

The 2023 Knowledge Organisers Pack



Year
7



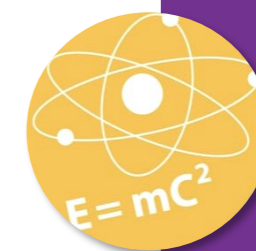


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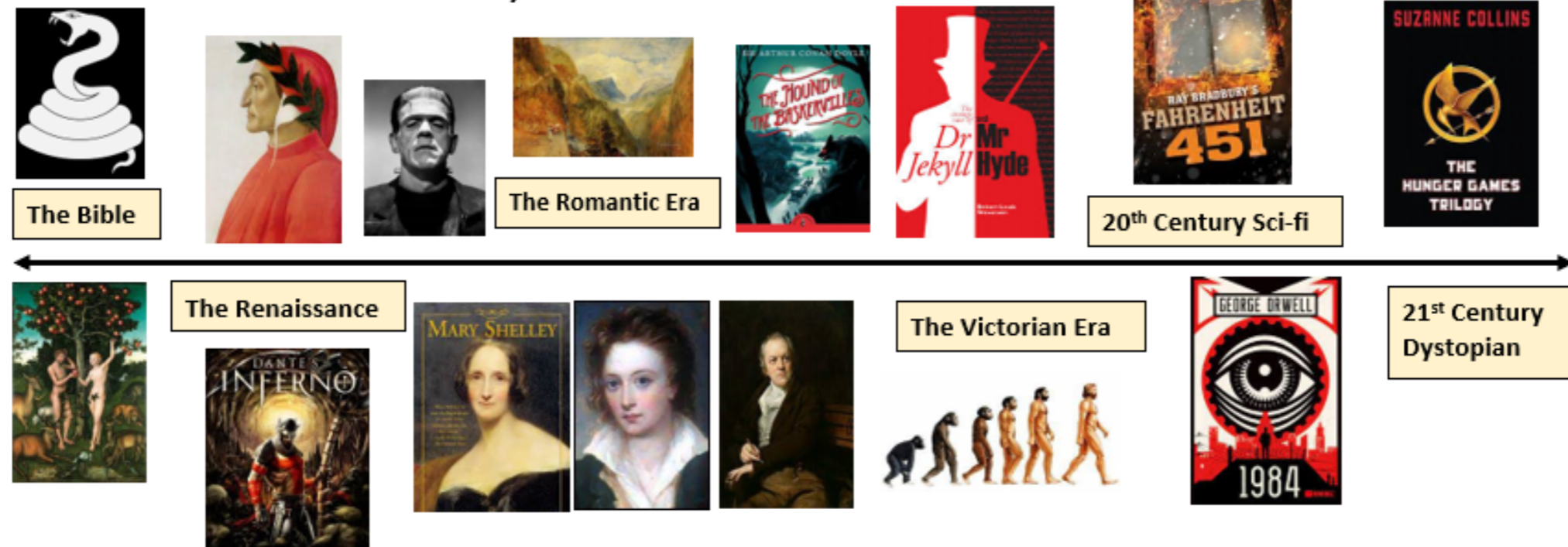
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Literature Through Time Knowledge Organiser

What texts and eras will we study?



⊕ Key ideologies by era:

Biblical	Renaissance	Romanticism	Victorian	20 th Century	21 st Century
For many, the bible is seen as the first text. From 1AD the population believed devoutly in God and accepted his presence as omniscient. Scientific discoveries were rare and religion was not questioned.	This era brought about huge changes in attitudes towards religion. Art and Literature became popular and discoveries in cosmology and science meant that people started to question the existence of God.	The Romantics had a preoccupation with the sublimity of nature and the preservation of human freedoms. They began to reject the constraints of society and the power certain groups had over them in favour of freedom of the individual.	The Victorian Era saw many developments in science, medicine and physiology in particular, and encouraged and even wider rejection of religious ideologies. Charles Darwin's Theory of Evolution dispelled the myth of Adam and Eve.	This era saw huge changes in society. Rights for marginalised groups were changing. The two world wars changed many people's outlooks and lifestyles. Literature began to be used to speak out and criticise society.	As sci-fi began to develop as a genre in the 20 th century, the 21 st century saw dystopian fiction grow in popularity. Books have been widely available for all for over 100 years now and readers are keen to explore wider fictional worlds.

Milestone Assessment 3

Prime numbers

- Integer
- Only has 2 factors
- and itself

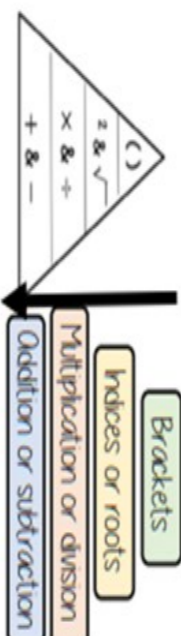
2

The first prime number
The only even prime number

Learn or how to quick recall...

2, 3, 5, 7, 11, 13, 17, 19, 23, 29...

Order of operations



If you have multiple operations from the same tier work from left to right

$$\text{e.g. } 10 - 3 + 5 \rightarrow 10 - 3 \rightarrow 7 + 5$$

$$\begin{aligned} & (6 \times 4 + 8 \times 2) \\ & 24 + 16 \\ & = 40 \end{aligned}$$

Square and cube numbers

Square numbers

1, 4, 9, 16...

$$144 = 2 \times 2 \times 2 \times 2 \times 3 \times 3 \times 3$$

$$2 \times 2 \times 3 \times 3 \times 2 \times 2 \times 3$$

Prime factors can find square roots

$$\sqrt{144} = 12$$

Cube numbers

1, 8, 27, 64, 125...

$$216 = 2 \times 2 \times 2 \times 3 \times 3 \times 3 \times 3$$

$$2 \times 3 \times 2 \times 3 \times 2 \times 3 \times 3$$

$$6 \times 6 \times 6$$

$$\sqrt[3]{216} = 6$$

Factors

Orange can help represent factors

Factors of 10

5 x 2 or 2 x 5

1, 2, 5, 10

The number itself is always a factor

Square numbers have an ODD number of factors

Factors of 4

1, 2, 4

Factors of 36

1, 2, 3, 4, 6, 9, 12, 18, 36

Be strategic - Lay factors out in pairs can help you not to miss any

Multiples

All the numbers in this list below are multiples of 3

3, 6, 9, 12, 15...

The list continues and doesn't end

3x, 6x, 9x...

Non example of a multiple

45 is not a multiple of 3

because it is 3 x 15

Not an integer

Sharing a whole into a given ratio

James and Lucy share £350 in the ratio 3:4.
Work out how much each person earns

Model the Question

James: Lucy

3 : 4

James

£350

Lucy

£350 - 7 = £50

one part - £50

Find the value of one part

Whole: £350
7 parts to share between
(3 James, 4 Lucy)

Put back into the question

James: Lucy

James = 3 x £50 = £150

£150 : £200

Lucy = 4 x £50 = £200

Order is Important

For every dog there are 2 cats

Dogs: Cats

1:2

The ratio has to be written in the same order as the information is given

e.g. 2:1 would represent 2 dogs for every 1 cat. ✗

Simplifying a ratio

Cancel down the ratio to its lowest form

For every 6 days of rain there are 4 days of sun

6:4

÷ by 2

3:2

For every 3 days of rain there are 2 days of sun – when the highest factor that goes into all parts of the ratio

Find the biggest common factor that goes into all parts of the ratio
For 6 and 4 the biggest factor number that multiplies into them is 2

Representing a ratio

For every 5 bags there are 3 gifts

This is the 'whole' – bags and gifts together



This represents the 5 bags. This represents the 3 gifts.

5:3

Double Number Line



Representing a fraction

Numerator
Number of parts represented

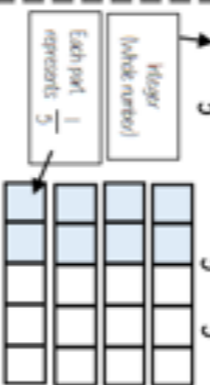


Number of parts to make up the whole
Denominator

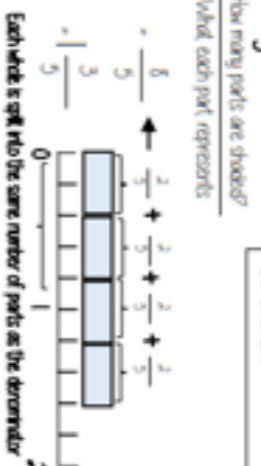
ALL PARTS of a fraction are of equal size

Repeated addition = multiplication by an integer

$4 \times \frac{2}{5} \rightarrow \frac{2}{5} + \frac{2}{5} + \frac{2}{5} + \frac{2}{5}$



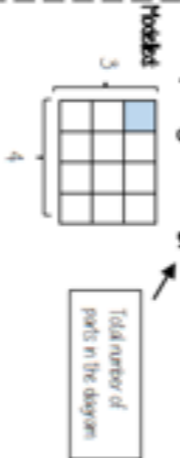
Result
When adding fractions with the same denominator - add the numerators



Each whole is split into the same number of parts as the denominator

Multiplying unit fractions

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



Multiplying non-unit fractions

$\frac{3}{4} \times \frac{2}{3} = \frac{6}{12} = \frac{1}{2}$



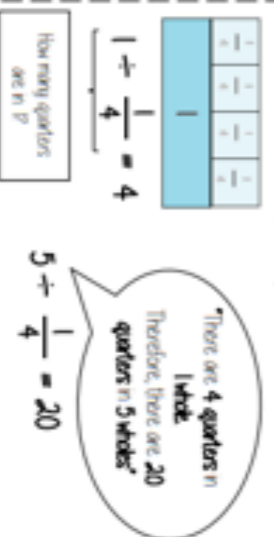
Quick Multiplying and Cancelling down

$\frac{1}{5} \times \frac{4}{9}$
The 5 and the 9 have a common factor and can be simplified

Quick Solving
Multiply the numerators
Multiply the denominators

$$\frac{1 \times 4}{5 \times 3} = \frac{4}{15}$$

Dividing an integer by an unit fraction



"There are 4 quarters in 1 whole. Therefore, there are 20 quarters in 5 wholes"

$$5 \div \frac{1}{4} = 20$$

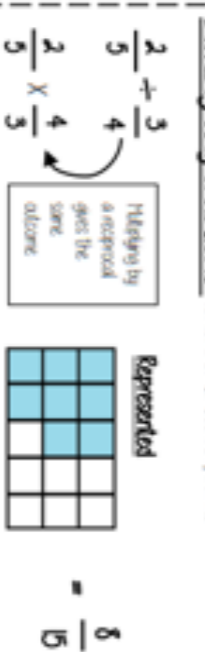
The reciprocal

When you multiply a number by its reciprocal the answer is always 1



Dividing any fractions

Remember to use reciprocal

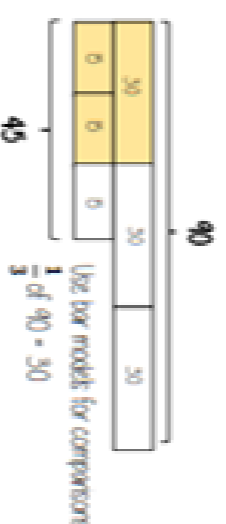
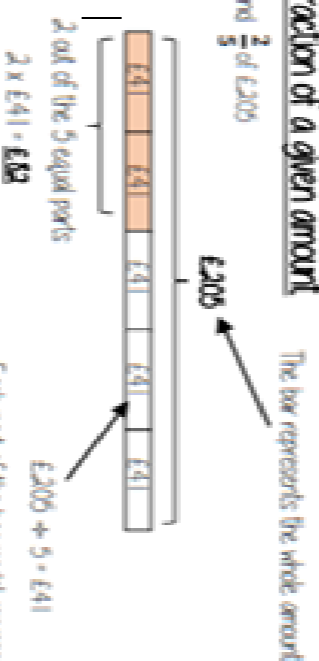


Year 7 - Mathematics . . .

