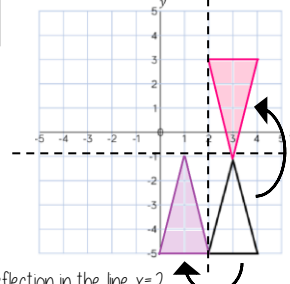
Reflection in the line y=-2

Reflection in the line x=2

Reflect horizontally/ vertically (2)

All points need to be the same distance away from the line of reflection
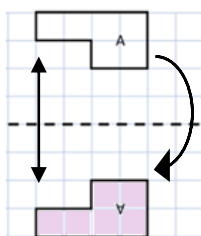
Reflection in the line y axis – this is also a reflection in the line x=0
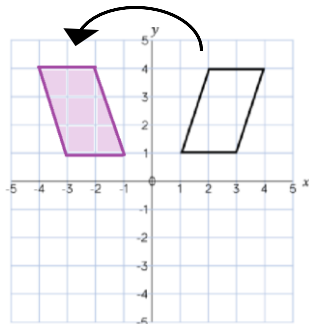
Lines parallel to the x and y axis
REMEMBER
Lines parallel to the x-axis are y = ____
Lines parallel to the y-axis are x = ____

Reflect Diagonally (1)

Points on the mirror line don't change position
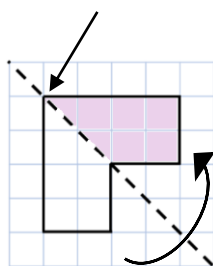
Fold along the line of symmetry to check the direction of the reflection
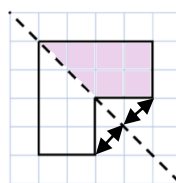
Turn your image
If you turn your image it becomes a vertical/ horizontal reflection (also good to check your answer this way)
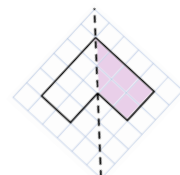
Drawing perpendicular lines
Perpendicular lines to and from the mirror line can help you to plot diagonal reflections

Reflect Diagonally (2)

This is the line y = x (every y coordinate is the same as the x coordinate along this line)
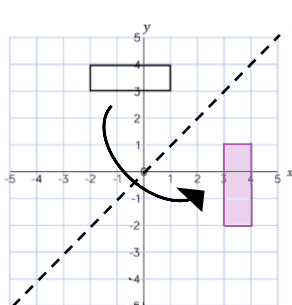
This is the line y = - x
The x and y coordinate have the same value but opposite sign
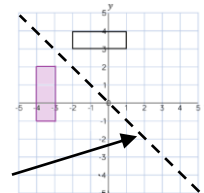
Turn your image
If you turn your image it becomes a vertical/ horizontal reflection (also good to check your answer this way)
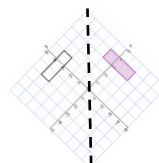
YEAR 8 - REASONING WITH DATA...
The data handling cycle

@whisto_maths

What do I need to be able to do?

By the end of this unit you should be able to:
- Set up a statistical enquiry
- Design and criticise questionnaires
- Draw and interpret multiple bar charts
- Draw and interpret line graphs
- Represent and interpret grouped quantitative data
- Find and interpret the range
- Compare distributions

Keywords

Hypothesis: an idea or question you want to test
Sampling: the group of things you want to use to check your hypothesis
Primary Data: data you collect yourself
Secondary Data: data you source from elsewhere e.g. the internet/ newspapers/ local statistics
Discrete Data: numerical data that can only take set values
Continuous Data: numerical data that has an infinite number of values (often seen with height, distance, time)
Spread: the distance/ how spread out/ variation of data
Average: a measure of central tendency — or the typical value of all the data together
Proportion: numerical relationship that compares two things

Set up a statistical enquiry

Write a suitable hypothesis → Design a data collection sheet → Pros/ Cons of sampling → Pros/ Cons primary or secondary data → Discrete or continuous data?

Features of a data collection sheet

Grouped or ungrouped categories

Data Title	Tally	Frequency
	IIII I	

Total number of that group observed

Design and criticise a questionnaire

The Question - be clear with the question - don't be too leading/ judgemental

> e.g. How much pocket money do you get a week?

Responses – do you want closed or open responses? – do any options overlap? – Have you an option for all responses?

Zero option

☐ £0   ☐ £0.01 - £2   ☐ £2.01 - £4   ☐ more than £4

More option

NOTE: For responses about continuous data include inequalities $< x \leq$
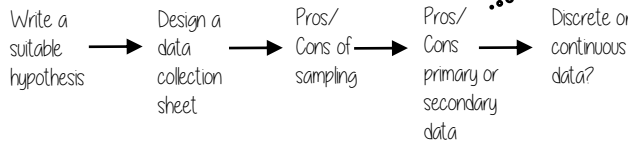
Pictograms, bar and line charts (R)

Represents quantitative data

Pictogram

Language	
French	●●●●
Spanish	●●●
German	●

● = 4 people

- Need to remember a key
- Visually able to identify mode

Bar Chart

How Y8 travel to school

- Gaps between the bars
- Clearly labelled axes
- Scale for the axes
- Title for the bar chart
- Discrete Data

Line Chart

- Gaps between the lines
- Clearly labelled axes
- Scale for the axes
- Discrete Data

Multiple Bar chart

Compares multiple groups of data

Average temperatures

- Clearly labelled axes
- Scale for axes
- Comparable data bars drawn next to each other

Key/ Colour code for separate groups of information

Gap between different categories of data

Draw and interpret Pie Charts (R)

Remember a circle has 360°

Type of pet	Dog	Cat	Hamster
Frequency	32	25	3

There were 60 people asked in this survey (Total frequency)

$\frac{32}{60}$ "32 out of 60 people had a dog"

