

Year 9 – HT5



Knowledge Organisers

Name:

Team:

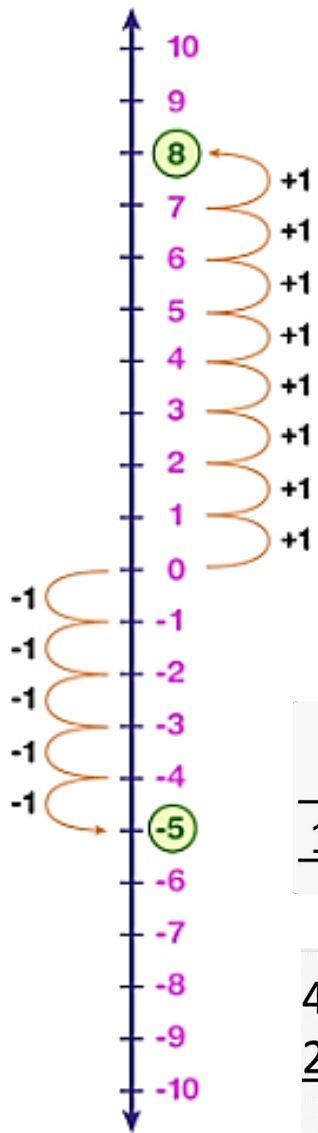


Mathematics

Our students will:

- become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
- **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can **solve problems** by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Maths: Quick Reference: Number Skills



100 Hundreds	10 Tens	1 Units	$\frac{1}{10}$ Tenths	$\frac{1}{100}$ Hundredths
3	5	2	7	1

addition

- add
- more
- plus
- sum
- total
- altogether

subtraction

- subtract
- minus
- leave
- less
- take away
- difference between

multiplication

- lots of
- times
- multiply
- groups of
- product
- multiplied by
- multiple of
- repeated addition
- array

division

- divide
- divided by
- divided into
- share
- share equally
- equal groups of

$$\begin{array}{r} 476 + \\ 874 \\ \hline 1350 \\ 11 \end{array}$$

$$\begin{array}{r} 586 \\ \times 7 \\ \hline 42 \\ 560 \\ \hline 3500 \end{array}$$

$$\begin{array}{r} 045 \\ 8 \overline{) 33640} \end{array}$$

$$\begin{array}{r} 7 \\ 4,783 - \\ 2,349 \\ \hline 4 \end{array}$$

156000. = 1.56×10^5
Move decimal point 5 places left,
exponent goes up by 5

0.0000053 = 5.3×10^{-6}
Move decimal point 6 places right,
exponent goes down by 6

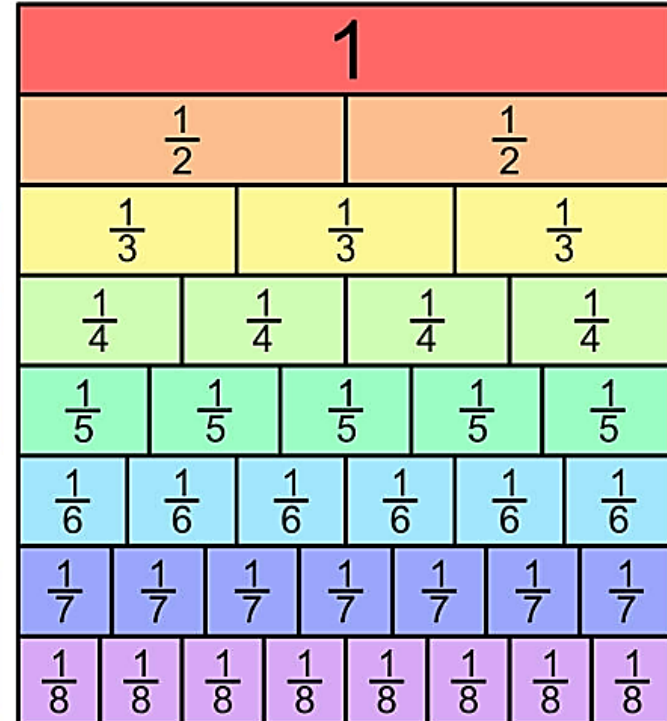
X	1	2	3	4	5	6	7	8	9	10	11	12
1	1	2	3	4	5	6	7	8	9	10	11	12
2	2	4	6	8	10	12	14	16	18	20	22	24
3	3	6	9	12	15	18	21	24	27	30	33	36
4	4	8	12	16	20	24	28	32	36	40	44	48
5	5	10	15	20	25	30	35	40	45	50	55	60
6	6	12	18	24	30	36	42	48	54	60	66	72
7	7	14	21	28	35	42	49	56	63	70	77	84
8	8	16	24	32	40	48	56	64	72	80	88	96
9	9	18	27	36	45	54	63	72	81	90	99	108
10	10	20	30	40	50	60	70	80	90	100	110	120
11	11	22	33	44	55	66	77	88	99	110	121	132
12	12	24	36	48	60	72	84	96	108	120	132	144

1 P Parentheses
2 E Exponents
3 M Multiply
D Divide
4 A Add
S Subtract

() e^2 (x) (÷) (+) (-)

Left to Right (whichever comes first) Left to Right (whichever comes first)

1% of $\div 100$ $\frac{1}{100}$ of $\times \frac{1}{100}$ $\times 0.01$	5% of $\div 10, \div 2$ $\frac{1}{20}$ of $\times \frac{1}{20}$ $\times 0.05$	10% of $\div 10$ $\frac{1}{10}$ of $\times \frac{1}{10}$ $\times 0.1$	20% of $\div 5$ $\frac{1}{5}$ of $\times \frac{1}{5}$ $\times 0.2$
25% of $\div 4$ $\frac{1}{4}$ of $\times \frac{1}{4}$ $\times 0.25$	50% of $\div 2$ $\frac{1}{2}$ of $\times \frac{1}{2}$ $\times 0.5$	75% of $\div 4, \times 3$ $\frac{3}{4}$ of $\times \frac{3}{4}$ $\times 0.75$	



Maths: Quick Reference: Geometry & Measures

Quadrilaterals

<p>Square</p> <p>Four sides of equal length, four internal right angles.</p>	<p>Rectangle</p> <p>Four internal right angles, opposite sides of equal length.</p>	<p>Parallelogram</p> <p>Opposite sides are parallel and equal in length, opposite angles are equal.</p>	<p>Rhombus</p> <p>All four sides are the same length, like a square that has been squashed sideways.</p>
<p>Trapezium (or trapezoid)</p> <p>Two sides are parallel. Side lengths and angles are not equal.</p>	<p>Isosceles Trapezium (or trapezoid)</p> <p>Two sides are parallel and base angles are equal, non-parallel sides are equal length.</p>	<p>Kite</p> <p>Two pairs of adjacent sides are of equal length, the shape has an axis of symmetry.</p>	<p>Irregular Quadrilateral</p> <p>No sides are equal in length and no internal angles are the same.</p>

3D shapes

Cone	Cylinder	Sphere	Square Based Pyramid
Cube	Triangular Prism	Tetrahedron	Cuboid

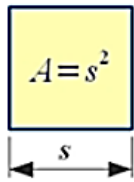
Triangle	Quadrilateral	Pentagon	Hexagon
Heptagon	Octagon	Nonagon	Decagon

Pentagon		$180^{\circ} \times 3 = 540^{\circ}$
Hexagon		$180^{\circ} \times 4 = 720^{\circ}$
Heptagon		$180^{\circ} \times 5 = 900^{\circ}$

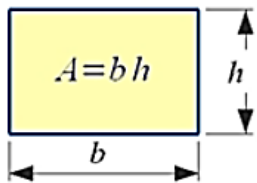
Length					
cm	mm	m	cm	km	m
$\times 10$	$\times 100$	$\times 1,000$	$\div 10$	$\div 100$	$\div 1,000$
Mass					
g	mg	kg	g	t	kg
$\times 1,000$	$\times 1,000$	$\times 1,000$	$\div 1,000$	$\div 1,000$	$\div 1,000$
Volume					
l	ml	cl	ml	l	cl
$\times 1,000$	$\times 10$	$\times 100$	$\div 1,000$	$\div 10$	$\div 100$

Maths: Quick Reference: Geometry (Areas & Volumes)