Milestone Assessment 4

Fraction of a given amount

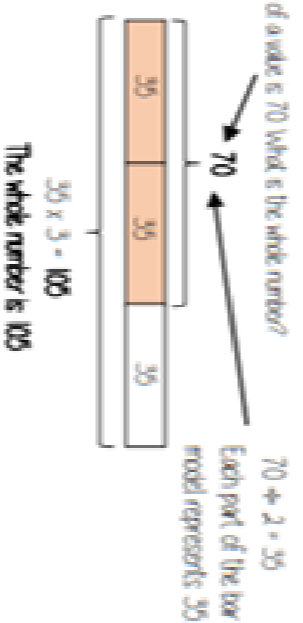
Find $\frac{2}{5}$ of £205



$\therefore \frac{1}{3}$ of $90 = \frac{2}{3}$ of 45

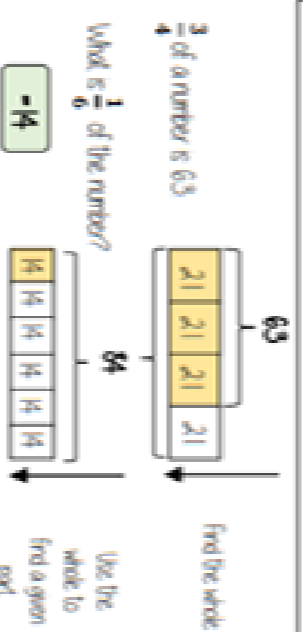
Use a fraction of amount

$\frac{2}{3}$ of a value is 70 What is the whole number?

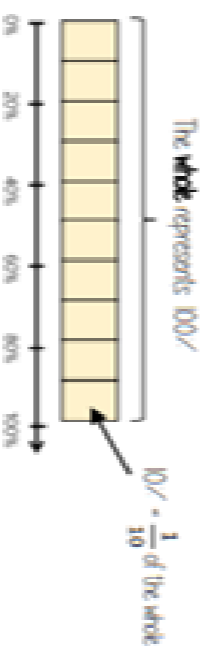


The wording of the question is important to setting up the bar model

$\frac{3}{4}$ of a number is 63



Find the percentage of an amount (Mental methods)



$10\% = \frac{1}{10}$ of the whole

$50\% = \frac{5}{10} = \frac{1}{2}$ of the whole

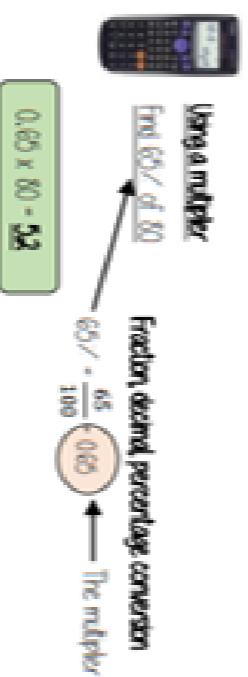
$20\% = \frac{2}{10} = \frac{1}{5}$ of the whole

$5\% = \frac{1}{20}$ of the whole

Find 65% of 80



Find the percentage of an amount (Calculator methods)



Using the percent button

Find 65% of 80

This brings up the / button on screen

You will see 65/

Type 65

Press **SHIFT** **□** (%)

Press **×** 80 and then press =

You can also use the calculator to support non calculator methods and find 1% or 10% then add percentages together

*of can represent % in calculator methods

1. Nutrients

Nutrient	Where it is found	Role in the body
Carbohydrate	Potatoes, rice, pasta, bread	Main source of energy
Lipids	Oils, butter, cheese, meats	Provides energy and insulation
Protein	Meat, fish, dairy	Growth and repair of body tissues
Vitamins and minerals	Fruits and vegetables	Iron – makes red blood cells. Calcium – strengthens teeth and bones
Water	Fruit, vegetable and drinks	Needed in all cells and body fluids
Fibre	Fruit, vegetables and cereal grains	Provides bulk to food to keep it moving through the digestive system

2. Effects of an unhealthy diet




A balanced diet involves eating the right amount of nutrients for your body to function.		Not eating enough of a nutrient can cause a deficiency (lack of) which can lead to disease.	
Under-eating	Over-eating	Defficiency	
Some people do not eat enough and become underweight.	Some people eat more than their body needs and become overweight	Some people do not eat enough of a particular nutrient.	
Risks	Risks	Diseases	
Suffer from health problems e.g. poor immune system	Heart disease	Vitamin A	Night blindness
Lack of energy, tiredness	Stroke	Vitamin C	Scurvy
Likely to suffer from deficiency diseases	diabetes	Vitamin D	Rickets

3. Skeleton and muscles

The skeleton has 4 essential functions

Protection	Support	Movement	Making blood cells
Bones protect our vital organs <u>e.g.</u> skull protects the brain	Without our bones, our body would not be able to support itself	It works with our muscles to move our body	Bone marrow in the middle of bones produces red and white blood cells

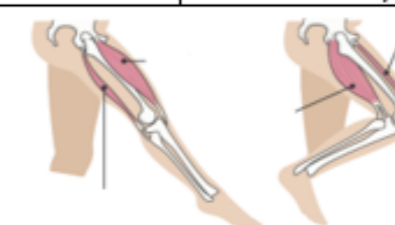
Movement In order to move, our skeleton has joints

Hinge joint	Ball and socket joint	Fixed joint
 <p>Examples: Elbow, knee,</p>	 <p>Examples: Hips, shoulder</p>	 <p>Examples: skull, pelvis</p>

There are many tissues that work together to support movement

Muscles	Tendons	Ligaments	Cartilage
Attach to bones. Work in pairs to make the bone move.	Tissue that connects the muscle to the bone.	Tissue that connects the bones together.	Smooth, hard coating on joint bones to make movement easy

Muscles work in antagonist pairs: This means that one needs to contract and the other needs to relax to move bones at a joint



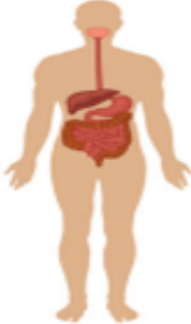
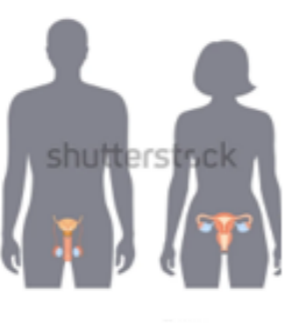

4. Key Words

Key Word	Definition
Cell	Smallest unit in a living organism
Tissue	Group of similar cells working together
Organ	Group of tissues working together
Organ System	Several organs and tissues working together



5. Organ Systems

There are 11 different body systems. These all have specific functions in the body to ensure that the body can keep a person alive

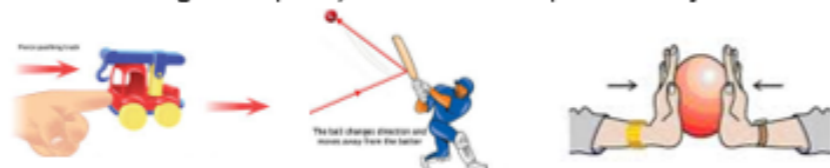
		
Digestive system	Reproductive system	Circulatory system
Breaks down large food molecules into smaller soluble molecules so they can be absorbed into the blood.	To fertilise an egg cell so that an offspring can be created	To pump and supply blood containing oxygen and nutrients to every living cell in the body.
Stomach, small intestines, large intestines, liver, pancreas	Ovaries, uterus, vagina, oviduct, testes, penis, sperm duct.	Heart, arteries, veins and capillaries

1. Key Words –forces

Mass	The amount of matter within an object. Measured in kilograms
Weight	The force of gravity acting on a mass. Measured in Newton's
Contact force	Contact force acts when two objects are physically touching, such as friction, drag, up-thrust
Non-contact force	Non-contact force acts when two objects are not touching, such as gravity and magnetic force
Balanced force	When forces are acting opposite each other and are equal sizes they are balanced
Unbalanced force	When forces acting opposite each other and are not equal sizes, they are unbalanced

2. Types of force

A force will change the speed, direction or shape of an object



Contact Forces	Non-contact forces
Elastic force	Gravity
Friction	Static electricity
Air resistance	Magnetic force
Upthrust	

3. Mass and weight

The weight of an object is affected by its mass and the gravitational field it is experiencing

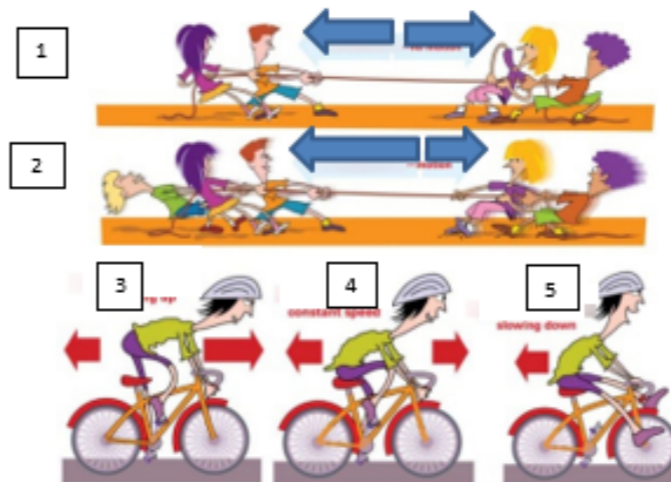
Weight can be calculated using this equation

$$W = mg$$

Weight of object = mass of object x acceleration of gravity

4. Balanced and unbalanced force

1	Forces are balanced, there is no movement in either direction
2	Forces are unbalanced, everyone will move in the direction of the larger force
3	There is more forward force so the bike speeds up
4	Forces are balanced, speed is constant
5	There is more force acting backwards so the bike slows down