This fraction of the 360 degrees represents dogs

$\frac{32}{60}$ X 360 = 192°

Multiple method
As 60 goes into 360 — 6 times.
Each frequency can be multiplied by 6 to find the degrees (proportion of 360)

Use a protractor to draw
This is 192°

Represents quantitative, discrete data

Draw and interpret line graphs

Playground Temperature

- Commonly used to show changing over time
- The points are the recorded information and the lines join the points

Line graphs do not need to start from 0

More than one piece of data can be plotted on the same graph to compare data

It is possible to make estimates from the line e.g temperature at 9.30am is 5°C

Grouped quantitative data

Time (minutes)	Frequency
$0 \leq t < 5$	4
$5 \leq t < 10$	6
$10 \leq t < 15$	5
$15 \leq t < 20$	8
$20 \leq t < 25$	10
$25 \leq t < 30$	1

This is a frequency diagram
There are no gaps between the bars

Grouping the data is useful if there is a large spread of data to begin with

"More than or equal to 25 and less than 30 minutes"

The use of inequalities shows that this will be a frequency diagram

Find and interpret the range

Difference between the biggest and smallest values

The range is a measure of **spread**

A smaller range means there is less variation in the results — it is more consistent data

A range of 0 means all the data is the same value

Shop 1 highest value

Shop 1 lowest value

Shop 1 has the smallest range — this indicates it has a more consistent flow of customers each week

Range of customers = 25 – 22 = 3
(Shop 1)

Key Vocabulary:

1	**Angle of incidence**	The angle between the incident (incoming) ray and the normal.
2	**Angle of reflection**	The angle between the reflected (outgoing) ray and the normal.
3	**Boundary**	The edge of a material or medium.
4	**Concave lens**	A lens that spreads out rays of light.
5	**Convex lens**	A lens that brings rays of light to a focal point.
6	**Cornea**	The transparent layer at the front of the eye.
7	**Dispersion**	The splitting of white light into the colour spectrum.
8	**Emit**	Produce or give out.
9	**Law of reflection**	The angle of incidence is equal to the angle of reflection.
10	**Lens**	A piece of dense transparent material that causes light to refract.
11	**Luminous**	Something that gives off light.
12	**Medium**	The substance through which a wave travels.
13	**Non-luminous**	Something that does not give off light.
14	**Normal**	An imaginary line perpendicular (at right angles) to the surface of a medium, from where angles are measured.
15	**Pupil**	The round opening in the centre of the eye through which light passes.
16	**Reflection**	When light bounces back to the medium it came from when it hits a boundary between materials.
17	**Refraction**	The change in speed of light as it moves from one medium to another, causing it to change direction.
18	**Retina**	The layer at the back of the eye that is sensitive to light and passes signals to the brain via the optic nerve.
19	**Spectrum**	The colours that make up white light.

18 Understanding Light

1. Light travels at 300 million metres per second (m/s).
2. Light travels faster than sound.
3. Light always travels in straight lines from a luminous object.
4. Shadows form when light is blocked by an opaque object.
5. Ray diagrams can show how light reflects off mirrors, forms images, and refracts.
6. Ray diagrams are always drawn with a ruler and pencil.
7. Angles are measured from the normal line with a protractor.
8. The normal line is the dotted line from which angles are measured, at right angles (90°) to the surface.
9. Arrows are used to show the direction the light is travelling in.
10. Transparent: A material that allows most light to pass through it.
11. Translucent: A material that allows some light to pass through it.
12. Opaque: A material that allows no light to pass through it.

19 Reflection

1. Reflection occurs when light hits a smooth surface (e.g. a mirror).
2. The light hits the surface and is reflected into the eye.
3. The angle of incidence is equal to the angle of reflection – this is the law of reflection.

i= angle of incidence
r= angle of reflection
Mirror
Reflected ray
Incident ray

20 Refraction

1. Refraction is the change in the direction of light going from one material (medium) into another.
2. This change in direction is because light changes speed when it moves from one medium to another.
3. When light enters a more dense medium it bends towards the normal.
4. When light enters a less dense medium it bends away from the normal.
5. Refraction in water makes objects look as though they are nearer the surface than they actually are.

Angle of incidence   Angle of refraction
Normal   Normal

21 Lenses

1. Lenses refract light.
2. Convex lenses are thicker in the middle and refract light to a focal point. In the eye, the cornea and lens are both convex lenses and help to focus light onto the retina.
3. Concave lenses are thinner in the middle and scatter the light (there is no focal point).

22

1. Prisms cause light to be dispersed, this is when white light to split into seven component colours called a spectrum.
2. Spectrum: A band of colours produced by separation of the components of light because they are each refracted differently.
3. The order of the colours is always the same ROYGBIV: red, orange, yellow, green, blue, indigo, violet.
4. Red light is refracted the least and violet is refracted the most.
5. Red, green and blue are called the primary colours of light.
6. Yellow, magenta and cyan are the secondary colours of light, made from combinations of the primary colours.
7. White light is produced from the combination of all the colours.
8. Objects appear the colour that they reflect, e.g. a red apple appears red because it reflects red light and absorbs all other colours
9. White objects appear white because they reflect all colours
10. Black objects appear black because they absorb all colours

Key Vocabulary

1	**Acidic**	Having a pH lower than 7. The stomach is acidic.
2	**Alkaline**	Having a pH greater than 7. Bile is alkaline.
3	**Amylase**	An enzyme that speeds up the breakdown of starch into glucose.
4	**Diffusion**	The net movement of particles from an area of high concentration to an area of low concentration.
5	**Enzyme**	Substances that speed up chemical reactions in the body.
6	**Lipid**	A nutrient found in butter, oils and other fatty foods, that provides energy and insulation.
7	**Muscle**	A type of tissue that can contract and relax.
	Tissue	
8	**Organ**	A group of tissues working together in an organism which performs a specific function.
9	**Pancreas**	An organ which produces enzymes.
10	**Protein**	A nutrient found in fish, meat, eggs, nuts and pulses that is