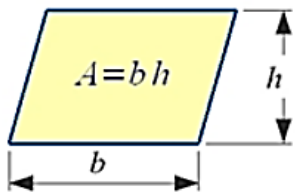
Square



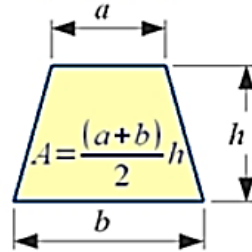
Rectangle



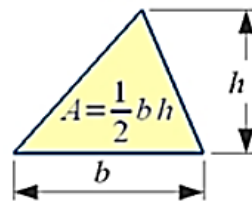
Parallelogram



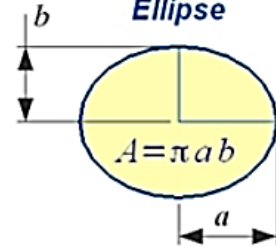
Trapezoid



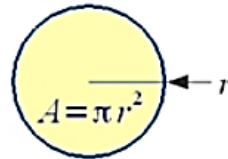
Triangle



Ellipse



Circle



electronics-micros.com

Area and volume of 3d figures

S.No	Name	Figure	Curved Surface Area	Total Surface Area	Volume
1)	Cube	$a = \text{side}$	$4a^2$	$6a^2$	a^3
2)	Cuboid	$l = \text{length}$ $b = \text{breadth}$ $h = \text{height}$	$2h(l + b)$	$2(lb + bh + lh)$	$l \times b \times h$
3)	Sphere	$r = \text{radius}$	$4\pi r^2$	$4\pi r^2$	$\frac{4}{3}\pi r^3$
4)	Solid Hemisphere	$r = \text{radius}$	$2\pi r^2$	$3\pi r^2$	$\frac{2}{3}\pi r^3$
5)	Right circular cylinder	$r = \text{radius}$ $h = \text{height}$	$2\pi rh$	$2\pi r(h+r)$	$\pi r^2 h$
6)	Right circular cone	$r = \text{radius}$ $h = \text{height}$ $l = \text{slant height}$	$\pi r l$	$\pi r(l+r)$	$\frac{1}{3}\pi r^2 h$
7)	Frustum of a cone	$r = \text{top radius}$ $R = \text{base radius}$ $h = \text{height}$ $l = \text{slant height}$	$\pi l(R + r)$	$\pi l(R+r) + \pi r^2 + \pi R^2$	$\frac{1}{3}\pi h(R^2 + r^2 + Rr)$

Maths: Quick Reference: Algebra Skills

Simplifying Expressions

Like terms

$$3y + 2x + 4x - y = 2y + 6x$$

Like terms

$$C \times C \times C \times C = C^4$$

$$C + C + C + C = 4C$$

Expanding Brackets

multiply

$$7(x + 2)$$

$$7x + 14$$

multiply

$$5a(b - 4)$$

$$5ab - 20a$$

Expand & Simplify...

$$5(x + 3) + 6(x - 4)$$

$$5x + 15 + 6x - 24$$

$$11x - 9$$

FOIL Method

F O

$$(2x + 3)(5x - 8)$$

I L

First: $(2x)(5x) = 10x^2$

Outer: $(2x)(-8) = -16x$

Inner: $(3)(5x) = 15x$

Last: $(3)(-8) = -24$

$$(2x + 3)(5x - 8)$$

$$= 10x^2 - 16x + 15x - 24$$

$$= 10x^2 - x - 24$$

Grid Method

$$(2x + 3)(5x - 8)$$

	$2x$	$+ 3$
$5x$	$10x^2$	$+ 15x$
$- 8$	$- 16x$	$- 24$

$$10x^2 + 15x - 16x - 24$$

$$= 10x^2 - x - 24$$

An Expression

$$4a + 7b$$

A Formula

$$A = \pi r^2$$

An Equation

$$4a + 12 = 60$$

An Identity

$$(a + b)^2 = a^2 + 2ab + b^2$$

Factorising Brackets

Common factor?

$$7x + 14$$

$$7(x + 2)$$

Common factor?

$$5ab - 20a$$

$$5a(b - 4)$$

Substitution

b = 9

$12b + 10 = 118$ $\frac{b}{3} = 3$ $-b = -9$ $3(b+1) = 30$
 $3b = 27$ $\frac{2b}{3} = 6$ $b - 5 = 4$
 $7b = 63$ $\frac{b+11}{4} = 5$ $b^2 = 81$ $b + 15 = 24$
 $3b - 4 = 23$ $b - 20 = -11$

Solving Equations

$$6x - 5 = 7$$

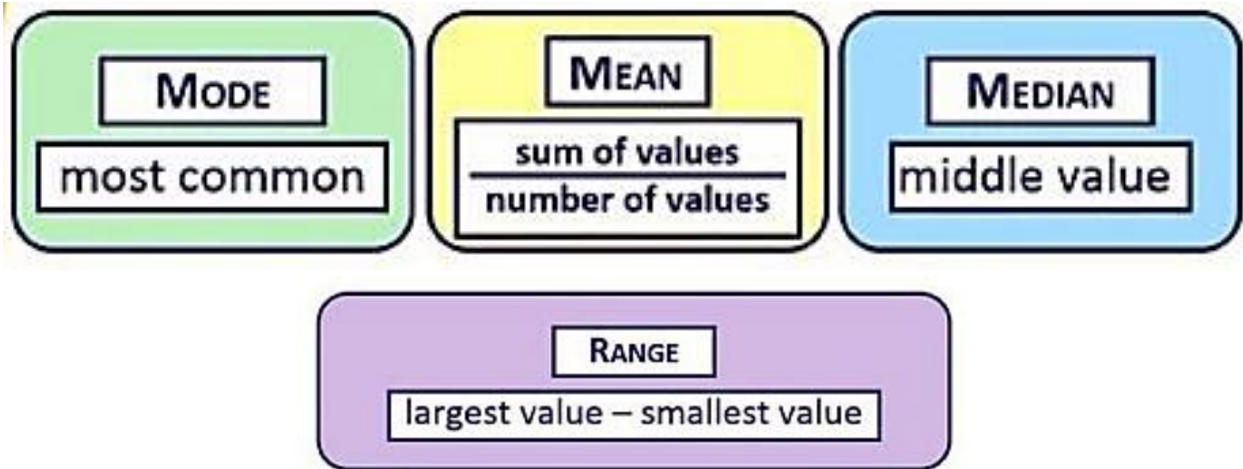
$$\boxed{+ 5} \qquad \boxed{+ 5}$$

$$6x = 12$$

$$\boxed{\div 6} \qquad \boxed{\div 6}$$

$$x = 2$$

Maths: Quick Reference: Statistics



<p>Mean 7, 3, 4, 1, 7, 6 Sum of numbers divided by the total numbers Mean = $(7+3+4+1+7+6)/6$ = $28/6 = 4.66$</p>	<p>Median 7, 3, 4, 1, 7, 6 Arrange in order and pick the middle value 1, 3, <u>4</u>, <u>6</u>, 7, 7 Median = $(4+6)/2 = 5$</p>
<p>Mode 7, 3, 4, 1, 7, 6 Most common number <u>7</u> 3, 4, 1, <u>7</u> 6 Mode = 7</p>	<p>Range 7, 3, 4, 1, 7, 6 Difference between highest and lowest Range = $7 - 1 = 6$</p>

Mean from the Frequency Table

Discrete Data Frequency Table

$$\text{Mean} = \frac{\text{Sum of (value} \times \text{frequency)}}{\text{Total frequency}}$$

Grouped Data Frequency Table

$$\text{Mean of grouped data} = \frac{\text{Sum of (interval midpoint} \times \text{frequency)}}{\text{Total frequency}}$$

Length (x cm)	Frequency	Midpoint	Midpoint × frequency
$0 < x \leq 10$	4	× 5	= 20
$10 < x \leq 20$	10	× 15	= 150
$20 < x \leq 30$	7	× 25	= 175
$30 < x \leq 40$	4	× 35	= 140
	25		485

estimated mean = $485 \div 25 = 19.4 \text{ cm}$

Simple Probability

$$\text{Probability} = \frac{\text{Favorable outcomes}}{\text{Total outcomes}}$$

Example:



$$P(\text{red}) = \frac{7}{12}$$

← Number of red marbles
← Total number of marbles (sample space)

$$P(\text{blue}) = \frac{5}{12}$$

← Number of blue marbles
← Total number of marbles (sample space)

In words:	Impossible	Very unlikely	Unlikely	Even chances	Likely	Very likely	Certain
As decimal fractions:	0	0,2	0,4	0,5	0,6	0,8	1
As fractions:	0	$\frac{1}{5}$	$\frac{2}{5}$	$\frac{1}{2}$	$\frac{3}{5}$	$\frac{4}{5}$	1
As percentages:	0%	20%	40%	50%	60%	80%	100%

Sample Space Diagrams

		Dice 1					
		1	2	3	4	5	6
Dice 2	1	2	3	4	5	6	7
	2	3	4	5	6	7	8
	3	4	5	6	7	8	9
	4	5	6	7	8	9	10
	5	6	7	8	9	10	11
	6	7	8	9	10	11	12
		Total Score					



Our students will:

- read easily, fluently and with good understanding
- develop the habit of reading widely and often, for both pleasure and information
- acquire a wide vocabulary, an understanding of grammar and knowledge of linguistic conventions for reading, writing and spoken language
- appreciate our rich and varied literary heritage
- write clearly, accurately and coherently, adapting their language and style in and for a range of contexts, purposes and audiences
- use discussion in order to learn; they should be able to elaborate and explain clearly their understanding and ideas
- are competent in the arts of speaking and listening, making formal presentations, demonstrating to others and participating in debate.



Our students will:

- develop **scientific knowledge and conceptual understanding** through the specific disciplines of biology, chemistry and physics
- develop understanding of the **nature, processes and methods of science** through different types of science enquiries that help them to answer scientific questions about the world around them
- are equipped with the scientific knowledge required to understand the **uses and implications** of science, today and for the future.