5. Speed

Speed is a measure of how fast or slow an object is travelling. The units for measuring speed is m/s

Speed can be calculated using this equation:

$$\text{Speed (m/s)} = \text{Distance (m)} \div \text{time (s)}$$

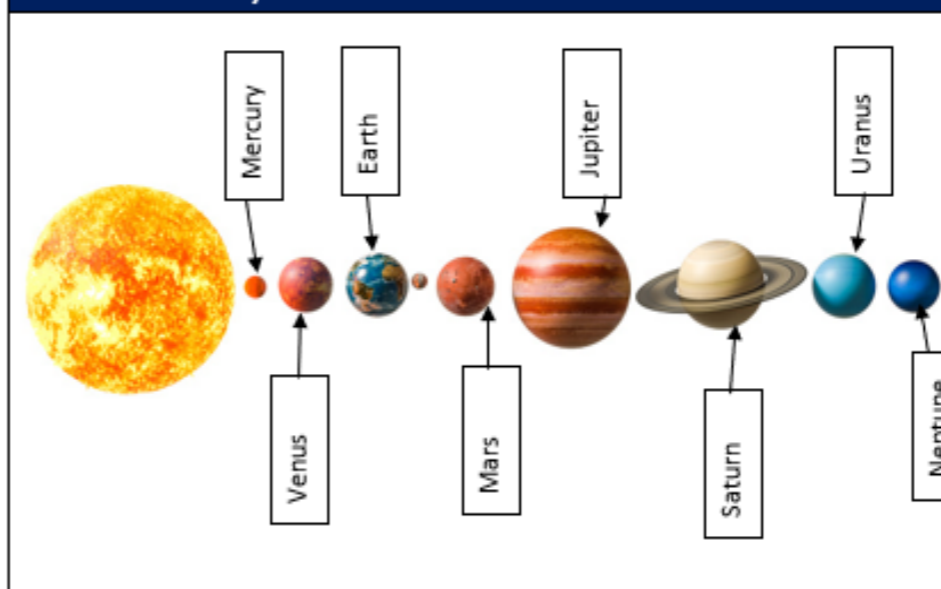
6. Key Words – Space

Orbit	To move in a regular, repeating curved path around another object, kept in place by a gravitational field
Rotate	To spin. E.g. Earth rotates on its own axis
Year	The length of time it takes for a planet to orbit the Sun.
Satellite	Any object or body in space that orbits something else. They can be natural or artificial (man-made).
Moon	A natural satellite which orbits a planet


7. Rotation and Orbit

Day and night	The Earth spins on its axis once every 24 hours. Light from the sun travels in straight lines to the Earth. Where the side of the Earth is facing the sun, it will be daytime. Light cannot bend around corners, so a shadow is cast on the side of the Earth facing away from the sun. This is called night-time.
Seasons	The Earth is tilted at its axis. This means that, as the Earth orbits the sun, the hemispheres will lean towards or away from the sun. For example, when the northern hemisphere leans towards the sun, then this is summer in the UK. When the northern hemisphere leans away from the sun, this is winter in the UK

8. The Solar System



9. Equipment

Newton meter	Stopwatch
	
Balance	Tape measure
	

Key Vocabulary...

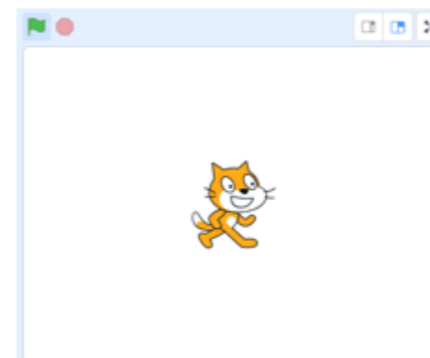
Name	Purpose
Algorithm	A set of step-by-step instructions.
Code	A set of program instructions.
Command	An instruction for a computer to perform a specific task.
Sprite	A character in Scratch that can be coded.
Stage	The stage is the background of the project. The stage can have different costumes
Code block	Code blocks are used to create code in Scratch. They fit together like jigsaw pieces to create programs
Costume	A costume is a different appearance for the same sprite. A sprite can have more than one costume.
Loop	A set of instructions that repeats until a condition is met. Loops make code simpler because they remove unnecessary steps.
Variable	A variable is like a box that the program uses to store a value. The content of the box can change. A variable can only store one value at a time.
Conditional Statement	A set of rules that IF a condition is met then an action is performed.



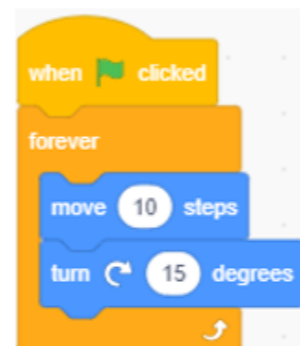
Picture This...



This is a sprite that can be coded in Scratch.



The stage is the area the sprite moves in.



A script that is used to animate a sprite

Questions

1. What kind of loops can be found in Scratch?
2. What word is used to describe the instructions used to control Sprites?
3. What two things do all Scratch programs have?
4. Where are instruction blocks stored on a Scratch screen?
5. What happens if the instruction blocks are placed in the wrong order?

Always Remember...

Most people think a variable contains numbers, but they can also contain text or True and False values.

Coding helps with maths skills, because games often work using co ordinates.

The order in which code blocks are created is important to make sure a program works.

If and If else blocks are used to make decisions in Scratch.

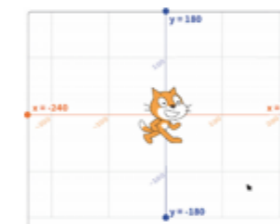
The repeat command, carries out an instruction a set number of times but a forever command will keep going until stopped by the user.



Deeper Learning...

Scratch is an excellent tool for helping you to learn mathematics.

For example Scratch teaches Cartesian coordinates.



Activity – Create a game in Scratch where the sprite will be fed an item of food and each time increase the score.

Key Vocabulary...

Name	Purpose
Spreadsheet	Software package that allows you to perform calculations and create charts.
Cell Cell/reference	An address on a spreadsheet which looks like a little box. There are over 17 billion cells on a spreadsheet so we need to be able to identify them with an address. This is known as a cell reference and looks like this: A1 R18
Formatting	Making the contents of a cell look or behave differently. This can be changing the colour of the font, backgrounds. This can also be changing the contents of a cell from numbers to currency.
Formula	A way of performing a calculation on a spreadsheet. = A1 * B1
Functions	A set of instructions that will perform maths tasks on a spreadsheet.
Modelling	Changing variables in a spreadsheet to see how it affects the result/answer.
IF statement	A logic test performed using a spreadsheet.
Conditional formatting	Changing the appearance of the cell, depending on the input.



Picture This...

	A	B	C	D	E	F
1	Exam Marks					
2	First Name	Surname	Maths	English	Science	Total
3						
4	Teresa	Wood	63	45	89	197
5	Tanya	Smith	32	34	12	78
6	Arthur	Shelby	91	82	89	262

Spreadsheet in value view

	A	B	C	D	E	F
1	Exam Marks					
2	First Name	Surname	Maths	English	Science	Total
3						
4	Teresa	Wood	63	45	89	=C4+D4+E4
5	Tanya	Smith	32	34	12	=C5+D5+E5
6	Arthur	Shelby	91	82	89	=C6+D6+E6

Spreadsheet in formula view

IF statement

	Pupil	Score	
1	Mark	10	=IF(B2>12,"Pass","Fail")
2	Simon	12	=IF(B3>12,"Pass","Fail")
3	Harold	17	=IF(B4>12,"Pass","Fail")
4	Edward	11	=IF(B5>12,"Pass","Fail")

Questions/Tasks

1. Give two examples where you might use a spreadsheet?
2. What is the following an example of? = A1 * C3
3. I have decided to change the colour of the background cell – what have I done?
4. How can you tell whether a formula or function has been used?
5. What is the logical test in an IF statement?
6. Explain what is meant by clock speed.

Always Remember...

Spreadsheets can accept three different data types in them.

- Numbers
- Text
- Formula

Never write more than one data type in the cell at any one time.

CPUs are very quick but not good at remembering information. They need help from something called RAM which holds the information for it.

Variable are placeholder for values in main memory.

Conditional formatting changes the appearance of the cell, depending on the value entered.
Greater than 150
Less than 150
Equal to 150



Deeper Learning...

Spreadsheets are excellent tools to model different situation by asking "What if...?".
The way to do this is by using an IF statement which performs a logic test.

Logic test - = if (A1 > 12, "Pass", "Fail")

If condition TRUE - "Pass"

If condition FALSE .. "Fail"

Businesses use this to indicate whether a change will positively or negatively impact the business.



Activity – Complete the table that calculates how much a charity shop will receive from the government with gift aid.

Verb Endings

1. Find the infinitive
 2. Remove AR/ ER / IR
 - 3 Add endings to stem
- I speak: hablar -> habl -> hablo

Presente		AR	ER	IR
yo	I	o	o	o
tú	you (s)	as	es	es
el/ella	he /she / it	a	e	e
nosotros	we	amos	emos	imos
vosotros	you (pl)	áis	éis	ís
ellos / ellas	they	an	en	en

Pretérito		AR	ER / IR
yo	I	é	í
tú	you (s)	aste	iste
el/ella	he /she / it	ó	ió
nosotros	we	amos	imos
vosotros	you (pl)	asteis	isteis
ellos / ellas	they	aron	ieron

Imperfect		AR	ER / IR
yo	I	aba	ía
tú	you (s)	abas	ías
el/ella	he /she / it	aba	ía
nosotros	we	ábamos	íamos
vosotros	you (pl)	abais	íais
ellos / ellas	they	aban	ían

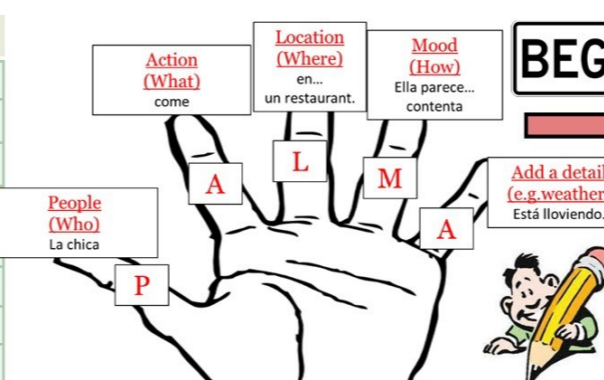
SER	ESTAR
D escription	P osition
O ccupation	L ocation
C haracteristics	A ction
T ime	C ondition
O rigin	E motion
R elationship	

yo	soy
tú	eres
el/ella	es
nosotros	somos
vosotros	sois
ellos/ellas	son

¿¿¿ PREGUNTAS ???	
¿Qué?	What?
¿Cuándo?	When?
¿Cuál(es)?	Which?
¿Quién(es)?	Who?
¿Dónde?	Where?
¿Cuánto(s)?	How many / much?
¿Por qué?	Why?
¿Cómo?	How?