11	The contents of a healthy human diet include carbohydrates, lipids (fats and oils), protein, vitamins, minerals, dietary fibre and water
12	A balanced diet includes all the nutrients our body needs in the right quantities
13	Calcium is an example of a mineral used in making bones and teeth

14	Carbohydrates are important to provide energy. Carbohydrates are found in foods such as bread, potatoes, rice and pasta Lipids (fats) are important for providing energy and insulation. Lipids are found in foods such as nuts, dairy products, meat, oils and sweets Proteins are important for growth and repair of cells and tissues. Proteins are found in foods such as eggs, pulses, fish, meat, nuts and dairy products

tongue — salivary glands
— oesophagus
liver — stomach
gallbladder —
duodenum — pancreas
— small intestine
appendix — large intestine
rectum —
— anus

16	The oesophagus moves food into the stomach
17	In the stomach, mechanical and chemical digestion occur
18	The stomach contains acid
19	Water is absorbed into the bloodstream from the large intestine

Food test

21	Iodine solution changes colour from brown to black in the presence of starch
22	Benedict's reagent changes colour from blue to orange/red when heated in the presence of simple sugars such as glucose
23	Biuret reagent changes colour from blue to purple in the presence of protein

20	
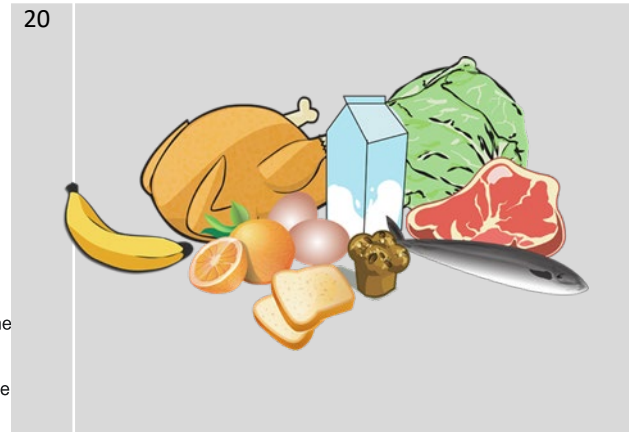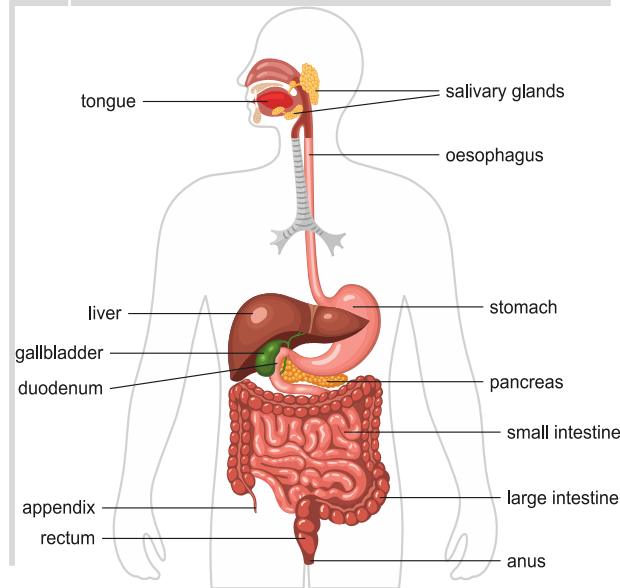
Year 7 – Poetry – HT5 Knowledge Organiser

Poetry	Literary work that expresses feelings and ideas using rhythm and style.
Analysis	Detailed examination of the language elements or structure of a piece of writing.
Comprehension	The understanding when reading a piece of text.
Structure	The structure of a poem is the way it is put together. It refers to the structural techniques and how it looks on the page.
Message	The message of a poem is what the writer intended to say – often poetry will have different layers of meaning.
Imagery	The imagery of a poem refers to the mental images that are created through language use.
Language	The language of a poem refers to word choices. Poets often try to use particularly descriptive vocabulary.
Effect	The effect of a poem refers to the way the writer wants readers to feel after reading.
Stanza	A group of lines in poetry, like a paragraph in writing, or a verse in a song.
Free Verse	Free verse is any poem that does not follow a particular rhyme scheme or rhythm.
First Person Narrative	When a story or poem is written from the perspective of the protagonist using first person pronouns.
Cyclical Structure	When a story begins at the end or ends at the beginning.
Consonance	When the same or similar constant sound occurs in words close to each other in a text.
Abstract	Something that usually only exists through a thought or an idea.
Caesura	A pause in a line of poetry marked by a full stop/end of a sentence.
Dashes	Punctuation that creates particular emphasis.
Refrain	A repeated line through a piece of poetry.
Connotations	The associations a particular word or phrase has.
Rhyme	Words with a similar/identical vowel or consonant sound.

Year 8: Causes of the First World War

On 28 June 1914, Archduke Franz Ferdinand, and his wife were assassinated This was just one of the many causes leading to the start of the First World War.