Our students will:

- know and understand the history of these islands as a coherent, chronological narrative, from the earliest times to the present day: how people's lives have shaped this nation and how Britain has influenced and been influenced by the wider world
- understand historical concepts such as continuity and change, cause and consequence, similarity, difference and significance, and use them to make connections, draw contrasts, analyse trends, frame historically-valid questions and create their own structured accounts, including written narratives and analyses
- understand the methods of historical enquiry, including how evidence is used rigorously to make historical claims, and discern how and why contrasting arguments and interpretations of the past have been constructed
- develop contextual knowledge of the location of globally significant places – both terrestrial and marine – including their defining physical and human characteristics and how these provide a geographical context for understanding the actions of processes
- understand the processes that give rise to key physical and human geographical features of the world, how these are interdependent and how they bring about spatial variation and change over time



The aims of the sequence of learning are to ensure that all students:

- Describe what was the most important cause of the Second World War.

Keyword	Definition
Causes	The reason an event happened.
Dictator	A political leader who has total control and power over a country.
Communism	Communism is a type of government. In a Communist system, individual people do not own land, factories, or machinery. Instead, the government or the whole community owns these things. Everyone is supposed to share the wealth that they create.
Lebensraum	Living Space - the land Nazis believed was required in order to grow and flourish.
Appeasement	When Britain and France gave Hitler what he wanted (<i>appeased him</i>) to try to avoid war.
Anschluss	German word for 'Union' – Hitler declared an Anschluss between Germany and Austria in 1938.
Blitzkrieg	German attack on enemy targets, means 'lightning war'.
Evacuation	Taking people away from danger.
Persecution	To treat someone cruelly or unfairly especially because of race or religious or political beliefs.
Anti-Semitism	Hostility towards Jews or discrimination against them as a group.
Aryan	Northern Europeans, including Germans, who Hitler believed were the 'Master Race'.
Ghettos	Areas of towns (usually run-down) sectioned off to separate Jews within the community.
Kristallnacht	Night of Broken Glass: attacks on Jews & Jewish property that intensified persecution of Jews in Germany.
Synagogues	Jewish places of worship.

Key Concepts



Causes of WWII: C. Timeline of Hitler's Actions:

1933: Hitler becomes Chancellor of Germany and builds up Germany's armed forces which breaks one of the terms of the Treaty of Versailles.

1936: German soldiers occupy the Rhineland where they were not supposed to go. Other countries, including Britain, did not stop this as the land belonged to Germany. This is the start of **Appeasement** by Britain and France.

1938: Hitler took over Austria, again breaking the Treaty. Britain protested but did nothing.

1938: Hitler threatened war with Czechoslovakia if they did not return the Sudetenland to Germany. 3 million Germans lived there. Britain and France agreed that Germany should be allowed to take the Sudetenland but made Hitler promise not to invade any other countries.

1939: Hitler broke his promise by taking over the rest of Czechoslovakia. He then started to threaten Poland. Poland was determined to fight Hitler...

1st September 1939: Germany invaded Poland, using 'Blitzkrieg' strategy. Britain and France (Poland's allies) gave notice to Germany to remove their troops from Poland. When they did not, Britain and France declared war on **3rd September 1939**.

This was the start of World War 2!

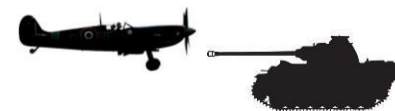


Other Causes of WWII:

Treaty of Versailles: By the 1930's many people believed that Germany had been treated too harshly in the Treaty including Britain. Germany had lost land to create new countries like Poland and Czechoslovakia and Hitler promised to overturn the Treaty of Versailles and reunite all German speaking people in a greater Germany.

Appeasement: The policy of appeasement aimed to prevent another war and is linked particularly with the British Prime Minister Neville Chamberlain. Many believe he made a mistake by trusting Hitler. Britain and France could have stopped Germany. Opportunities, such as the Rhineland, were missed and Chamberlain even negotiated with Hitler in Munich to give him the Sudetenland. This prompted the Nazi Soviet Pact.

The Nazi Soviet Pact: Stalin felt alienated by the Munich Agreement and this encouraged him to sign the pact even though he and Hitler hated each other. It was a truce to agree to share Poland. This would help Hitler avoid a war on two fronts and give him back up from the USSR. This made him more confident about invading Poland even though Britain and France had promised to protect them.



What was the most important turning point of World War II?

A turning point is a significant moment when events alter in a way that has an impact both in the short and long term. There are many key moments in WWII that had an impact on the outcome of the war.

Turning Point: Was the evacuation of Dunkirk seen as a triumph or disaster?

Large numbers of British, French and Belgian troops were surrounded by German soldiers in the French town Dunkirk but 338,226 were saved by a fleet of British navy ships and 800 small boats. These soldiers made up of much of Britain's army went on to fight throughout the war. It gave the British public hope.

Turning Point: How important was the Battle of Britain?

The Royal Air Force (RAF) successfully defended against attacks by Nazi Germany's air force: Luftwaffe. It has been described as the first military campaign fought entirely by air forces. Hitler changed his tactics when it was clear the RAF could not be defeated, and he cancelled the invasion of Britain. The RAF went on to bomb targets in Germany.



- Describe what was the most important cause of the Second World War.



Key Concepts

The Holocaust: What is it? The mass murder of Jews under the German Nazi regime during the period 1939-1945. More than 6 million European Jews, as well as members of other persecuted groups, were murdered at concentration camps such as Auschwitz. Holocaust means destruction or slaughter on a mass scale, especially by fire. Many Jews use the term 'Shoah' which comes from the Hebrew meaning catastrophe.

A History of Anti-Semitism

The Nazis did not invent hatred of Jews or anti-Semitism.

Jews were persecuted in the Middle Ages for religious reasons. In 1190, 150 Jews were massacred in York and all Jews were expelled in 1290.

In many European countries, Jews were blamed for spreading the Black Death and were banned from owning land. In towns they were usually confined to certain areas—ghettos and subject to restrictions, such as curfews.

Martin Luther, who started the Protestant Reformation, called for Jewish synagogues to be destroyed.

In the 1800s, millions of Jews fled the Russian Empire because of pogroms (organised massacre) against them. Immigrants often ended up in Britain or the USA.

The Ghettos:

Ghettos were usually in the most run-down area of a city and were used to segregate the Jews. By mid-1941, nearly all Jews in occupied Poland had been forced into these overcrowded districts.

In the Warsaw ghetto, by far the largest, 490,000 Jews and a few hundred Roma and Sinti (Gypsies) struggled to survive. In larger centres, ghettos were shut in by walls, fences or barbed wire. No one could leave or enter without a special permit.

Jews received little food and the ghettos were overcrowded. Diseases such as typhus and tuberculosis were rife. It is estimated that 500,000 Jews died in the ghettos of disease and starvation. Many also perished in nearby slave labour camps, where conditions were even worse.



Nazi Persecution of the Jews:

Hitler's dislike of the Jews was based on many things including his experiences in Vienna as a youth, but mainly the economy. He blamed them for making Germany weak and for the defeat of World War One.

1933: From 1st April the Nazi Party began an official Boycott of all Jewish shops, businesses, doctors and lawyers. The SA were used to paint Jewish stars or the word 'Jude' (Jew) outside Jewish businesses and they stood outside holding banners to discourage people from going inside.

Jews were also banned from government jobs and Jewish civil servants and teachers were sacked.

1935: The Nuremberg Laws were passed and stated only those of German blood could be German citizens. Jews became German 'subjects', not citizens and marriage between Jews and Aryans was banned. Placards saying 'Jews not wanted here' were displayed in resorts, public buildings, restaurants and cafes.

9th November 1938: Kristallnacht (*Night of Broken Glass*) - gangs smashed and burned Jewish homes, businesses & synagogues all over Germany and attacked Jews. Many Jews were killed and 20,000 arrested and sent to concentration camps.

1939-41: Millions of Jews living in Poland & the USSR came under Nazi control. Many were shot or kept in Ghettos.

1942: Leading Nazis agreed upon a 'Final Solution' at the Wannsee Conference to the "Jewish problem". Death camps would be used to eradicate Jews from Europe.

Concentration Camps:

The Nazis had been using concentration camps since 1933 as extended prisons or work camps, often for political opponents, but thousands of Jews were taken to camps like Dachau following Kristallnacht.

Germany's invasions of Poland & The Soviet Union meant that there were now millions more Jews under Nazi control. Initially, groups of SS troops – 'Einsatzgruppen', murdered Jews by shooting.

Following the decision at the Wannsee Conference in 1942 to eradicate all Jews, death camps were built. The death camps used gas chambers to murder Jews and others on an industrial scale.

When Jews arrived from all over Europe, 'selection' happened. Women with young children, the elderly and the unfit were sent straight to the gas chambers. The Jews were told they were being taken to 'showers' but the 'showers' were in fact gas chambers which used a chemical called Zyklon-B. Usually, people 14 years of age and upwards were sent to the camp if they were fit and healthy. They would receive showers to clean them up. The showers were either really hot or extremely cold. They would then be given a uniform, tattooed with a number and have their hair shaved.

Sometimes, horrifying medical experiments were carried out on camp inmates, for example, by Dr Mengele at Auschwitz who was fascinated in studying twins.