PRESENT	PAST	FUTURE
normalmente	normally	ayer
en general	in general	anteayer
siempre	always	el lunes pasado
todo el tiempo	all the time	el fin de semana pasada
a menudo	often	el mes pasado
a veces	sometimes	el año pasado
de vez en cuando	from time to time	
nunca	never	

Imperfect	Preterite
Was-ing, were-ing and used to doing	Used for completed action, with a beginning and an end



BEGIN	Opinion
a mi ver	In my opinion
desde mi punto	From my point of view
diría que	I would say
creo que	I believe that
pienso que	I think that
para mí	For me
opino que	I think that

I like	I don't like
me encanta	odio
me gusta	no me gusta
me chifla	no aguanto
me flipa	detest

P	porque
P	puesto que
Y	ya que
D	dado que
C	como

es	era	será
it is	it was	it will be



Quantifiers

muy	very
bastante	quite
un poco	a bit
mucho	a lot
raramente	rarely
demasiado/a (s)	too much
casi	almost

Connectives

y	and
pero	but
o	or
donde	where
también	also
por ejemplo	for example
(des) afortunadamente	(un) fortunately
por otro lado	on the other hand
especialmente	especially
sin embargo /	however
no obstante	
al principio /	firstly
primeramente /	
primero	
entonces	then
después	after
finalmente	finally
mientras	while

Positivo	Negativo
bondadoso/a	aburrido/a
• caring	• boring
educado/a	vago/a
• polite	• lazy
gracioso/a	travieso/a
• funny	• mischievous
listo/a	quisquilloso/a
• clever	• fussy
extrovertido/a	egoísta
• outgoing	• selfish

Future

It hasn't happened yet...so keep the full infinitive - AR / ER / IR	
yo	é
tú	ás
el/ella	á
nosotros	emos
vosotros	éis
ellos / ellas	án



Key Vocabulary...

ILLUSTRATION	Illustration captures the emotions, thoughts and feelings of characters through facial expressions and movements using delicate lines.
CHARACTER	A character is created by an author or illustrator and is described by the way they think, speak and look.

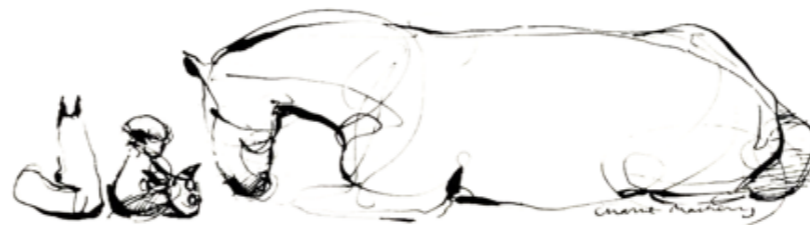
Always remember...

TIM BURTON	Tim Burton is a director, producer and illustrator. After studying animation at the California Institute of Arts, he got his start in the business by working as an animator at Disney.
QUENTIN BLAKE	Sir Quentin Saxby Blake is an English cartoonist, illustrator and children's writer. He has illustrated over 300 books, including 18 written by Roald Dahl.
CHARLIE MACKESY	Charlie Mackesy is an English illustrator who has written and illustrated his own series of books: The Boy, The Mole, The Fox and The Horse.



Picture This...

"No talent or wit can ever beat kindness, said the horse. 'It sits quietly beyond all things'"



Deeper Learning...

An **illustration** is a drawing which can be found in a book. This could be anything from a fictional children's book, to a recipe book for adults, rather than having to read the words, the illustration is there to explain what is happening in a visual form, rather than words.

In short, illustration is a picture made by an artist. It is a drawing (or painting or photograph etc.) that explains something.

The illustration doesn't have to be drawn—a photo in an encyclopedia is also an illustration, because it explains what is written.

Many famous illustrators, are famous for creating beautiful little characters, such as The BFG, to enable younger minds to imagine what he looks like.

The Big Question...

WHAT IS ILLUSTRATION?

Activity: Use the illustrators we are exploring and design your own characters in their style.

Weighing and measuring

Ingredients are usually measured in **grams (g)** or **kilograms (Kg)**

There are 1000g in 1 Kg

Liquids are usually measured in **millilitres (ml)** or **litres (l)**. They can be measured in pints (pt) and fluid ounces (fl.oz). There are 20 fl.oz in 1 pt.

To weigh accurately, always make sure that you set your scales to zero before you start.

Remember if you put your bowl on the scales, you could be weighing the bowl, NOT the food. So put your bowl onto the scales but then set the reading to 0 before you start.

Make sure that you are using g as the unit on the scales

What to use



Key vocabulary

Weigh	Chop
Plastic spoon	Simmer
Grams (g)	Cool
Measure	Golden brown
Peel	Breadcrumbs
Core	Rubbing in
Fats	Bake
sweeten	tablespoon

Deeper learning



The Rubbing-in Method

1. Weigh your flour and put into a mixing bowl.
2. Weigh your fat (butter or margarine).
3. Put the butter into the bowl with the flour.
4. Start with a table knife and chop the fat into small pieces.
5. Once the fat is well chopped, rub the mixture using your fingertips until it turns yellow and looks like breadcrumbs.
6. Keep the mixture cool to stop it sticking together and to keep a crumbly texture.

Equipment



Mixing bowl



peeler 1



peeler 2



Saucepan



table knife



weighing scales










Key Vocabulary...

Precipitation	Precipitation is the release of water from the sky, it can be liquid or solid, for example, rain, sleet, hail and snow.
Cloud	Clouds are visible accumulations of tiny water droplets or ice crystals in the Earth's atmosphere.
Air Pressure	The air around you has weight, and it presses against everything it touches. That pressure is called atmospheric pressure, or air pressure.
Weather satellites	Weather satellite is a type of satellite that is primarily used to monitor the weather and climate of the Earth
Weather	Weather refers to day-to-day temperature and precipitation activity.
Climate	Climate is the average weather condition over 30 years.

How far have we come?

The first ever daily weather forecasts were published in The Times on **August 1, 1861**, and the first weather maps were produced later in the same year. In 1911, the Met Office began issuing the first marine weather forecasts via radio transmission.

Key Symbols...

 Sunny day	 Sunny intervals	 Cloudy
 Overcast	 Light rain	 Heavy rain
 Light snow	 Heavy snow	 Thunder

The Met Office

The Met Office is the UK's national weather service. It provides weather and climate-related services to the Armed Forces, government departments, the public, civil aviation, shipping, industry, agriculture and commerce.



Deeper Learning...

Imagine you asked a friend to stand in the middle of the playground, and then you walked or ran around your friend. If the playground was space, you would be called a satellite.



Picture this...

Temperature is measured in Celsius (°C) using a **thermometer**.



Precipitation is measured using a **rain gauge**.



Wind direction is reported by the direction it is blowing **from**, according to the compass.



Wind speed can be measured using an **anemometer**.

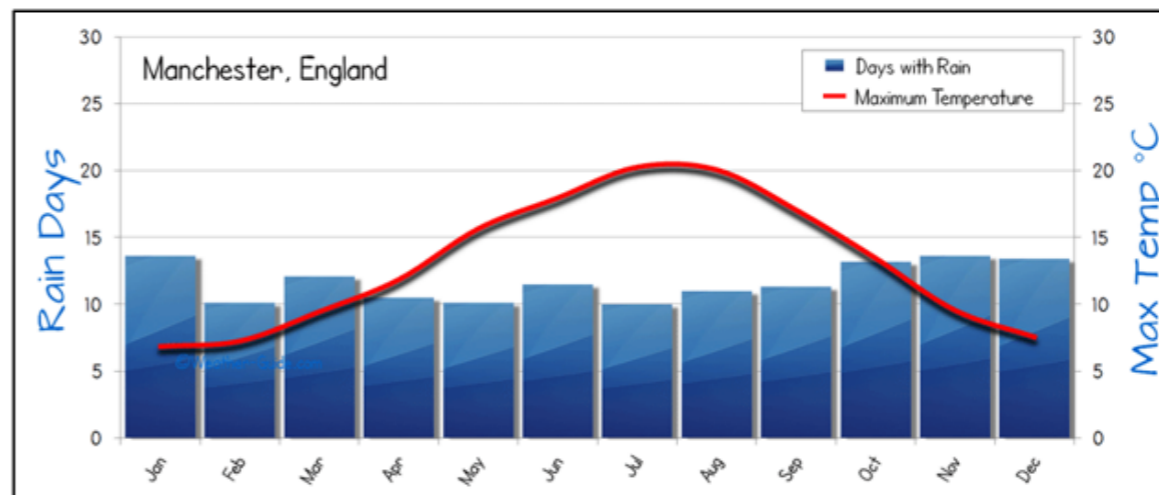
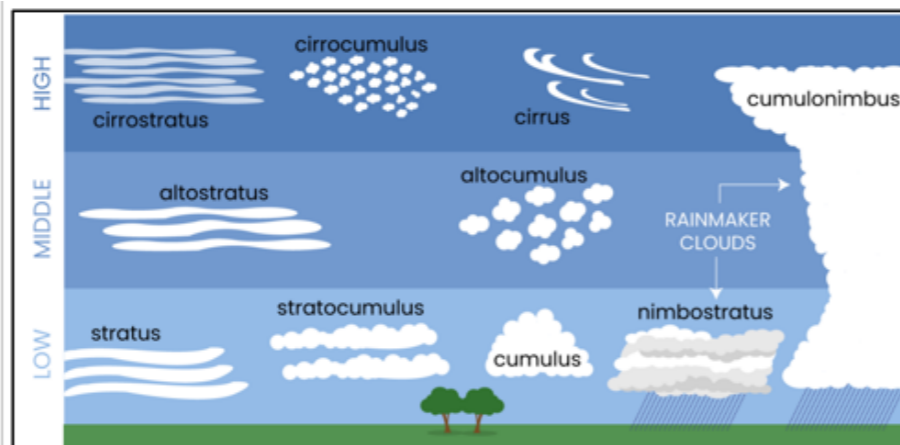


The BIG questions..

1. Explain what factor influence the climate of Europe.
2. Document the journey of a water droplet. How does it rain?

A weather satellite is a man-made satellite that orbits the Earth and gives us information about the weather. Powerful rockets take these satellites into orbit.

Activity: Describe today's weather... You are a BBC weather reporter tells us the forecast today.