Triple Entente
GB, France, Russia, Serbia

Central Powers
Germany, Austro Hungary
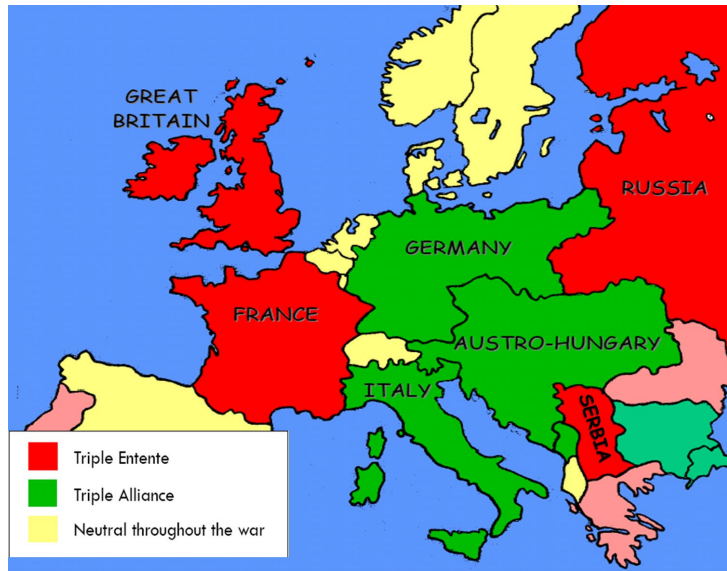
ALLIANCES	An agreement between countries that benefits each of them.
ASSASSINATION	The planned murder of an important person.
BALKANS	A region in south eastern Europe.
EMPIRE	A group of countries ruled by a single country.
HEIR	someone who has the right to inherit a person's money, property, or title when that person dies
IMPERIALISM	Imperialism is a way of governing in which large or powerful countries seek to extend their power beyond their own borders.
KAISER	German word meaning King.
MILITARISM	The belief that it is necessary to have strong armed forces.
NAVY	The part of a country's armed forces that is trained to operate at sea.
NATIONALISM	A pride in your own country and a belief that it must be strong.
RIVALRIES	A situation in which countries compete against each other for the same thing.

Key People	
Alfred von Schlieffen	Schlieffen developed a plan in 1897 in which Germany would attack and defeat France quickly, and then fight Russia.
Kaiser Wilhelm I	King of Germany
The Black Hand	A secret society of Serbs dedicated to unite all Serbs in the Balkans.
Archduke Franz Ferdinand	Heir to the Austro-Hungarian Empire, assassinated by Gavrilo Princip in 1914.
King George V	King of England
Tsar Nicholas I	Emperor of Russia

TIMELINE OF THE EVENTS LEADING TO WORLD WAR ONE

Triple Alliance Signed. 1882.	France and Britain signed the Entente Cordiale 1904.	Archduke Franz Ferdinand, assassinated. 28 June 1914,	Austro-Hungary declares war on Serbia. 28th July 1914	Germany declares war on Russia 1st August 1914

Keywords

Biome - a global ecosystem.

Choropleth - colour map to show different values.

Climate - average temperature and precipitation over time.

Densely populated - many people in an area.

Nuclear energy - energy created by atoms.

Permafrost - permanently frozen ground.

Rural-urban migration - movement of people from rural to urban areas.

Sparsely populated – few people in an area.

Taiga - forest in high latitudes.

Tundra - flat, treeless region in high latitudes.

Russia's biomes

Characteristics of biomes

Tundra
- Fungi and shrubs
- Too cold for trees
- Short roots
- Thin, acidic soils

Taiga
- Evergreen trees
- Thick bark
- Shallow, long roots
- Rich soil
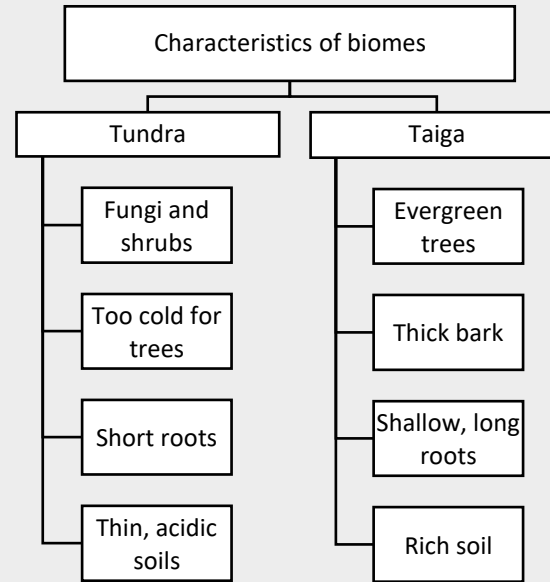
Volcanoes in risky areas

Monitoring techniques 3Ps
- Predict
- Plan
- Prepare

Russia's population

Reasons for population distribution

Sparsely populated
- Landscape
- Extreme
- Risk

Densely populated
- Ports
- Fertile
- Mild
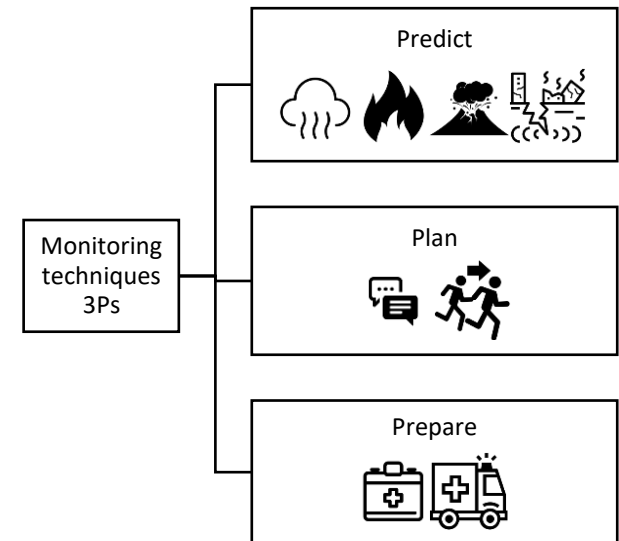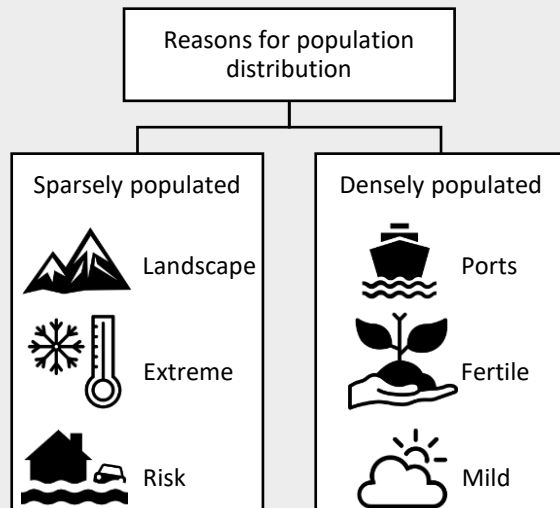
Rural-urban migration in Russia