All of the Jews' personal belongings: gold, silver, spectacles, clothes, even hair was kept to be re-used. Even in work camps, deaths through beatings, lack of food and disease were common. It is widely accepted that as many as 6 million Jews were murdered during the Holocaust.

Other groups, such as Russian prisoners, homosexuals, communists, gypsies and the mentally and physically disabled were also victims of the Nazi regime.

As the map shows, most death camps were in Poland rather than Germany, and Poles made up half of the victims. Jews from nearly all European countries were victims during World War Two.





- Describe what was the most important cause of the Second World War.



Retrieval Practice

Questions	Answers
Tell me three minority groups persecuted by the Nazis:	Jewish, disabled and homosexuals
What date was Kristallnacht and what happened?	8th November 1938 when gangs smashed and burned Jewish homes, businesses & synagogues all over Germany and attacked Jews. Many Jews were killed and 20,000 arrested and sent to concentration camps.
Who was Anne Frank and why is she significant when studying the Holocaust?	Anne Frank was a German girl and Jewish victim of the Holocaust who is famous for keeping a diary of her experiences. Anne and her family went into hiding for two years to avoid Nazi persecution.
Explain two causes of World War Two (short or long term):	Treaty of Versailles – Many believed Germany was too harshly punished Appeasement- Many believe Chamberlain made a mistake by trusting Hitler. Britain and France could have stopped Germany.
What was the Nazi Soviet pact? Explain with examples.	A pact between Hitler and Stalin. It was a truce to agree to share Poland. This would help Hitler avoid a war on two fronts and give him back up from the USSR.
Why did Britain and France eventually declare war on Germany?	When Germany invaded Poland
Was Dunkirk a triumph or disaster? Explain your answer.	A disaster as large numbers of French, British and Belgium troops died. A success as 338,226 troops were saved
What happened at the Battle of Britain and why was it a turning point of WWII?	The Royal Air Force (RAF) successfully defended Britain against attacks by Nazi Germany's air force the Luftwaffe. Britain could now bomb targets in Germany
What consequences did Germany face after the Battle of Stalingrad?	It was the first failure of the war to be publicly acknowledged by Hitler and put Hitler and the Axis powers on the defensive, boosting Russian confidence.
Why did Germany surrender? Tell me one reason.	Soviet forces neared Adolf Hitler's command bunker in central Berlin. On April 30, 1945, Hitler committed suicide. Within days, Berlin fell to the Soviets.



Career Focus - Where could this take you?



I am a Screenwriter: My job is to write and develop screenplays for film or TV drama. I do this either based on an original idea, by adapting an existing story into a screenplay or by joining an existing project (if on TV). I will also use events that have happened in History and dramatise it while including historical facts. I have to make sure I have researched the area I want to focus on and plan my ideas, plots and characters.



Challenge Activities

- Write a newspaper article about one of the key battles in World War Two. You need to research the battles and decide which one you want to write about- ensure you know enough to make a comparison to at least one other battle.
- Write a script to use in a movie or play about one of the key battles of World War Two or about the Holocaust. Many movies have been produced which use historical fiction (incorporating some historical facts with a fictional storyline).
- Produce a timeline which can be used as a display piece of key events in World War Two. This should include dates, key individuals, the event (what happened) and pictures to match.

Topic Links



This topic links to other humanities topics such as:

- From Democracy to Dictatorship
- The end of World War Two
- Britain's Homefront
- Judaism

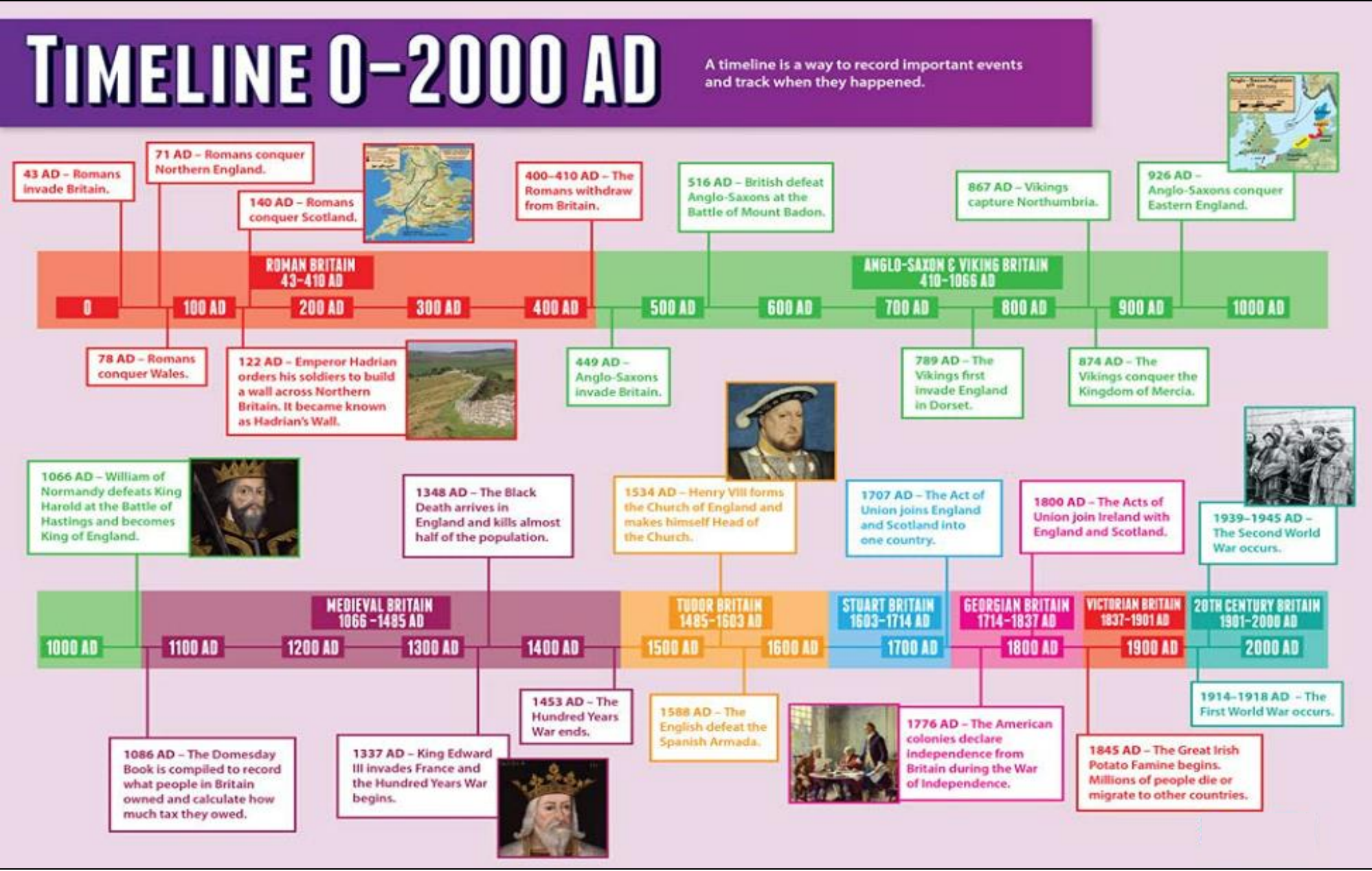
Additional Resources



To further practise and develop your knowledge see:
<https://www.familysearch.org/en/blog/world-war-2-facts>
<https://www.youtube.com/watch?v=8a8fqGpHjSk>
<https://www.britannica.com/study/world-war-ii-major-events-battles>
<https://www.bbc.co.uk/bitesize/topics/zk94jxs/articles/z6vff82>



Timeline



Year 9 Urban Issues and Challenges

The aims of the sequence of learning are to ensure that all students:

- Explain the reasons for urban growth on a global scale
- Describe the global distribution of megacities
- Explain why Rio is such an important city
- Explain the challenges in Rio and how these can be managed

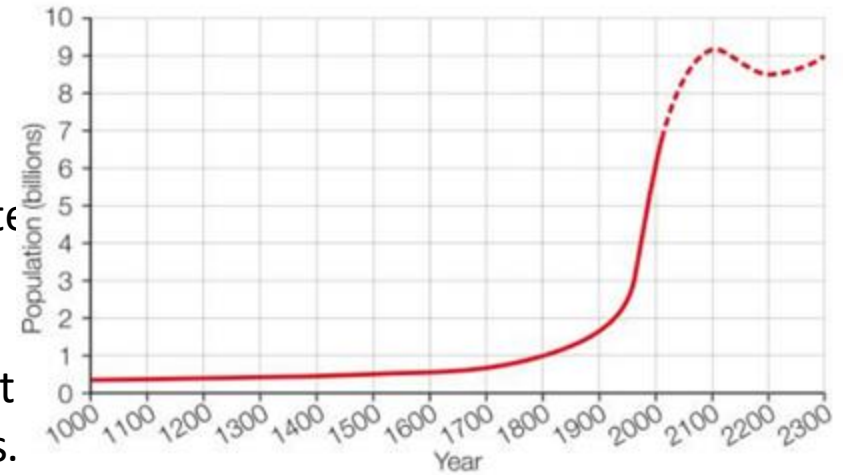
Keyword	Definition
Formal economy	The type of employment where people receive a regular wage
Informal economy	Employment outside the knowledge of the government
Megacity	City with a population of over 10 million
Migration	The movement of people
Natural increase	Where the birth rate is higher than the death rate
Recession	A period of temporary economic decline during which trade and industrial activity are reduced
Pull factor	Reasons attracting people to an area
Push Factor	Reasons forcing people to leave an area
Rural to urban migration	Movement of people from the countryside to a city
Unemployment	No jobs
Urbanisation	An increasing percentage of population living in towns and cities

Key Concepts

Urbanisation

This is growing because of natural increase (birth rate minus death rate) and migration.