WEATHER

WHAT YOU GET

CONDITIONS OF THE ATMOSPHERE OVER A SHORT PERIOD OF TIME

CAN CHANGE WITHIN MINUTES OR HOURS

CLIMATE

WHAT YOU EXPECT

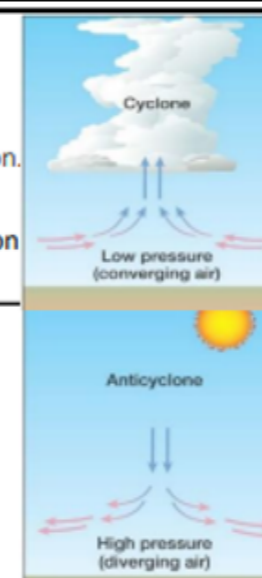
HOW THE ATMOSPHERE BEHAVES OVER A LONG PERIOD OF TIME AND SPACE

AVERAGE REGIONAL WEATHER PATTERN OVER DECADES















- R A G P
1. What is the difference between weather and climate?
 2. What does the Beaufort scale show?
 3. Describe what the climate is like in the UK.
 4. Explain how rain forms.
 5. Explain how we measure the weather.
 6. How is climate change affecting the UK's weather?

<p>LOW PRESSURE is caused when...</p> <p>Common weather is...</p> <p>Where does it occur?</p>	<p>Warm air rises. When the air rises, there are less molecules in the lower atmosphere = low pressure.</p> <p>Clouds, rain and winds. As the warm air rises, it cools and condenses and forms clouds. Eventually the clouds become saturated (full of water) & rain. Strong winds are common.</p> <p>The equator - the sun's energy is concentrated over a smaller area. The average temperature is 26°C. The warm air rises, cools, condenses to form clouds = precipitation. There is a lot of rain at the equator. This is where you find tropical rainforests.</p>
<p>HIGH PRESSURE is caused when...</p> <p>Common weather is...</p> <p>Where does it occur?</p>	<p>Cooler air sinks. When air sinks, there are more molecules in the lower atmosphere = high pressure.</p> <p>Sinking air = no water vapour condenses = clear skies, dry conditions</p> <ul style="list-style-type: none"> ➤ Summer: hot days, no clouds, dry, droughts. ➤ Winter: cold days, frost and ice common. <p>Air sinks at 30° N&S of the equator and at 90° N&S of the equator. This is where we find hot and cold deserts.</p>



Extended Write: Explain the climate in the UK and describe the weather this causes.

Key Vocabulary		Key Vocabulary	Picture This
Archbishop of Canterbury	The senior bishop and principal leader of the Church of England,	Roundheads	The merchants and traders of the south-east and London who supported Parliament.
Exile	Being forced to be away from one's home, If you return there is a threat that you could be killed	Cavaliers	The gentry of the northern and western areas, were Royalists and supported the king
Clergy	People such as priests and monks who worked in the church.	Commonwealth	The period in Britain after the execution of Charles I in 1649 until the restoration of Charles II in 1660
Civil War	War between two groups in the same country	New Model Army	Formed in 1645 by the Parliamentarians in the English Civil War, the countries first full time professional fighting force
The Pope	The leader of the catholic church all over the world	Divine right	A belief which asserts that monarchs are anointed by God to rule on earth, and that to challenge a sovereign's will is to defy the will of God.
Martyr	Someone who willing to die for their beliefs	Roundheads	The merchants and traders of the south-east and London who supported Parliament.
Catholicism	A form of Christianity which places the Pope as head of the Church.	<p>The English Civil War was caused by many problems and disagreements, however the most important thing was whether the country should be ruled by a king, that people believed had been chosen by God or whether the country should have democracy, meaning the people chose the people in charge of the government.</p> <p>The English Reformation: In 1534, Henry VIII made himself the Head of the Church and broke away from the Catholic Church in Rome, the led to:</p> <ol style="list-style-type: none"> 1. The king had even more power than before. 2. The monasteries of England were dissolved and Henry took their land and wealth. 3. The Bible started to be printed in English and the way people in England worshipped changed. 4. There was an uprising against the changes called the Pilgrimage of Grace. 	
Protestantism	A form of Christianity which places the monarch as head of the Church		
Illegitimate	Born of parents not lawfully married to each other.		
Reformation	Break up of the Catholic Church in England		
Annulled	Annulment is a legal procedure within religious legal systems for declaring a marriage null and void.	<p>Did you know? Plays and acting shows were performed in the gardens of pubs until 'The Theatre' was built in the 16th century. The Globe was a rebuilding of this venue.</p>	
The court	The court was the centre of royal power and consisted of nobles and higher gentry who enjoyed the queen's favour.		
		Emblems from the Houses of Lancaster and York	
		Canterbury Cathedral	
		The Globe Theatre London	
		A parliamentary "roundhead" soldier	
		A royalist "cavalier" soldier	
		The execution of king Charles I	

Key individuals			Deeper Learning	Tasks
King Richard III		English King who reigned from 1483 until 1485. He is believed to be responsible for the deaths of Edward V and his brother in the Tower of London. They were both probably murdered.	Richard III crowned himself King of England in 1483 and his nephews, the two princes, Edward and Richard disappeared whilst staying at the Tower of London. In 1674 the bones of two young boys were found hidden away under a staircase in the Tower of London, leading many people to believe the princes had been murdered. After this, many lords turned against Richard and then he lost the Battle of Bosworth and was killed.	Red: State reasons why the Elizabethan period might be considered a golden age.
King Henry VII		King of England from 1485 to 1509. He founded the Tudor dynasty. On 22 August 1485, Henry's army defeated Richard III's army at the Battle of Bosworth Field.	Henry Tudor became Henry VII but it was his son, also Henry, that became the most famous king in English history. Henry VIII was known for being a ruthless King who ruled with an iron fist. Strong-willed and bullish, he handed out executions to anyone who stood in his way. It is estimated that during his 38-year reign, more than 70,000 people were executed. There were many fiendish punishments, including some new methods of execution dreamt up by Henry himself.	Amber: Describe the key features of the Wars of the Roses.
King Henry VIII 1509 - 1547		Henry VIII was King of England from 1509 until his death in 1547. Henry is best known for his six marriages. Henry began the English Reformation, separating the Church of England from papal authority.	England enjoyed relative peace and stability until the English Civil War began in 1642. This ended with Oliver Cromwell's New Model Army defeated King Charles I's Royalist forces. A period without a king followed called the Interregnum but the monarchy was restored in 1660.	Green: Explain why the English Reformation.
Queen Elizabeth I 1558 - 1603		Elizabeth I was Queen of England and Ireland from 1558 until her death in 1603. Elizabeth was the last of the five monarchs of the House of Tudor.	Oliver Cromwell was executed in January 1661 – two and half years AFTER his death... In 1658, Cromwell died, however when the monarchy was restored he was posthumously convicted of treason, and his body was disinterred from its tomb in Westminster Abbey and hanged from the gallows at Tyburn.	Purple: 'The main reason for the English Civil War was religion'. Evaluate. Religion helped to cause the English Civil War because... However, there were other reason such as... Overall, I agree/disagree with the statement because...
King Charles I 1625 - 1649		Charles I] was King of England, King of Scotland, and King of Ireland from 27 March 1625 until his execution in 1649.		
Oliver Cromwell		Oliver Cromwell was an English general and statesman who led the Parliament of England's armies against King Charles I during the English Civil War		

Key Vocabulary

Theist	A person who believes in a God/Gods
Atheist	A person who does not believe in God.
Agnostic	A person is unsure about the existence of God.
Humanist	Does not believe in a god. They believe it is possible to live a good and fulfilling life without following a traditional religion.
Social justice	The equal access to wealth, opportunities, and privileges within a society.
Emergency Aid	When there is an emergency situation/crisis because of a natural disaster or war: Charities will re-build communities, provide medical aid, food and shelter.
Development Aid	When charities tackle extreme poverty by providing long-term support such as building wells for clean water, providing tools & seeds for food, develop schools for education.

Always Remember...



Christians live their lives according to the teachings and life of Jesus and the Bible. Christian action, and therefore their **ethics and morals**, are often based on the '**Greatest Commandment**' when Jesus said that people should '**love thy neighbour as thyself**'. What Jesus meant by this was that people should love God, one another and treat others as they would want to be treated.



Christian Aid is an organisation that works all over the world to try and end poverty. The organisation aims to create a more equal world, where all people have the same opportunities and rights. Christian Aid also works in disaster relief in many different parts of the world.

Part of the work of Christian Aid involves encouraging more people to be global citizens and creating a more environmentally sustainable world. Christian Aid has recently worked to develop what they call sustainable development goals. These are aimed at protecting the planet.

Christian Aid believes that education is vital in achieving their goals and wants more schools to teach these topics. Christian Aid aims to achieve these goals by 2030.

What does a Humanist believe?

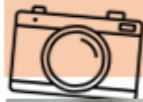
Humanists reject the idea or belief in a supernatural being such as God. This means that humanists class themselves as agnostic or atheist.

Humanists have no belief in an afterlife, and so they focus on seeking happiness in this life. They rely on science for the answers to questions such as creation, and base their moral and ethical decision-making on reason, empathy and compassion for others.

Humanists are concerned with **human welfare** and **happiness** and believe that this is **the one and only life and world** they have.

As a result, they believe that people should make the most of their lives while on Earth. However, they also believe that they have a duty to support others to live fulfilling lives too - this includes people who are alive today as well as future generations.

Because humanists do not believe in any kind of god or supernatural force that will solve their problems, they believe that human beings must take sole responsibility for solving the world's environmental problems. Only humans are capable of finding the solutions that can lead to a sustainable existence.



Picture this...Inspirational Individuals



Malala Yousafzai is a young Pakistani activist. In 2008 she began protesting the closing of girls' schools in her area. In 2012 she was shot as a result of her protests. Yousafzai survived the assassination attempt and spoke all over the world about the importance of the education of girls.

The book, *I Am Malala: The Girl Who Stood Up for Education and Was Shot by the Taliban*, was published in 2013.

Yousafzai was awarded the Nobel Peace Prize in 2014. She was the youngest person to ever receive the Nobel Peace Prize. She shared the award with another children's rights activist.

Saint Oscar Romero spoke up for poor communities in El Salvador during a period of terrible violence.

In a service on 23rd March 1980, Romero ordered the army to stop killing people:

"In the name of God, and in the name of this suffering people whose cries rise to heaven more loudly each day, I beg you, I implore you, I order you, in the name of God, stop the repression!"

The next day, Romero was shot dead.

Mother Teresa was a humanitarian. This means she did things to help out other people. Her entire life was fully devoted to helping the poor, the sick, the needy, and the helpless.

When she was 36 years old, Mother Teresa felt the call from God to help the poor of India. She received some basic medical training and then set out to help the sick and needy. This wasn't an easy task in 1948 India. She had very little support and, while trying to feed and help the poorest of the poor, she herself was constantly hungry and even had to beg for food.

She was awarded the Nobel Peace Prize in 1979. Rather than have the traditional Nobel honor banquet, she asked that the money for the banquet be donated to the poor of India.



Tasks

Red:

Give 3 examples of Social Justice.

Amber:

Describe what Christian Aid does.

Green:

Explain how humanists differ from theists.