- Larger homes
- Gardens
- Stores are expanding
- Public libraries
- Outdoor activities

- Higher education
- More leisure facilities
- Good healthcare

- Lack of gas, water and electricity
- Poor healthcare
- Poor education

- Overcrowded
- Housing shortage
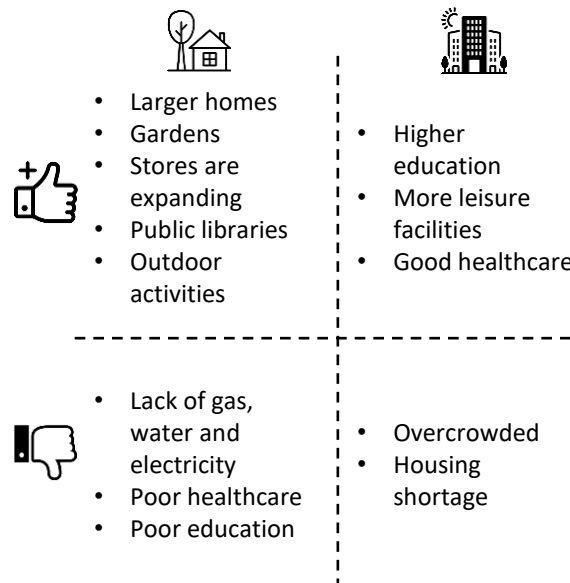
Causes and effects of the Chernobyl disaster

Causes

Large power surge

100x more power released

Radioactive material released

Chernobyl disaster (1986)

160,000 people evacuated

Food shortages

600,000 people exposed

Over 200,000 deaths

Effects

Tenses

A
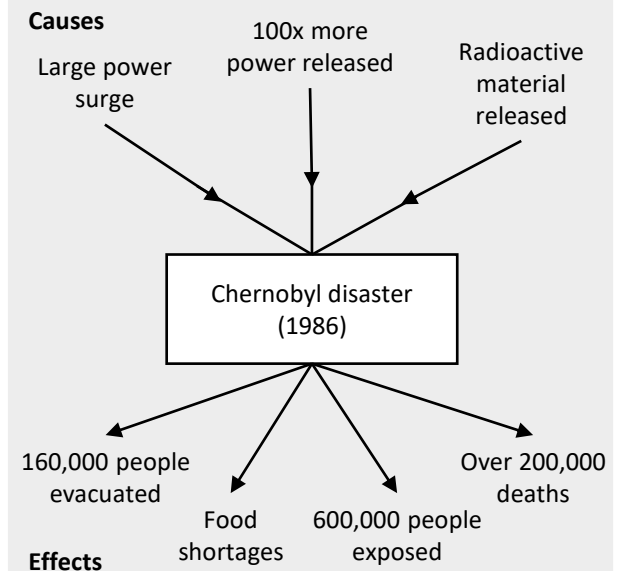
Son= they are
Hay - there is
Es - is
Tiene - has

PRESENT	-ar verbs	-er verbs	-ir verbs
I	-o	-o	-o
you	-as	-es	-es
he/she/it	-a	-e	-e
we	-amos	-emos	-imos
you (pl)	-áis	-éis	-ís
they	-an	-en	-en

B

FUTURE	Saying what you are going to do	
Voy		INFINITIVE
		Ir
vas		
va	a	*Tocar*
		jugar
vamos		*nadar*
		llevar
vais		
		leer
van		*Ver*

Opinions

C

Odio

Detesto

Prefiero

Pronouns
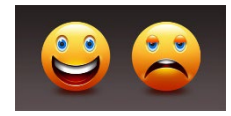
D

Me chifla(n)

Me flipa(n)

Me = me
Le = him/her
Nos = us

Me irrita(n)

Me aburre(n)

Connectives

E

También / además   also/furthermore
Pero / sin embargo   but / however
que   which
Porque / dado que   because/ given that
Aunque   although

Complexity

F

Tengo que + Infinitive = I have got to
Tengo que llevar   = I have to wear

Más….que = more…than
Menos…que = less…than

Me gustaría llevar… = I would like to wear…

Adjectives

G

De moda	fashionable
Antecuado(a)	Old fashioned
Largo(a) / corto(a)	Long/ short
elegante	smart
De colorines	coloured
Estampado(a)	patterned
De rayas	striped
Cómodo / incómodo	(un)comfortable
Feo/a	Ugly

Un vestido negro
Una falda negra

H

Muy = very
Bastante = quite
Un poco = A little bit
Demasiado=*too*
realmente= *really*

Year 8 La Ropa TOPIC VOCABULARY TRANSLATED

LA ROPA

I

Spanish	English
un traje	a suit
un jersey	a jumper
un abrigo	a coat
un top	a top
un vestido	a dress
Un cinturón	a belt
una camisa	a shirt
una blusa	a blouse
una falda	a skirt
una camiseta	a T-shirt
una corbata	a tie
una sudadera (con capucha)	a sweatshirt (with hood)
una gorra	a baseball cap
unos pantalones	trousers
unos zapatos	shoes
unos vaqueros	jeans
unos calcetines	socks
unas botas	boots
unas zapatillas de deporte	trainers

COLORES   K

amarillo   naranja   rojo   rosado

fucsia   morado   violeta   celeste

azul   verde claro   verde oscuro   marrón

negro   gris   blanco

J   **Los verbos**

Comprar - to buy

Llevar   - to wear

RE 8.3 Crime and Punishment

Key terms

1. **Punishment -** A negative consequence for a bad action.
2. **Capital punishment** - The death penalty.
3. **Retribution** - Getting revenge.
4. **Protection** - Keeping people safe.
5. **Reform** - Helping people to change for the better.
6. **Forgiveness** - Accepting an apology and letting go of anger.
7. **Human Rights -** Things we are entitled to because we are human.
8. **Amnesty International -** A global human rights organisation.
9. **Humanism** - Non religious people who believe that we should try to live a good life just because we should.
10. **Impact** - The effect something has.
11. **Justice** – Fairness.