Urbanisation takes place at different times and speeds. The UK was one of the first countries to become urbanised.



In 2020 around 56% of the World's population lived in urban areas. This is expected to increase to 68% by 2050. Rural to urban migration is slowing in many HICs but is growing in many LICs. This is the movement of people from the countryside to cities.

It is caused by push and pull factors.
 Push factors - force people out of the country
 Pull factors - attract people to a city



Year 9 Urban Issues and Challenges

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 Explain the reasons for urban growth on a global scale
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Key Concepts



Rio de Janeiro (Rio) is Brazil's second most populated city after Sao Paulo with a population of 6.5 million, and a further 12.5 million in the urban area. Rio is in the southeast of Brazil on the Atlantic coast. Rio became an important port and was the

Regional:

- Rio is important in providing hospitals, schools and universities and provides employment, leisure and recreation opportunities
- A thriving arts and culture scene.
- The city is a major transport hub with an airport and important docks providing raw materials for local and regional industries exporting products



Rio's Importance

National:

- Brazil's oil, mining and telecommunications companies have their headquarters in Rio.
- Several of the country's universities and research and development institutions are based in Rio.
- Rio is a major manufacturing centre specialising in chemicals, processed food, clothing and pharmaceuticals.
- The port is important for the export of coffee, sugar and iron ore.
- It is Brazil's second most important industrial area and produces 5% of the country's gross domestic product (GDP).
- Major entertainment and media organisations are based in Rio.

International:

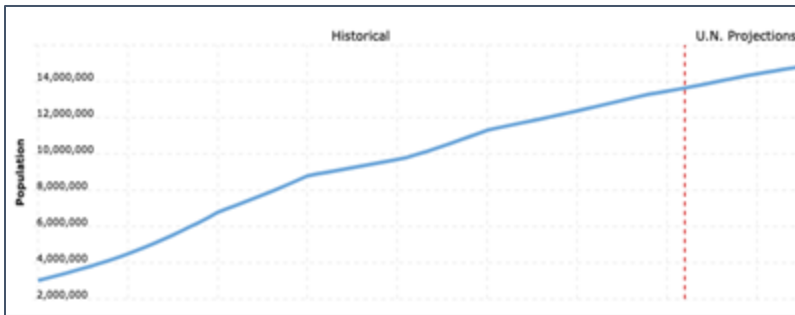
- Rio has hosted a number of global sporting events for example the 2016 Olympic and Paralympic Games, and the 2014 World Cup
- Tourists from around the world are drawn to Rio to see attractions such as the Statue of Christ the Redeemer and participate in colourful festivals and see the beaches
- The city is an international centre for industry and finance.
- It has five ports and three airports, which make it a major international transport hub.

Year 9 Urban Issues and Challenges

The aims of the sequence of learning are to ensure that all students:
Explain the reasons for urban growth on a global scale
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Key Concepts

Population Growth in Rio



Rio's population is growing rapidly. Since the 1950s, the population of the city has more than trebled. As a result, Rio de Janeiro has an estimated 2020 population of 6.48 million.

The metro population (surrounding area under the same local government) of Rio de Janeiro is much larger, however, with 13.5 million residents in 2021

Reasons for Rio's growth

Rural to Urban Migration:

As Rio has developed, it has attracted migrants from within Brazil and from abroad. One of the largest groups of migrants is the Portuguese people. Rio is the largest Portuguese city outside of Portugal. Rural-to-urban migration has been a significant cause of population growth. Migrants are pulled to the city because of better education, employment opportunities, and improved living conditions. On the other hand, migrants have been pushed from rural areas due to mechanisation (use of machinery) on farms, poor living conditions and the lack of employment opportunities. More recently, Rio has attracted migrants from South Korea and China who seek business opportunities.

Natural Increase:

The high migration rate into Rio has led to a youthful

Year 9 Urban Issues and Challenges

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Retrieval Practice	
Questions	Answers
What is urbanisation?	An increasing percentage of population living in towns and cities
What % of the world live in urban areas?	56%
Give 2 examples of push factors	Lack of jobs and lack of facilities
Give 2 examples of pull factors	Better health care and a better standard of living
Where is Rio located?	Rio is located in Brazil in the southern hemisphere, it is located next to the Atlantic Ocean
Why is Rio regionally important?	The city is a major transport hub with an airport and important docks
Why is Rio internationally important?	The 2016 Olympic and Paralympic Games Games, and the 2014 World Cup, were held there
How many people live in the area around Rio?	13.5 million
Name 2 countries where people have migrated to Rio from?	Portugal and China

Career Focus - Where could this take you?



I am an Urban Planner

We plan for houses and renewable energy generation sites like wind farms, redesign urban spaces and develop parks, woodlands and waterways in a sustainable way. We also prepare and make decisions about planning applications, plans and proposals we research and assess technical information, data and surveys to advise on planning rules.

Challenge Activities

- Create a model of a typical home found in a favela - add labels to describe the features of the house
- Write a news report on the living conditions and lives of residents in Rio's favelas and explain what could be done by the authorities to improve their situation.
- Create a poster to show the location of Rio in the world and some of the images of this Megacity (these could be human and physical features and even some issues it faces)

Topic Links

- This topic links to
- Population
 - Development

Additional Resources

To further practise and develop your knowledge see:

Urbanisation



Favelas



Rio





Key Concepts: World – Countries and Oceans





- Describe how the Jews were persecuted in Germany
- Explain the impact of the Holocaust on survivors



Key Concepts

Anti-Semitism is a certain perception of Jews, which may be expressed as hatred toward Jews. Rhetorical and physical manifestations of antisemitism are directed toward Jewish or non-Jewish individuals and/or their property, toward Jewish community institutions and religious facilities.

Origin – How did antisemitism start?

Jewish people have been discriminated against for more than 2,000 years. Often it has been because of their religious beliefs. In ancient times some people worshipped many gods. They did not trust the Jewish people because the Jews did not follow the same gods. The Jewish people worship only one God.

Later, the new religion of Christianity developed from the religion of Judaism. The new religion was based on the teachings of Jesus Christ. He and his followers were Jewish, but the two religions became separate because of different beliefs. The Christians thought that Jesus was a saviour sent by God. The Jewish people did not believe that. At the time, the Roman Empire controlled the land where both religions began. The Romans destroyed the Jewish Temple in Jerusalem and forced the Jews to leave. Eventually, the Roman rule accepted Christianity. The empire controlled many lands, so the religion of Christianity spread. The Roman leaders were powerful. They tried to turn Christians against the Jewish people. People treated the Jews poorly. Anti-Jewish laws in ancient Rome separated the Jews and limited their freedoms. Jewish people moved to many parts of Europe, but in some places they were forced to live in areas called ghettos. They were forced to live in other areas altogether. People made up myths about Jewish people so others would not trust them.

Anti-Semitism in the Russian Empire

When they were forced out of parts of western Europe, many Jews moved to Poland and Russia. Toward the end of the 1800s, however, they were mistreated there as well. The Russian Empire wrote laws to take away land from the Jews. Jewish people had to move to a different part of Russia, away from others. Many Jewish people could no longer work. Mobs of people attacked the Jews. These violent attacks were called pogroms.

Anti-Semitism in Modern Europe

In the 1800s people in Europe began to think of Jewish people as a separate race. Racism toward Jews helped a political party in Germany come to power in 1933. The Nazi Party was led by Adolf Hitler. The party spread hateful misinformation about Jewish people. They ordered boycotts of Jewish-owned businesses. They said that the Aryan race was superior. The Aryans were white people from northern Europe. The Nazis wanted to get rid of all Jewish people. They collected Jewish people from throughout Europe. They forced the Jews into concentration camps to work as slaves. Many Jews were killed right away. This time is called the Holocaust. Nazi Germany and those who helped the Nazis killed about 6 million Jews.

The Nazis were defeated in World War II, which ended in 1945. Many places in the world did not express anti-Semitism any more. Jewish people became part of the culture. But in some places, anti-Jewish acts still happened.

Anti-Semitism Today

Today many people believe that anti-Semitism is wrong. Unfortunately, anti-Semitic acts still happen. For example, people paint anti-Jewish symbols on buildings and Jewish graves. Others spread misinformation. They say Jewish people have too much control of the media, the economy, and the government. Some people even say that the Holocaust never happened.