Purple:

Which of the inspirational individuals (on the left of this page) best demonstrated the values of social justice? Explain your answer in detail.

YEAR 7- TERM THREE- KNOWLEDGE ORGANISER

Key Vocabulary	
Term	Definition
Chorus	A group of performers who function as a commentary on action or as an accompaniment to the action
<u>Choragos</u>	The head chorus member who could enter the story as a character able to interact with the characters of the play
Comedy	One of the two principal dramatic forms of theatre in ancient Greece
Orchestra	'Dancing place' flat terrace where the chorus performed
Skene	Changing hut which eventually became the backdrop
<u>Theatron</u>	Slope, watching place, from which the word 'theatre' derived
Thespian	A common term for performer
Tragedy	One of the two principal dramatic forms of theatre in ancient Greece
Parados	The entrances and exits used by the chorus and the actors

Origins of Greek Theatre

Greek Theatre began in the 6th Century BCE in Athens with the performance of tragedy plays at religious festivals. These in turn inspired the genre of Greek comedy plays. The two types of Greek drama would be hugely popular and performances spread around the Mediterranean.

Aeschylus and Sophocles were the two most famous Greek playwrights.

Some of the most popular Greek plays have been extensively studied as part of our education. These include: **Oedipus Rex** by Sophocles, **Prometheus Bound** by Aeschylus, **Antigone** by Sophocles, **Medea** by Euripides, **The Persians** by Aeschylus and **Ajax** by Sophocles.

Greek Mythology

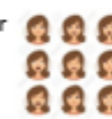
Greek Myths were not just stories, they were models for human behaviour. They taught people how to live, the consequences of right and wrong. Though they were told via worlds and gods and kings, many of the myths apply to everyday people and everyday life.

Always Remember

Never perform with your back to the audience



Your expressions and your emotions must match!



Your work can always be improved



Make sure your voice is loud and clear



For Choral Speaking to be effective everyone must speak at the same time but you can experiment with how.

Always try and put yourself in the shoes of the character you are playing. This will make your character more convincing



Focus, focus, focus!



Always listen to the ideas of others as well as voicing your own



Greek Theatre is the root of performance as we know it now



Women were not allowed to perform in Greek times



The famous drama masks originated from Greek theatre



The chorus was an integral part of all Greek theatre performances

You were banned from showing death on stage in a Greek Play

Greek Gods

Zeus was the God of the sky and thunder

Poseidon was the God of the sea and horses

Hera was the Queen of the Gods and the Goddess of marriage and childbirth

Hephaestus was the God of craftsmen and carpenters

Dionysus was the God of immortality

Athena was the Goddess of wisdom

Artemis was the God of the wilderness

Apollo was the God of intelligence

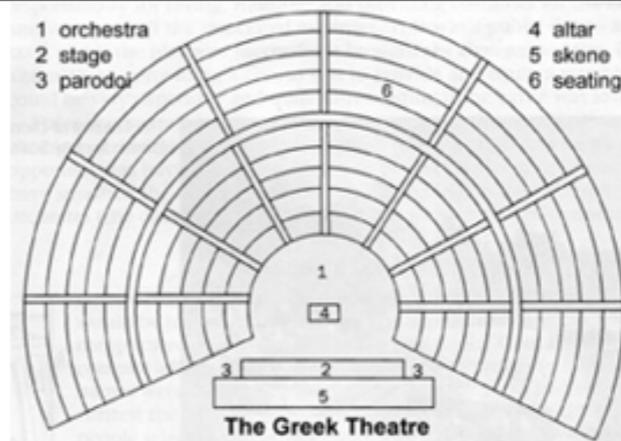
Ares was the God of war

Demeter was the Goddess of harvest

Aphrodite was the Goddess of love and beauty

Hermes was the God of trade, wealth and luck

Dual Coding



Check your progress...

Do your expressions always match the character's emotions?

Do you take on board the ideas of others?

Do you think creatively and include your own ideas in script work?

Is your interpretation appropriate to the meaning?

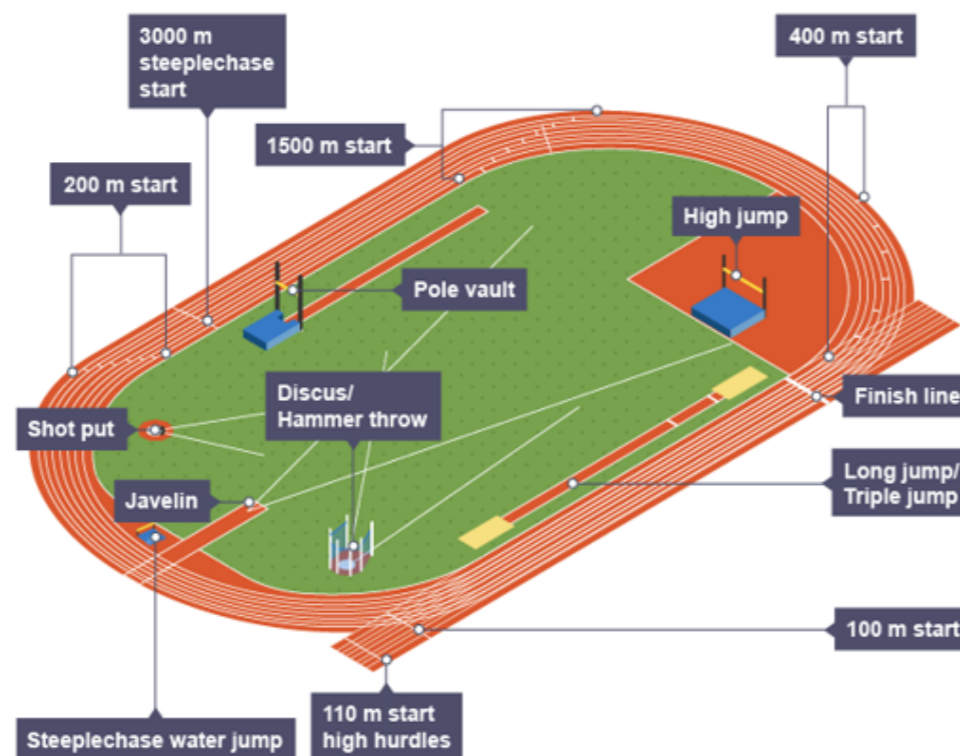
Subject Knowledge Organiser

Athletics – Competition, Scoring & Officials

Competition

Athletics is a collection of sporting events that consist of the three major areas of running, jumping and throwing. The running events include sprints, middle and long-distance events and hurdling. Jumping events include the long jump, high jump, triple jump and pole vault, while the throwing events include the discus throw, hammer throw, javelin throw and shot put. There are also combined events, such as the decathlon for men, which consists of ten events, and the heptathlon for women, which consists of seven events.

Shown below is a typical competition area for athletics.



Scoring

Success in athletics is judged on times and distances rather than points or goals.

Track events – These races are started with an electronic pistol which is only sounded again on a false start. In races that are very close, officials use a digital line-scan camera across the finish line to give them a photo finish picture. The clock stops when an athlete has passed through the finish line.

Jumping events – These events are measured from the front edge of the take-off board to the first mark made in the sand by the athlete. The distance is always measured to the nearest centimetre and athletes will always be given a minimum of three jumps.

Throwing events – These events are measured from the front edge of the throwing line to the first mark made in the ground by the implement. The distance is always measured to the nearest centimetre and athletes will always be given a minimum of three attempts.

Officials

An athletics competition requires a wide range of officials. These include:

Starter – Starts all track events.

Starter's marshals – Line up competitors in correct order ready for starting.

Timekeepers – Provide official times for all track competitors.

Place judges – Ensure the correct order of positions are given.

Field event judges – Measure, record and let athletes know when it is safe to compete.

Relay judges – Make sure runners at change-overs are in the correct lane and within the change-over box.

Subject Knowledge Organiser Athletics – Track, Jump & Throw

Sprint

This track event is a short running race. There are generally three different sprint distances: 100m, 200m, and 400m.



Drive phase

The drive is where you are looking to cover as much ground as possible through each stride, pushing with the leg that is in contact with the ground and driving the free leg through. In this phase the head must follow the body.

Transition phase

This transition phase is when you smoothly and gradually come upright into your stride. This is when you start move at a slightly faster tempo and begin to reach top speed.

Fly phase

The fly phase is when you are fully upright and at top speed. The key to maintaining as much top end speed as possible is a relaxed upper body and a quick foot contact and tempo.

Progress Vocabulary: *Identify, Define, describe, explain, compare and contrast, sporting links, analyse, evaluate*

High jump

This jumping event requires athletes to jump over the bar using the Fosbury Flop technique.



Stage one

Start 8-10 strides away from the barrier. Run in a curve with controlled speed. Lean your torso into the curve, the opposite side to the barrier. Keep your shoulder as high as possible.

Stage two

You are ready to jump at approximately one metre past the first post and an arm's length away from the mat. At this point, plant the take-off foot down. At the same time, drive your lead leg and arms upwards and shoulders high.

Stage three

In the air, keep driving upwards and bring your lead knee across the body to get shoulders parallel with the bar. Bring the arms forwards and back into the body. As your hips cross the barrier, flick your feet upwards and high over the barrier. Maintain balance and land safely.

Shot put

This throwing event requires athletes to throw a heavy metal ball called a shot as far as possible.



Stage one

Hold the shot at the bottom and place the thumb and little finger each side of the shot. Place the shot under the chin and touching the neck. Keep the throwing arm elbow high and the arm parallel to the floor. Stand on the balls of your feet with your knees bent and non-throwing shoulder pointing towards the throwing area.

Stage two

Lean backwards and place your weight on the back foot. Transfer the weight from the back leg to the front leg. Explode upwards, bring the hips around and forwards to face throwing area. Extend the throwing arm up quickly and powerfully. Finish with chest and head up.

Key words: start, finish, race start, pacing, sprinting, dip finish, fosbury flop, arched approach, toe, knee, chin, 45 degrees, push, scissor kick.

Subject Knowledge Organiser

Cricket – Rules, Officials, Scoring, Player Positions & Wicket Dimensions

Rules

- ❑ Cricket is a game played between two teams made up of eleven players each.
- ❑ One team bats and the other team bowls and fields.
- ❑ Each over consists of six good bowled balls.
- ❑ There are a number of ways a batter can be called out:
 - The bowler bowls the ball and hits the wickets with the ball.
 - The batter hits their own wickets with their bat.
 - The batter hits the ball in the air and a fielder catches the ball before it hits the floor.
 - The batter runs but the ball hits the wickets when the batter is not in the crease.
- ❑ The batting team try to get as many runs as they can and then the fielding team will bat and try to beat the score. For example, team one scores 78 runs, team two need to score 79 runs to win.
- ❑ When bowling the ball cannot bounce more than once or this is called a 'no ball' and the batting team will receive an extra ball.
- ❑ When bowling the ball must stay within the crease or it will be called a 'wide ball' and the batting team receive an extra run.
- ❑ Hitting the ball to the boundary along the floor score four runs.
- ❑ Hitting the ball over the boundary on the full, without a bounce, scores six runs.