Crucial Commands:

Describe: Say in detail what something or someone is like, and the impact it has. E.g. Describe Hajj.

Explain: Say why something or someone is important, and the impact it has. E.g. Explain why Zakat is important...

Discuss: Write about at least two points of view and explain why these points of view are valuable or not. E.g. ""Zakat is the most beneficial of the Five Pillars of Islam" Discuss.

Reasons for punishment

The main reasons for punishment are: **retribution** (to get pay-back or revenge); **deterrence** (to put people off committing crimes); **protection** (to keep dangerous criminals away from innocent people; and **reform** (to help people who live a bad life to learn how to live a good life and change for the better).

Other reasons for punishment are: vindication (to show that good people are good) and reparation (to make amends for something you have done wrong).

Amnesty International

This is a very well-known Human Rights organisation, who campaign against injustice and inequality world-wide. They also work to protect people in the world who are vulnerable to inhumane treatment and where human rights are violated.

Amnesty International has over seven million members, both religious and non-religious. Amnesty International very famously campaign against the death penalty and hope for the death penalty to be abolished world-wide.

Islam

There are many teachings in the Qur'an concerning capital punishment. For example the Qur'an says not to take life, which God has made sacred, except for a JUST CAUSE. . It is very important that Muslim authorities think carefully before they make a decision concerning taking life.

Capital punishment

Different types of Capital Punishment include:

- **Lethal injection.**
- **Crucified**
- **Electrocuted**
- **Gas chambers**
- **Firing squad**
- **Hanging**

Many people support capital punishment as they believe that it protects us from dangerous criminals and deters people from committing crimes. Others people dislike capital punishment as they believe that there is always a chance that an innocent person could be executed.

Humanism

Capital punishment is generally opposed by humanists because they believe that killing somebody intentionally is always wrong.

Humanists believe in treating criminals fairly and they argue that by doing this it ensures that innocent suspects are also treated fairly.

Humanists believe that the capital punishment violates basic human rights, as the Human Rights Act states that we all have a right to life.

Christianity

There are many teachings in the Bible that relate to capital punishment. For example, the Ten Commandments say "*do not kill*" whereas the Book of Genesis says "*whoever sheds the blood of man, by man his blood shall be shed*". Christians are therefore divided on their views of CP.

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Athletics

Knowledge
Be able to demonstrate my performance.
Show a range of skills in a competitive situation in track events 100m, 200m, 300, 400, 800m, 1500m and field events – throwing = Discus, Javelin, Shot Put – jumping = Long Jump, High Jump, Triple Jump.
Key Skills:

Running events
• Starting: • Use of Blocks (where relevant) • Leg action: • Foot strike •Cadence • Bend running (where relevant) • Stride pattern/pacing •

Jumping events
• Approach: • Hitting appropriate speed for take-off • Efficient transition
between technical phases of the movements • Flight: • Appropriate elevation • Landing • movement of the body beyond initial point of contact
(long jump and triple jump)

Throwing events
• Travel: • use of cross step/glide (where applicable) • rotational throws
(where applicable) • Release phase: • Appropriate angle of release • Efficient transition between technical phases of the movements

Key Content and Terms to learn: HEPTATHLON: an athletic event in which competitors take part in seven sports events* HIGH JUMP: a sports event in which competitors jump over a bar LANE: parallel lines on a running track

Stretch and Challenge Task:
Research the past Olympic games, they have an incredible history!
https://www.olympic.org/

Key Content and Terms to learn:
ATHLETE: a trained person in sports who takes part in track and field competitions
BATON: a short tube passed from runner to runner in a race* BELL LAP: the final
lap in a race* DECATHLON: an athletic event in which competitors take part in ten
sports events* FALSE START: an invalid start of a race in which one of the
competitors starts too early – before the official signal has been given

Each individual discipline has its own specific set of rules and competitors are expected to abide by these to ensure that the competition is fair.
Some athletics events you are likely to cover include the following;
• 100 metres, 200 metres, 400 metres, 4 × 100 metres relay, High jump, Long jump, Triple jump, Shot put, Discus throw, Javelin throw

Stretch and Challenge Task:
Research local clubs and events , perhaps you could get involved…!

INTRODUCTION TO PYTHON

Python is a **text** based **programming language**. That can be used to create programs, games, applications and much more!

A **program** is a set of precise instructions, expressed in a **programming language**. This is called an algorithm

In programming we use variables, these are like containers that store data An example would be   Name =("Paul")   - Name is the variable and Paul is the data stored.