Keyword	Definition
Antisemitism	Hatred towards Jewish people
Boycotts	Refusing to buy products from a business, country or group of people
Ghettos	A poor urban area mainly occupied by minority groups
Persecution	Punishment or harassment usually of a severe nature based on race, religion, or political opinion in one's country of origin.
Concentration Camps	A place in which large numbers of people, especially political prisoners or members of persecuted minorities, are deliberately imprisoned in a relatively small area with inadequate facilities, sometimes to provide forced labour or to await mass execution



The aims of the sequence of learning are to ensure that all students:

- Describe how the Jews were persecuted in Germany
- Explain the impact of the Holocaust on survivors



Key Concepts

The Holocaust: What is it? The mass murder of Jews under the German Nazi regime during the period 1939 - 1945. More than 6 million European Jews, as well as members of other persecuted groups, were murdered at concentration camps such as Auschwitz. Holocaust means destruction or slaughter on a mass scale, especially by fire. Many Jews use the term 'Shoah' which comes from the Hebrew meaning catastrophe.

A History of Anti-Semitism

The Nazis did not invent hatred of Jews or anti-Semitism.

Jews were persecuted in the Middle Ages for religious reasons. In 1190, 150 Jews were massacred in York and all Jews were expelled in 1290.

In many European countries, Jews were blamed for spreading the Black Death and were banned from owning land. In towns they were usually confined to certain areas—ghettos and subject to restrictions, such as curfews.

Martin Luther, who started the Protestant Reformation, called for Jewish synagogues to be destroyed.

In the 1800s, millions of Jews fled the Russian Empire because of pogroms (organised massacre) against them. Immigrants often ended up in Britain or the USA.



Nazis Persecution of the Jews:

Hitler's dislike of the Jews was based on many things including his experiences in Vienna as a youth, but mainly the economy. He blamed them for making Germany weak and for the defeat of World War One.

1933: From 1st April the Nazi Party began an official Boycott of all Jewish shops, businesses, doctors and lawyers. The SA were used to paint Jewish stars or the word 'Jude' (Jew) outside Jewish businesses and they stood outside holding banners to discourage people from going inside. Jews were also banned from government jobs and Jewish civil servants and teachers were sacked.

1935: The Nuremberg Laws were passed and stated only those of German blood could be German citizens. Jews became German 'subjects', not citizens and marriage between Jews and Aryans was banned. Placards saying 'Jews not wanted here' were displayed in resorts, public buildings, restaurants and cafes.

9th November 1938: Kristallnacht (*Night of Broken Glass*) - gangs smashed and burned Jewish homes, businesses & synagogues all over Germany and attacked Jews. Many Jews were killed and 20,000 arrested and sent to concentration camps.

1939-41: Millions of Jews living in Poland & the USSR came under Nazi control. Many were shot or kept in Ghettos.

1942: Leading Nazis agreed upon a 'Final Solution' at the Wannsee Conference to the "Jewish problem". Death camps would be used to eradicate Jews from Europe.

Concentration Camps:

The Nazis had been using concentration camps since 1933 as extended prisons or work camps, often for political opponents, but thousands of Jews were taken to camps like Dachau following Kristallnacht.

Germany's invasions of Poland & The Soviet Union meant that there were now millions more Jews under Nazi control. Initially, groups of SS troops – 'Einsatzgruppen', murdered Jews by shooting.

Following the decision at the Wannsee Conference in 1942 to eradicate all Jews, death camps were built. The death camps used gas chambers to murder Jews and others on an industrial scale.

When Jews arrived from all over Europe, 'selection' happened. Women with young children, the Elderly and the unfit were sent straight to the gas chambers. The Jews were told they were being taken to 'showers' but the 'showers' were in fact gas chambers which used a chemical called Zyklon-B. Usually, people 14 years of age and upwards were sent to the camp if they were fit and healthy. They would receive showers to clean them up. The showers were either really hot or extremely cold. They would then be given a uniform, tattooed with a number and have their hair shaved.

Sometimes, horrifying medical experiments were carried out on camp inmates, for example, by Dr Mengele at Auschwitz who was fascinated in studying twins.

All of the Jews' personal belongings: gold, silver, spectacles, clothes, even hair was kept to be re-used. Even in work camps, deaths through beatings, lack of food and disease were common. It is widely accepted that as many as 6 million Jews were murdered during the Holocaust.

Other groups, such as Russian prisoners, homosexuals, communists, gypsies and the mentally and physically disabled were also victims of the Nazi regime.

As the map shows, most death camps were in Poland rather than Germany, and Poles made up half of the victims. Jews from nearly all European countries were victims during World War Two.



The Ghettos:

Ghettos were usually in the most run-down area of a city and were used to segregate the Jews. By mid-1941, nearly all Jews in occupied Poland had been forced into these overcrowded districts.

In the Warsaw ghetto, by far the largest, 490,000 Jews and a few hundred Roma and Sinti (Gypsies) struggled to survive. In larger centres, ghettos were shut in by walls, fences or barbed wire. No one could leave or enter without a special permit.

Jews received little food and the ghettos were overcrowded. Diseases such as typhus and tuberculosis were rife. It is estimated that 500,000 Jews died in the ghettos of disease and starvation. Many also perished in nearby slave labour camps, where conditions were even worse.



The aims of the sequence of learning are to ensure that all students:

- Describe how the Jews were persecuted in Germany
- Explain the impact of the Holocaust on survivors



Retrieval Practice

Questions	Answers
What is Antisemitism?	Hatred towards Jewish people
What does persecution mean?	Punishment or harassment usually of a severe nature based on race, religion, or political opinion in one's country of origin.
Where were some of the Jewish people forced to live?	Some Jews were forced by the Nazis to live in Ghettos.
What did Hitler blame the Jewish people for?	Making Germany weak and losing World War 1
What happened in Germany on 9th November 1938	Kristallnacht (<i>Night of Broken Glass</i>) - gangs smashed and burned Jewish homes, businesses & synagogues all over Germany and attacked Jews. Many Jews were killed and 20,000 arrested and sent to concentration camps.
Which other groups of people were persecuted in Nazi Germany?	Russian prisoners, homosexuals, communists, gypsies and the mentally and physically disabled

Career Focus - Where could this take you?



I am a Historical researcher. I study past events, people, policies and documents to gain an in-depth understanding of their significance and impact on modern and future societies. Examining primary and secondary sources is an essential part of a historical researcher, as well as knowing and understanding peoples' beliefs and views.

Challenge Activities



- Explain in your own words, the history of Judaism that led to antisemitic attacks.
- Research how the holocaust has affected many Jews in the world today.

Topic Links

This topic links to other RE topics such as

- Judaism

This topic links with other subjects such as:

- History

We will also be practising how to

- Argue a point and practise our Voice 21
- Participate in debates
- Write PEE sentences/how to answer exam questions


Additional Resources

To further practise and develop your knowledge see:

<https://www.bbc.co.uk/newsround/29363650>

<https://www.bbc.co.uk/bitesize/topics/znwhfg8/articles/z4vvhv>







<https://www.bbc.co.uk/bitesize/guides/zf3yb82/revision/6>





Key Concepts

SIX WORLD RELIGIONS (spellings vary)

Religion name	Follower	SYMBOL	NAME OF GOD/GODS	COUNTRY OF ORIGIN	FOUNDER /MESSENGER	HOLY BOOK/S	PLACE OF WORSHIP	MAIN FESTIVALS	Denominations /schools/type/	Followers in the UK (approx.)	Followers in the world (approx.)
BUDDHISM	Buddhist	 Dharmachakra	none	India (Today in Nepal)	Siddhartha Gotama (The Buddha)	Tripitaka	Temple Shrine room Vihara	Wesak Dharma day	Theravada Mahayana Zen Triratna Pure Land	98,000	376 million
HINDUISM	Hindu	 Om/Aum	Brahman (Shiva Vishnu Brahma)	Indus Valley	none	Vedas Bhagavad Gita Mahabharata	Mandir Temple	Holi Diwali		272,000	1 billion
CHRISTIANITY	Christian	 Cross	God	Palestine Israel	Jesus of Nazareth	Bible	Church Cathedral	Easter Christmas	Catholic Eastern Orthodox Church of England Baptist Quaker	30 million	2.2 billion
JUDAISM	Jew	 Star of David	G_d	Israel	Abraham	Torah Tenakh	Synagogue	Rosh Hashanah Pesach Yom Kippur	Hasidic Orthodox Reform Liberal	214,000	14 million
SIKHISM	Sikh	 The Khanda	God Waheguru	Punjab, India	Guru Nanak The ten Gurus	Guru Granth Sahib	Gurdwara	Vaisakhi Diwali	Sahajdhari Amritdhari	239,000	23 million
ISLAM	Muslim	 Five pointed star & crescent moon	Allah (God)	Saudi Arabia	Muhammad (pbuh)	Quran	Mosque	Eid-ul-Fitr Eid-ul-Adha	Sunni Shi'a Sufi	1,278,000	1.6 billion

Theist = Someone that believes in God

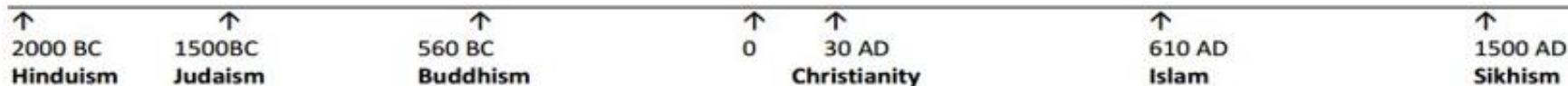
Atheist = Someone that doesn't believe in God

Agnostic = Someone that is not sure about the existence of God

Monotheist = Someone that believes in one God

Polytheist = Someone that believes in many gods

Timeline of religions (all dates approximate)





Our students will:

- understand and respond to spoken and written language from a variety of authentic sources
- speak with increasing confidence, fluency and spontaneity, finding ways of communicating what they want to say, including through discussion and asking questions, and continually improving the accuracy of their pronunciation and intonation
- can write at varying length, for different purposes and audiences, using the variety of grammatical structures that they have learnt
- discover and develop an appreciation of a range of writing in the language studied.