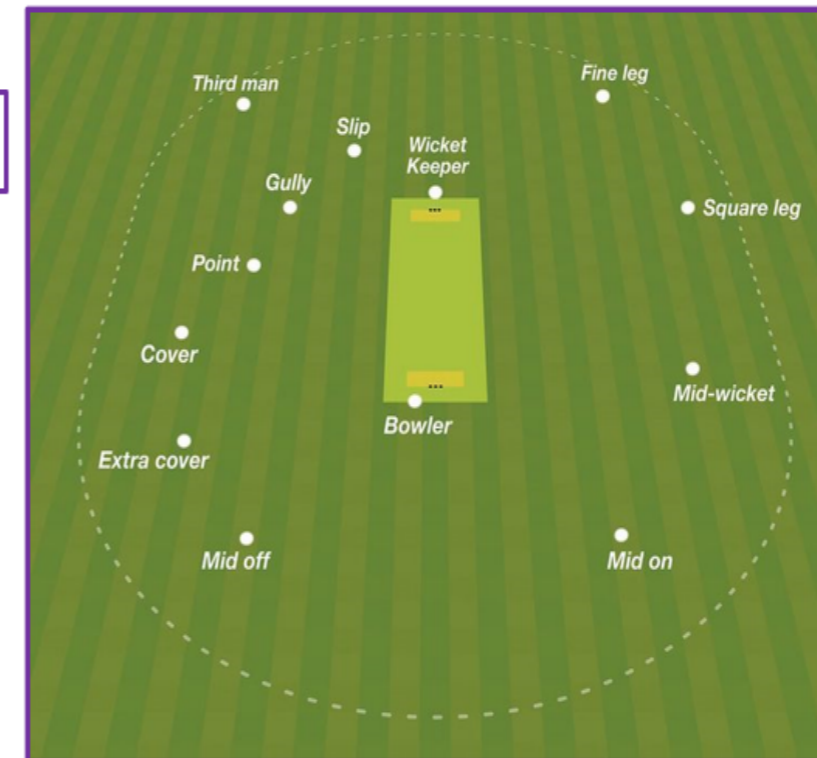
Officials

During a competitive game of cricket there are two umpires and two score keepers.

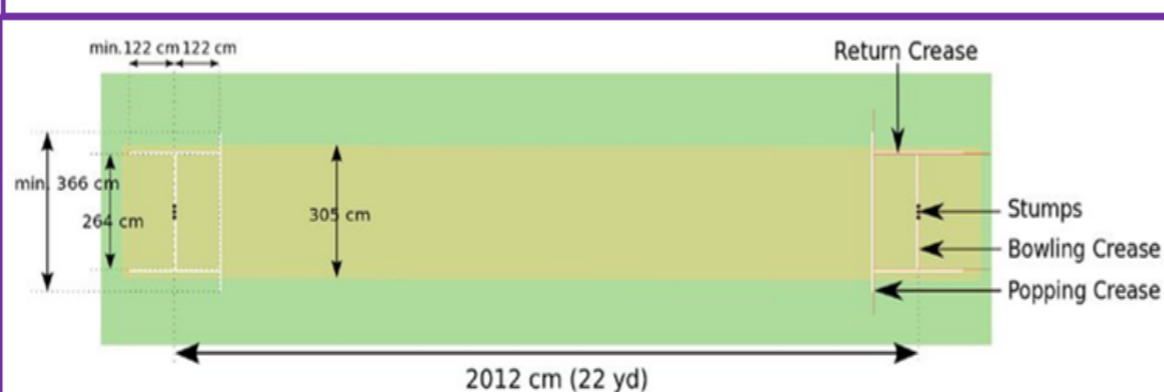
Scoring

In a game of hockey the team that scores the most goals wins the game. Each goal is worth one point. Goals can only be scored in the scoring circle. A shot from outside the scoring circle must be deflected in the scoring circle into the net to score.

Player Positions



Pitch Dimensions



Subject Knowledge Organiser

Cricket – Bowling, Batting & Long Barrier

Bowling

An overarm bowl is the legal way to deliver a ball in a competitive game of cricket.

Stage one

Keep your arms close to your body, your head steady and your eyes fixed on the batter. Holding the ball in your dominant hand, index and middle finger either side of the seam on top of the ball, with the thumb holding the seam on the bottom of the ball.

Stage two

As you get close to the crease, start turning your body so your shoulder is facing towards the wicket and lean back slightly. At the release point, keep the ball close to your chin and your non-bowling arm up with your elbow pointing towards the target. Keep your head looking at the wicket from behind your front arm. As your back foot lands before the popping crease line, keep your body upright and raise your front foot pointing your knee towards the target. As your front foot lands, your toes should be pointing to the batter.

Stage three

On releasing the ball, begin rotating your shoulders and push your bowling arm forward and down from the coil position. The non-bowling arm should be pointing to the batter. Finally, your arms should rotate through with the ball and release it at the top of the delivery arc.

Batting

A chest pass is a very fast and flat pass which enables a team to move quickly up a court in a precise and accurate fashion.

Stage one

Stand with feet shoulder width apart and on the balls of your feet, with back straight and knees slightly bent. Place hands on the sides of the ball with the thumbs directly behind the ball and fingers comfortably spread.

Stage two

The ball should be held in front of the chest with the elbows tucked in. Step in the direction of the pass, by extending their legs, back, and arms. Push the ball from the chest with both arms (not from one shoulder). Fingers are rotated behind the ball and the thumbs are turned down.

Stage three

The back of the hands face one another with the thumbs straight down. Make sure the ball is released off the first and second fingers of both hands. Follow through to finish up with the arms fully extended, fingers pointing at the target and thumbs pointing to the floor.

Long Barrier

The long barrier is the safest technique to control a cricket ball that is travelling along the ground.

Stage one

Move towards the ball at a controlled speed. Get in line with the ball and get your whole body behind the ball.

Stage two

As quickly as possible bend both knees and twist sideways so that the knee of your strong leg touches the ground and touches the back of the heel of the other leg. Extend arms downwards, spread hands wide with little fingers touching each other.

Pick up the ball and draw into the body, then stand up ready to make the best decision.

Stage three

Decide where the ball should be thrown to, the wicket keeper or bowler.

Subject Knowledge Organiser

HRF – Health, Fitness and Exercise, Consequences of a SL, Lifestyle choices & CoF

Health, Fitness and Exercise

Health can be defined as 'complete physical, mental and social wellbeing and not only the absence of illness or infirmity'. Fitness can be defined as 'the ability to meet the demands of the environment'. Exercise can be defined as 'a form of physical exercise done to improve health or fitness or both'. *Adults* - five sessions of thirty minutes activity per week. The activity should be physical enough to cause the adult to breathe more deeply and to begin to sweat. *Children and young people* - seven sessions of sixty minutes per week. At least two of these sessions should be of high intensity exercise such as running, jumping or cardiovascular based sports.

Consequences of a sedentary lifestyle

If a person does not take part in regular physical activity, exercise or sport then they are at risk of a number of illnesses and negative effects such as weight gain or obesity; heart disease; hypertension (high blood pressure); diabetes; depression; increased risk of osteoporosis and loss of muscle tone.

Lifestyle choices

Other lifestyle choices can affect a person's health in either a positive or negative way. For example, eating a balanced diet means a person is less likely to become ill or put on excess body fat; getting enough sleep is important for the body to rest and brain to function optimally; not smoking as this causes illnesses such as bronchitis and lung cancer and not taking recreational drugs such as alcohol as in the short term it can lead to disorientation and poor decision-making and in the long term can lead to disease.

Component of Fitness

	Definition	Example
Body composition	The percentage of body weight which is fat, muscle and bone	The gymnast has a lean body composition to allow them to propel themselves through the air when performing on the asymmetrical bars
Cardiovascular fitness	The ability of the heart, lungs and blood to transport oxygen	Completing a half marathon with consistent split times across all parts of the run
Flexibility	The range of motion (ROM) at a joint	A gymnast training to increase hip mobility to improve the quality of their split leap on the beam
Muscular endurance	The ability to use voluntary muscles repeatedly without tiring	A rower repeatedly pulling their oar against the water to propel the boat towards the line
Strength	The amount of force a muscle can exert against a resistance	Pushing with all one's force in a rugby scrum against the resistance of the opposition pack
Agility	The ability to change the position of the body quickly and control the movement	A badminton player moving around the court from back to front and side to side at high speed and efficiency
Balance	The ability to maintain the body's centre of mass above the base of support	A sprinter holds a perfectly still sprint start position and is ready to go into action as soon as the gun sounds
Coordination	The ability to use two or more body parts together	A trampolinist timing their arm and leg movements to perform the perfect tuck somersault
Power	The ability to perform strength performances quickly	A javelin thrower applies great force to the spear while moving their arm rapidly forward
Reaction time	The time taken to respond to a stimulus	A boxer perceives a punch from their left and rapidly moves their head to avoid being struck
Speed	The ability to put body parts into motion quickly	A tennis player moving forward from the baseline quickly to reach a drop shot close to the net

Subject Knowledge Organiser

HRF – Training Methods, Advantages/Disadvantages of TM & Training Zones

Training Methods

Training can be aerobic or anaerobic. In aerobic exercise, which is steady and not too fast, the heart is able to supply enough oxygen to the muscles. Aerobic training improves cardiovascular fitness. Anaerobic exercise is performed in short, fast bursts where the heart cannot supply enough oxygen to the muscles. Anaerobic training improves the ability of the muscles to work without enough oxygen when lactic acid is produced.

Specific training methods can be used to improve each fitness factor. Circuit training involves performing a series of exercises in a special order called a circuit. Each activity takes place at a 'station'. It can be designed to improve speed, agility, coordination, balance and muscular endurance. Continuous training involves working for a sustained period of time without rest. It improves cardiovascular fitness. Cross training involves using another sport or activity to improve your fitness. It happens when an athlete trains in a different environment. For example a volleyball player uses the power training for that sport to help with fitness for long jump. Fartlek training or 'speed play' training involves varying your speed and the type of terrain over which you run, walk, cycle or ski. It improves aerobic and anaerobic fitness. Interval training involves alternating between periods of hard exercise and rest. It improves speed and muscular endurance.