If we do not input data and have information returned, there is no point of a computer.
To enter data using python
Name = input(" please enter your name") Name is the variable and the data entered by the user will be stored in that variable. If we don't put the input in then the user will not be able to input and data
If we want to enter a number the code used is slightly different
Num = int(input("please enter a number, ")) please note the double brackets at the end and we put int before the input

We can use selection in programming, for example if it is raining wear coat otherwise don't wear a coat. This looks like
Raining = input(" is it raining, please answer yes or no, ")
If Raining == "yes":
    print ("it is raining")   Raining is the variable, if and else check
else: and the print is the output. Don't forget the :
    print (" it is dry")

Or when the value you want to enter is a number:
Test =int(input(" What did you get in the test "))
If Test > 50:   Test is the variable. Don't forget the int and
    print ("Well done you passed")   the ((because it is a number
else:
    print (" Sorry you failed")

Useful snippets of code

print ("Year 8")	Will display the string "Year 8". A string to be displayed is always found between " "
input ()	Reads a line of text from the keyboard and returns it
print	Is put before what you want to be output
Name=[item1 , item2, item3]	Allows ctreation of a list e.g. shopping = ["oranges", "apples", pears"]

Data types
Whole numbers—**integer**

Letters, combination of letters, numbers—**string.** Strings are always contained in "" if you want it displayed

Yes/no or True/False— **boolean**

Arithmetic operators
+ addition
- difference
* multiplication
/ division

Selection symbols
< less than
> Greater than
= = Equal to

Some common syntax errors in selection
· use if and else—no capitals
· A colon : is always required after the condition and after else. E.g. after the yes and the 50 in the examples
· Use **indentation** to indicate which statements 'belong' to the if block and the else block.
You need a double = (look at the example) if you want the condition to be = to something

Aboriginal Art History

- Aboriginal art is the oldest form of artistic expression in the world. Scientists have found Aboriginal art carvings that dates back at least 30,000 years.

- Experts believe that the Aboriginals migrated from the African continent over 30,000 years ago. They believe that they arrived in Australia by accident, as they where carried across the pacific ocean by a flood or tsunami that happened somewhere in the north.

- An important part of their culture is the performance of dance and art. Most of the dances are inspired by animals and nature. Dances and stories are passed down from generation to generation. Nothing is written down.

- Dreamtime is a type of Aboriginal Art. It is how they understand the world and rules that govern their lives. You could say it is similar to the bible.

- Aboriginals believe that the Dreamtime was way back, at the very beginning. The land and the people were created by the Spirits. They made the rivers, streams, water holes the land, hills, rocks, plants and animals.

Design – A plan for the construction of an object or art piece before it is made.

Pattern – A repeated decorative design.

Keywords:

Communication – Using imagery to communicate, for example, cave paintings.

Tribal – Things which belong to a tribe; a group of indigenous people.

Cultural – The ideas and behaviour of a society.

Symbolism – Representing an idea in a visual way.

Aboriginal Art

Construction of Boomerang

A **boomerang** is a flying tool with a curved shape used as a weapon or for sport.
Aboriginal people used them to help to hunt for food.
They are primarily used for sport.

Step 1: Draw around the boomerang template.
Step 2: Design your boomerang, adding an animal and symbols using earthy colours.
Step 3: Using cardboard, layer your boomerang to make it three-dimensional.
Step 4: Using papier mâché, make your boomerang layers smooth.
Step 5: Using your design idea from before, repeat your design neatly onto your boomerang. Use a base colour first. You could also add texture with string. Make sure to create small dots with different colours.

Symbolism

The colours used represent parts of the Earth.
Black: Represents night time
Yellow: This is the sacred colour. The colour of the sun.
Red: The colour for land and blood.
White: The spirt colour, like smoke, wind and lighting.

Aboriginal Art consists of symbols. These symbols are used as communication. The symbols represent earth, their rituals, food and customs.

Summary of topic
Students explore Greek myths and choral strategies to fully understand how drama was created.

Aims of the topic
To be introduced to the Greek Theatre genre of where drama began.

Skills & Definitions
Choral Speech – speaking together at the same time.
Parados – Where the chorus stand.
Skene – Where the actors got changed.
Theatron – Where the audience sat.
Orchestra – Where the actors performed.
Ampitheatre – Greek outdoor theatre.
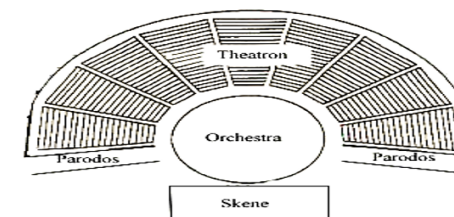Posiedon – King of the ocean.
Zeus – Leader of the Gods.
Medusa – Gorgon, if you stare at her she turns you into stone.
Athens – Capital city of Greece.
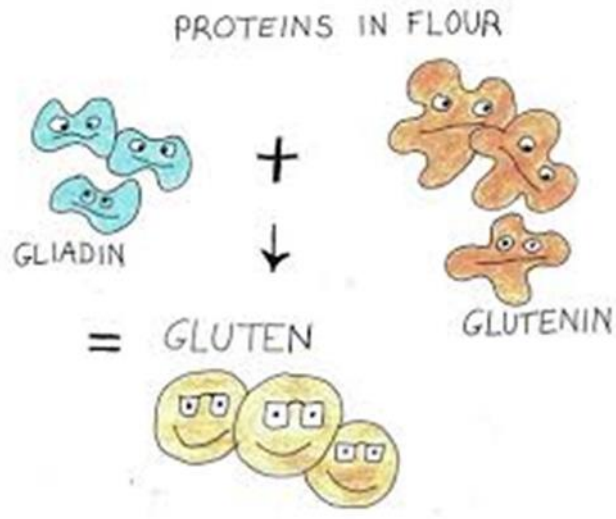Trestle mask – Worn by the actors.

DRAMA

Greek Theatre Y8

Knowledge Organiser

Assessment & Performance Tips

The assessment is a group scripted piece using a poem stimuli of Medusa.
- Face the audience at all times
- Speak loud and clear so everyone can hear you
- Try not to laugh and stay focused.
- Use a real range of movement skills.
- Use choral skills.
- Add emotion to your performance.
- Make your performance abstract. Look beyond the meaning of words.