- Express the main threats to the environment
- Discuss eating choices using more complex opinion phrases.
- Negate sentences with a variety of expressions



Keyword	Definition
Qu'est-ce que tu manges?	What do you eat?
Pourquoi? Pourquoi pas?	Why? Why not?
Est-ce que tu manges de la viande?	Do you eat meat ?
Est-ce que tu es pour ou contre le végétarisme?	Are you for or against veganism?
Personnellement je pense que manger des animaux c'est normal.	Personally I think that eating animals is normal.
Quel sont les dangers pour les animaux?	What are the dangers for the animals?
Le tigre est menacé par la chasse.	Tigers are threatened by hunting.
Qu'est-ce qu'il faut faire pour protéger la planète?	What should we do to protect the planet?
Il faut ramasser les déchets et recycler.	You must pick up litter and recycle.
Qu'est-ce qu'il ne faut pas faire?	What shouldn't we do?
Il ne faut pas utiliser trop d'énergie.	You mustn't use too much energy.
Qu'est-ce qu'on a fait pour aider la planète?	What have you done to help the planet?
J'ai recyclé du papier.	I have recycled paper.

Essential Vocabulary and Grammar.

Qu'est-ce que tu manges?

Je mange	I eat	Je bois	I drink
du fromage / du lait		cheese / milk	
du pain / du riz		bread / rice	
de la soupe		soup	
de la viande		meat	
de l'eau		water	
des frites / des haricots		chips / beans	
des légumes		vegetables	
des pommes de terre		potatoes	
des sandwichs		sandwiches	
un fruit		a piece of fruit	
un jus de fruits		a fruit juice	

Est-ce que tu manges de la viande?

Je ne mange jamais de viande / de poisson.	I never eat meat / fish
Je ne bois pas de lait.	I don't drink milk.
Est-ce que tu es pour ou contre le végétarisme?	Are you for or against veganism?
La production de viande, c'est mauvais pour l'environnement.	Producing meat is bad for the environment.
Manger des animaux, c'est cruel.	Eating animals is cruel.
Manger des animaux, c'est normal.	Eating animals is normal.

Essential Phonics.

Silent final consonant – **shhh!**

Un fruit 	Je bois 	Le pied 
--	---	---


Qu'est-ce qu'il faut faire pour aider la planète?

Il faut ... ramasser les déchets. recycler le papier et les bouteilles. aller au collège à pied ou à vélo.	You must ... pick up litter. recycle paper and bottles. go to school on foot or by bike.
Il ne faut pas ... manger trop de viande. utiliser trop d'énergie.	You must not ... eat too much meat. use too much energy.

Qu'est-ce qu'on a fait pour aider la planète?

J'ai ramassé des déchets.	I picked up litter.
J'ai recyclé du papier et du plastique.	I recycled paper and plastic.
J'ai acheté des produits bio.	I bought organic products.
Je suis allé(e) au collège à pied.	I went to school on foot.
On a utilisé moins d'énergie.	We used less energy.
On a organisé une campagne anti-plastique.	We organised an anti-plastic campaign.

- Express the main threats to the environment
- Discuss eating choices using more complex opinion phrases.
- Negate sentences with a variety of expressions

Retrieval Practice 	
Questions	Answers
Qu'est-ce que tu manges?	Je mange <u>du pain avec du fromage</u> et je bois <u>du jus d'orange</u> .
Est-ce que tu manges de la viande?	Non, mais je mange du poisson. ✗ Oui, j'aime manger de la viande. ✓ Non, parce que je suis végétarien. ✗
Est-ce que tu es pour ou contre le véganisme?	Personnellement, je pense que <u>manger des animaux c'est normal</u> . ✓ <u>Selon moi, je crois que manger des animaux c'est cruel</u> . ✗
Quel sont les dangers pour les animaux?	À mon avis <u>l'ours polaire</u> est menacé par <u>le changement climatique</u> . C'est <u>terrible</u> .
Qu'est-ce qu'il faut faire pour protéger la planète?	Il faut <u>ramasser les déchets</u> et <u>recycler</u> .
Qu'est-ce qu'il ne faut pas faire?	Il ne faut pas <u>utiliser trop d'énergie</u> .
Qu'est-ce qu'on a fait pour aider la planète?	J'ai <u>recyclé du papier</u> . et on a <u>organisé une campagne anti-plastique</u> .

Career Focus - Where could this take you?



We work for the European Commission. We work on new policies for Europe and our work has an impact on European laws and the decisions made in the European Council. There are 24 official and working languages spoken.

Challenge Activities

- 1) Make a poster for an environmental campaign at your school. Include what you will be doing, when and where. Don't forget to add the why!
- 2) Complete the activities on Sentence Builders.

Topic Links

- This topic links to:
- Food and drink.
 - The past tense.
 - Giving detailed opinions.
 - Where I live.

Additional Resources

- To further practise and develop your knowledge see:
- Sentence Builders
 - Active learn

PERFECT TENSE ("has done/did")

Start with the present tense of *avoir/être*, then add the past participle of the second verb:

-er	-ir	-re
Remove -er Add -é	Remove -r	Remove -re Add -u
jouer → (j'ai) joué	finir → (j'ai) fini	vendre → (j'ai) vendu

VERBS USING ÊTRE e.g. je suis allé(e)

monter entrer sortir venir aller naître partir descendre arriver tomber rester mourir retourner (and all reflexive verbs)

The past participle for these verbs must agree with the subject in gender and number:

*je suis allé (m) je suis tombée (f)
on est entrés (mpl) on est entrées (fpl)*

PRESENT TENSE ("does/is doing")

Remove the *-er/-ir/-re* and add these endings:

	jouer	finir	vendre
je	joue	finis	vends
tu	joues	finis	vends
il/elle/on	joue	finit	vend
nous	jouons	finissons	vendons
vous	jouez	finissez	vendez
ils/elles	jouent	finissent	vendent

ÊTRE

je suis / tu es / il est / nous sommes / vous êtes / ils sont

AVOIR

j'ai / tu as / il a / nous avons / vous avez / ils ont

SIMPLE FUTURE TENSE ("will/shall do")

Add these endings to the infinitive:

	jouer	finir	vend r
je	jouera i	finira i	vendra i
tu	jouera s	finira s	vendra s
il/elle/on	jouera	finira	vendra
nous	jouer ons	finir ons	vendr ons
vous	jouerez	finirez	vendrez
ils/elles	jouer ont	finir ont	vendr ont

IRREGULAR STEMS

*être (ser-) avoir (aur-) faire (fer-)
venir (viendr-) savoir (saur-) aller (ir-)
devoir (devr-) pouvoir (pourr-) voir (verr-)*

Negatives

Most negatives work like *ne...pas* (not). They are in two parts and go around the verb:

- ne...rien* (nothing)
- ne...jamais* (never)
- ne...plus* (no longer, not anymore)

With *il y a* (there is/are), the negatives go around *y a* and *ne* shortens to *n'*:

Il n'y a rien à faire. (There is nothing to do.)

Il n'y a jamais de bus. (There are never any buses.)

Il n'y a plus de magasins. (There are no longer any shops.)

Sequencers (narrative words)

d'abord firstly/first of all
ensuite next
puis then
après after/afterwards
finalement finally

IMPERFECT TENSE ("was doing/used to do")

Remove *-ons* from the *nous* form of the present tense, add these endings (*ais/ais/ait/ions/iez/aient*)

	jouer	finir	vendre
je	jouais	finissais	vendais
tu	jouais	finissais	vendais
il/elle/on	jouait	finissait	vendait
nous	jouions	finissions	vendions
vous	jouiez	finissiez	vendiez
ils/elles	jouaient	finissaient	vendaient

NEAR FUTURE TENSE ("is going to do")

Use the present tense of *aller* followed by the infinitive:

	je	vais	jouer finir vendre être aller vouloir etc.
tu	vas		
il/elle/on	va		
nous	allons		
vous	allez		
ils/elles	vont		

CONDITIONAL TENSE ("would do")

Begin with the future stem, add imperfect endings:

	jouer	finir	vend r
je	jouera is	finira is	vendra is
tu	jouera is	finira is	vendra is
il/elle/on	jouera it	finira it	vendra it
nous	joueri ions	finiri ions	vendr <i>ions</i>
vous	jouerie iez	finirie iez	vendr <i>iez</i>
ils/elles	jouera ient	finira ient	vendr <i>aient</i>

IRREGULAR STEMS

Same as for the simple future

EXTRA MARKS: USE WITH THE IMPERFECT TENSE

Si j'avais le temps, j'irais... (If I had time, I'd go to...)