Progress Vocabulary: *Identify, Define, describe, explain, compare and contrast, sporting links, analyse, evaluate*

Advantages and Disadvantages of Training Methods

Continuous Training

Good for aerobic fitness, lose weight accessible, health benefits, good for beginners of all ages, little equipment Boring, not always sport specific, risk of injury does not improve anaerobic fitness

Fartlek Training

Good for team sports, less boredom, easy to use, can mimic the sport, god for team sports

Too easy to cheat, can be difficult

Circuit Training

Less boring, easily adapted for fitness/skill, easily adapted to sports, stations can target specific muscle groups

Take time to set up, requires equipment

Interval Training

Can be both aerobic and anaerobic, less technical, can mimic a sport, good for sports that require a change of pace

Can be boring, easy to cheat hard aspects,

Free weights

Full range of sporting movement, large muscle groups can be worked

Risk of injury, need a spotter, more suitable for advance performers, requires good knowledge

Resistance machines

Safer, good for beginners, good for injury rehabilitation

Expensive, no functional everyday movements, only focuses on one muscle group

Always remember: To work out your maximum heart rate you take your age from 220. So a 12 year old has a maximum heart rate of 208 beats per minute.

Training Zones

Anaerobic Threshold
80-100%
Peak Performance
80-90%
Aerobic Fitness
70-80%
Aerobic
60-80%
Fat Burning
60-70%
Active Recovery
60%
Warm-up Cool-down
50%

Subject Knowledge Organiser

Rounders – Rules, Officials, Scoring, Player Positions & Pitch Dimensions

Rules

- ☐ Teams can be a minimum of 6 players and a maximum of 15 players. 9 players are on the field for each team at any one time.
- ☐ One team bats whilst the other team fields and bowls.
- ☐ The bowler bowls the ball to the batter, who hits the ball anywhere on the Rounders pitch. The batter then runs to as many posts as possible before the fielders return the ball to touch the post the batter is heading for.
- ☐ A batter is out if the fielding team catch the ball hit by a batter before it touches the ground **or** by touching the post the batter is running to with the ball before the batter reaches it.
- ☐ The team with the most rounders wins.
- ☐ Batters must always keep contact with the post, either with their hand or bat. If you don't, the fielders can stump you out at the following post.
- ☐ If you are at a post you cannot keep on moving to the next post when the bowler has the ball in his square. However, if you are between posts then you can keep on moving until you reach the following post.
- ☐ Each batter will have one good ball bowled to them.
- ☐ A batter must hold on to the bat whilst running round the track.

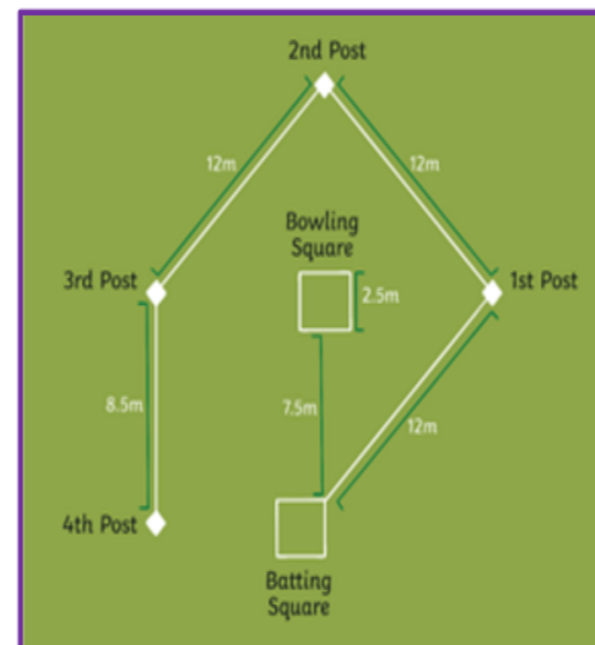
Officials

During a competitive game of rounders there are two umpires and up to two scorekeepers.

Scoring

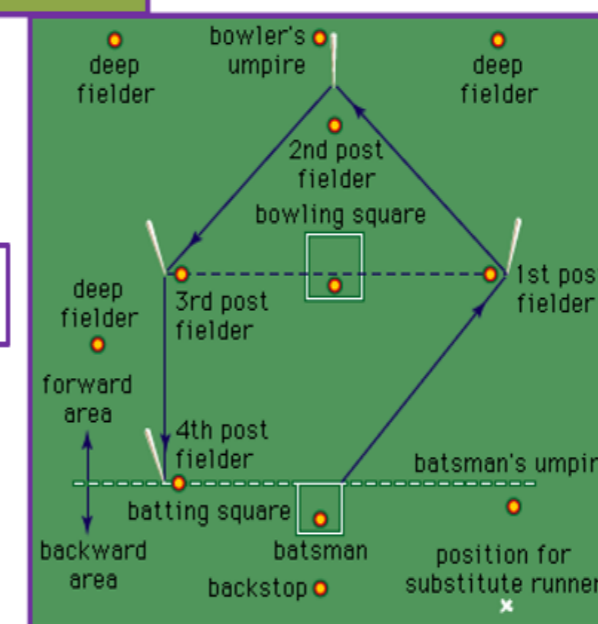
In a game of rounders points can be scored by reaching different bases.

- Hit the ball and stop at base two will score you half a rounder.
- Hit the ball and stop at base three will score you half a rounder.
- Hit the ball and run around all the bases, including base four, you will score one rounder.



Pitch Dimensions

Player Positions



Subject Knowledge Organiser

Rounders – Bowling, Batting and Overarm throw

Bowling

The underarm bowling technique is an important skill needed to play rounders, it requires consistent accuracy.

Stage one

Stand in the middle of the bowling box with the ball in your strongest hand. Facing the batter with your less dominant foot and arm pointing at the batter.

Stage two

Bring your dominant arm back in an underarm motion, aiming to bowl the ball above the batters knee but below their head, release the ball with a straight arm at chest height.

Stage three

Follow through with your dominant hand when the ball has been released, your arm should finish across your body, weight transferred from your back foot to front foot.

Batting

Hitting the ball into space in a game of rounders increases the batters chance of scoring more points for their team.

Stage one

Stand in the middle of the batting box side on, with feet shoulder-width apart. Holding the bat in your dominant hand, head facing the bowler, eyes on the ball.

Stage two

When the ball is bowled use your less dominant hand to track the ball by pointing at the ball. Use your dominant hand to swing the bat across the body, aiming to make contact using the middle of the bat on the ball.

Stage three

Follow through the movement of the bat, shoulders will be facing the direction of which the ball is going, the bat will finish across the body at the opposite shoulder.

Overarm Throw

The overarm throw is a skill used when fielding over long distances to throw the ball to a person on a base when trying to stump a batter out. It is the fastest and most accurate throw to use.

Stage one

Stand shoulder width apart, sideways on to the target, on the balls of your feet with the weight transferred to the back foot. Hold the ball in your dominant hand. The throwing arm is taken back behind the head at a 90° angle. Point the non-throwing arm at the target.

Stage two

Transfer the weight from your back foot to your front foot by rotating your hips and torso toward the target. Pull the throwing arm through toward the target leading with your elbow and your forearm and wrist following last and fast. Release the ball just in front of your head with both feet on the ground and the chest facing the target.

Stage three

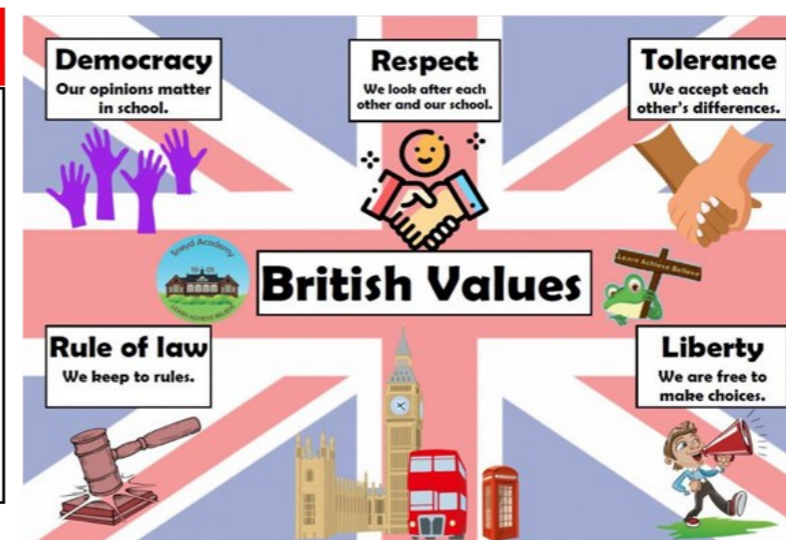
Follow through with your throwing arm pointing toward the target. Momentum will pull your body weight towards the floor.

Key Vocabulary...		The British Values and Some Other Rights	
Laws	Rules which are set by the government that every single person must follow.	Democracy	The idea that the people should be able to collectively choose their leaders.
Election	The event at which people vote to choose the government.	The Rule of Law	The idea that all people should follow the law and be treated equally by the law.
Respect	Giving consideration to the feelings, wishes, needs or abilities of another person.	Individual Liberty	The idea that people should be free to choose their own path in life.
Racism	Prejudice or discrimination based on someone's skin colour or place of origin.	Mutual Respect and Tolerance	The idea that no one should be mistreated based on their race, gender, religion, disability or any other difference.
Sexism	Prejudice or discrimination based on someone's gender or biological sex.	Freedom of Speech	The idea that people should be free to express themselves and their views without fear of punishment.
Prejudice	Making judgements about someone based on their gender, race, sexual orientation or religion.	The Right to Protest	Within certain rules, UK citizens are legally allowed to protest against treatment or rules that they deem unfair.
Discrimination	Mistreatment of someone based on their gender, race, sexual orientation or religion.	unfair Treatment	
Protest	A public demonstration of dissatisfaction with the rules.	Human Rights	The basic rights which are considered to be common to all people rather than having to be earned.
Liberty	Freedom, the right to make decisions about one's own life.		

The Big Idea

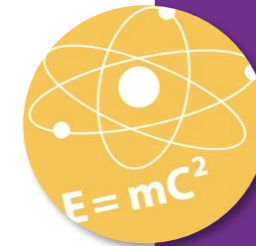
In many countries the rights and freedoms of the people are not guaranteed and protected by law. We are very lucky in Britain to be living in a country which protects us in this way and allows us to live our lives as we choose, as long as we don't have a negative affect on others. It has been a long journey through history to gain these rights and freedoms.

Democracy, for example, has developed over more than 800 years, beginning with King John being forced by his barons to grant them some basic rights in a document which we now call Magna Carta, signed in the year 1215. Over this period, there have been many people who have fought for the rights of the British people, brave campaigners such as Annie Besant and William Wilberforce, who both worked hard to make sure that eventually all British people would be free and have a say in how the country is governed.

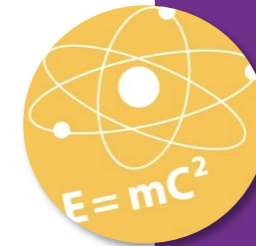


Activity - Research the five key British Values of democracy, the rule of law, individual liberty, mutual respect and freedom of speech. Create a fact-file explaining how these rights and values are protected in Britain.

Notes



Notes



Notes