Key Words

•	Ampitheatre	•	Zeus
•	Theatron	•	Chorus
•	Parados	•	Orchestra
•	Skene	•	
•	Poseidon	•	

THE GREEK AMPHITHEATRE
THEATRE BEGAN 6TH CENTURY BC– 2ND CENTURY AD

Theatron
Orchestra
Parodos   Parodos
Skene

Parts of a Greek Theater

PROTEINS IN FLOUR

GLIADIN + GLUTENIN ↓

= GLUTEN

The yeast **ferments** the sugar in the food.
Ferment = yeast feeds on sugar and produces
CO_2 - Carbon Dioxide
&
Alcohol

Test 1: Ranking Test
Test 2: Rating Test
Test 3: Profiling Test

Cake Making Methods

Rubbing in.
Butter and flour are rubbed together. This laminates the flour and stops the gluten being formed. This creates a crumbly buttery texture. Ratio of 1:4 Fat : Flour
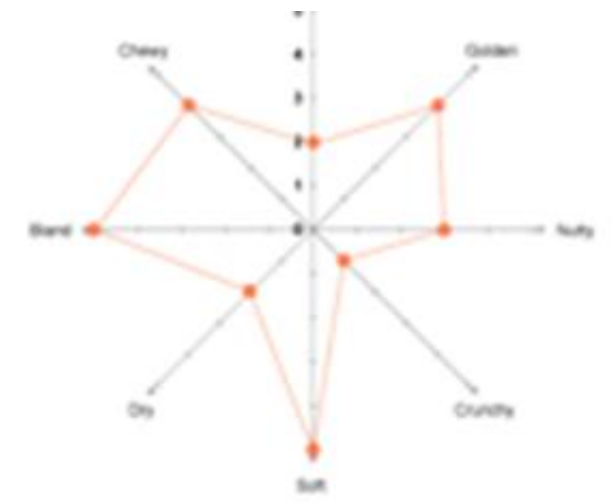
Melting.
Butter is melted before adding to the sugar mix. This helps to create a dense, moist cake as there is no step to create air.
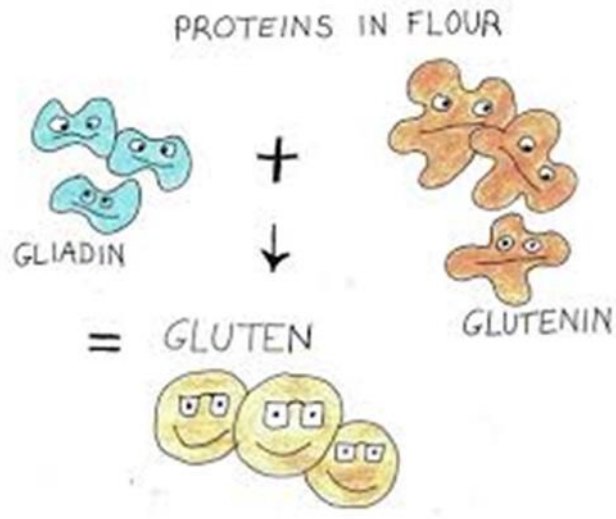
Creaming.
This method adds lots of air to the cake. Firstly the butter and sugar are creamed together before beating in the egg. The egg traps lots of air at this stage. SR flour is then carefully folded in to ensure the air remains in the batter. This also contains a chemical raising agent. Ratio 1:1

All in One.
This method puts all the ingredients together and then a big mix. Usually this is used for cakes that use oil rather than butter, so there is no reason to cream before hand.

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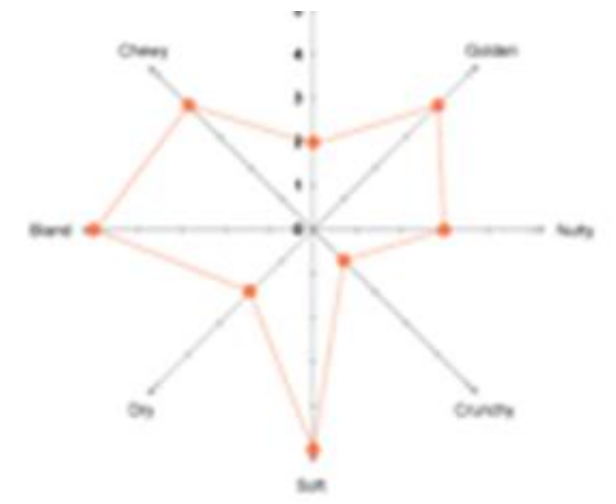Test 3: Profiling Test

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CLASS CONCERT

Samba — Brazil

- Surdo
- Ganza
- Caixa
- Apito
- Agogo
- Repinique
- Timbales
- Reco-reco

Recap
Rehearse
Perform
from the 5 topics

Pop Music
Through the Decades
- 60s
- 70s
- 80s
- 90s

Woodwind	Brass	Strings	Percussion
Flute	Trumpet	Violin	Timpani
Saxophone	Trombone	Viola	Snare Drum
Oboe	French Horn	Cello	Glockenspiel
Clarinet	Tuba	Double Bass	Xylophone
Bassoon			Drum Kit

Orchestra

4 Chords

C E G · G B D · A C E · F A C

Adverts

Crescendo =	Getting louder.
Ostinato =	Repeated musical pattern.
Chords =	Two or more notes at the same time.
Diminuendo =	Getting quieter.
Glissando =	Fast up or down all the notes.
Timbre change =	Using different sounding instruments.
Rall/accelerando =	Slows down/speeds up.

In the Hall of the Mountain King by Grieg.

E F# G A B G B   Bb F# Bb   A F A   E F# G A B G B E   D B G B D

Eine Kleine Nachtmusik by Mozart.

G   D G   D   G D G B D   C   A C   A   C A F# A D

Ride of the Valkyries by Wagner.

G G G   Bb   G   Bb Bb Bb   D   Bb   D Bb D   F   F   Bb F Bb   D