Connectives

et and **mais** but
ou or **où** where
parce que because
donc/alors therefore/so
cependant however
car as (because)
puisque since (because)

Present vs. imperfect

il y a (there is)
il y avait (there was)
c'est (it is)
c'était (it was)

PLUPERFECT TENSE ("had done")

Very similar to the perfect tense, except you start with the *imperfect* tense of auxiliary verbs *avoir/être*:
e.g. *j'avais joué, il avait fini, nous étions allés, elles s'étaient brossées les dents*

1st step - Description

To start off:

Sur l'image/la photo	In the image/the photo
Il y a	There is/ are
Je vois / On peut voir	I see / We can see
La photo montre	The photo shows
Le scène se passe	The scene takes place

2nd step - Opinions

Hypothesis:

Ils/Elles ont l'air	They seem
Il/Elle a l'air	He/She seems
Ça/Il a l'air	It looks like
Peut-être	Maybe
Ça semble être	It seems to be

Locating:

Au premier plan	In the foreground
À l'arrière plan	In the background
À gauche/ à droite	To the left/to the right
Près de..	Close to
Devant/Derrière..	In front of/At the back
Au milieu..	In the middle

Say what you think about the photo

Je crois que...	Je suppose que...
I think that...	I suppose that...
Je pense que...	Il me semble que...
I think that...	It seems to me that...
Je dirais que...	Cela me rappelle...
I would say that...	It reminds me of...

Décrire
une
photo

Remember to mention the 4 Ws

Where/Où	When/Quand	Who/Qui	What/Quoi
<ul style="list-style-type: none"> • À l'école • Dans la rue • À la montagne • Au bord de mer • À l'intérieur • À l'extérieur • En ville 	<p><u>Weather</u></p> <ul style="list-style-type: none"> • Il fait beau • Il pleut • Il y a du soleil <p><u>Moment</u></p> <ul style="list-style-type: none"> • Le soir • Le midi • Pendant 	<ul style="list-style-type: none"> • Une famille • Des enfants • Beaucoup de monde • Quelques personnes • Des arbres • Des bâtiments 	<ul style="list-style-type: none"> • Ils/Elles sont en train de: parler, manger, faire la fête, rigoler, s'amuser, recycler, apprendre, faire du sport, jouer, bronzer...

J'aime
cette
photo

- parce que les gens ont l'air heureux/drôles...
- car j'adore la plage, la montagne, les festivals...
- j'aimerais faire partie de la scène pour...

Je n'aime
pas cette
photo

- parce que la météo n'est pas à mon goût
- car je n'aime pas les activités, je préfère...
- Je ne voudrais pas participer à la photo car...



Computing

Our students will:

- can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
- can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
- can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
- are responsible, competent, confident and creative users of information and communication technology

The aims of the sequence of learning are to ensure that all students:

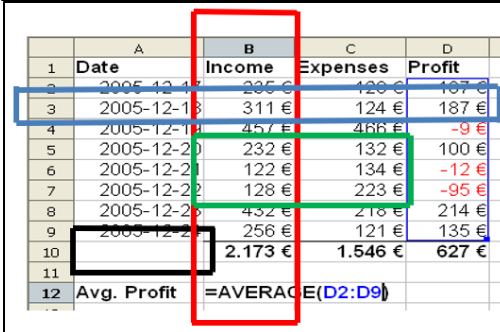
- Demonstrate knowledge of the MS Excel interface by naming the main sections of the interface
- Demonstrate knowledge of using MS Excel by describing the use of a range of different tools, features, formulae and functions

- Apply knowledge of using MS Excel through the accurate completion of a range of spreadsheet tasks
- Apply knowledge from this unit to accurately describe some keywords

Keyword	Definition
Row	The grid is made up of rows labelled with numbers. They are horizontal. e.g. Row 5
Column	The grid is made up of columns that are labelled with letters. They are vertical e.g. Column B
Value	Values are the numbers we have to put into a spreadsheet so that it can carry out calculations e.g. to calculate the total value of ticket sales.
Cell	The spreadsheet is made up of a grid, labelled with letters and numbers. Each little box in the grid is called a cell.
Active Cell	When you click on a cell, it becomes the active cell, and has a thick black line around it. The cell reference for the active cell appears in the box at the top left of the spreadsheet
Formula	When we want Excel to do a calculation for us, we need to put a formula in the cell where we want the answer to be. Formulae (the plural of formula) are equations that can perform calculations. It always begin with a '=' e.g. =C2+D2
Function	A pre-defined formula (e.g. =SUM) that performs a calculation using values entered in a particular order. Each function performs a specific calculation, and you can find them in the formulas tab.
Label	Labels are pieces of text that we add to the spreadsheet to give us information about the numbers. They can be added to any cell and give you a meaning for the values
Worksheet	At the bottom of the spreadsheet you can see several tabs. These are the worksheets that you have available. You can re-name them by right-clicking on the tab.
Workbook	A workbook is a file that contains one or more worksheets to help you organise data. You can create a new workbook from a blank workbook or a template.

Key Concepts

MS Excel Basics

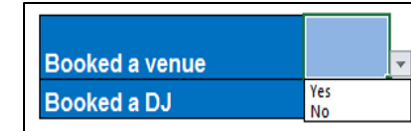


Row = 3
Column = B
Cell Reference = A10
Cell Range = B5:C7

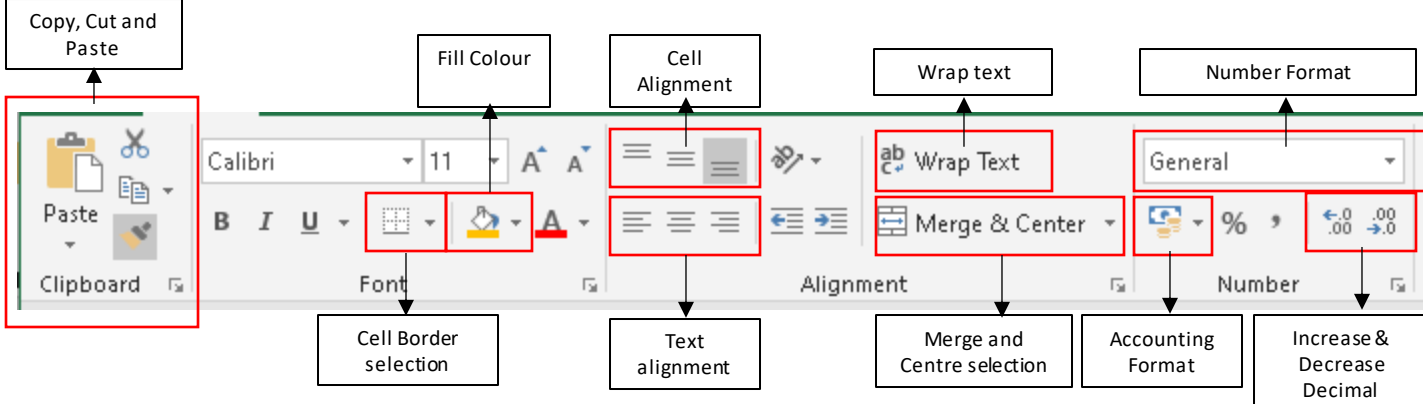
Create a Drop-down Box

Steps involved:

- 1) Click on the cell then go to the 'Data' tab
- 2) Click on the 'Data Validation' button
- 3) Change allow 'Any' to 'List'
- 4) Write down your options in the 'Source' textbox e.g. Yes.No
- 5) Press the 'OK' button



Basic Cell Formatting Tools in MS Excel



Copy, Cut and Paste | Fill Colour | Cell Alignment | Wrap text | Number Format

Clipboard | Font | Alignment | Number

Cell Border selection | Text alignment | Merge and Centre selection | Accounting Format | Increase & Decrease Decimal

Some commonly used Functions in MS Excel


Function	Example	Function	Example
SUM	=SUM(C8:C13)	MIN	=MIN(J6:J18)
AVERAGE	=AVERAGE(C7:C12)	COUNTIF	=COUNTIF(E7:E106,"Female")
MAX	=MAX(F6:F18)	IF	=IF(L108>=\$H\$113,"Yes","No")



The aims of the sequence of learning are to ensure that all students:

- Demonstrate knowledge of the MS Excel interface by naming the main sections of the interface
- Demonstrate knowledge of using MS Excel by describing the use of a range of different tools, features, formulae and functions

- Apply knowledge of using MS Excel through the accurate completion of a range of spreadsheet tasks
- Apply knowledge from this unit to accurately describe some keywords

Retrieval Practice 	
Questions	Answers
How can you find the 'Row' and 'Column' details on a MS Excel worksheet?	Rows are labelled with numbers and run horizontally on each sheet .e.g. 5 Columns are labelled with letters and run vertically on each sheet .e.g. A
What is the difference between the terms 'Cell Reference' and 'Cell Range'?	A cell reference is the combination of column letter(s) and row number(s) that identify a cell (or range of cells) on a worksheet e.g. A5 A cell range is a collection of selected cells. This range is usually symmetrical (square), but can exist of separate cells as well. A cell range can be also be referred to in a formula e.g. =COUNTIF(E7:E106,"Female")
What do you need to type to start creating a new formulae or function on MS Excel?	You will need to find the formula bar on the worksheet and then enter the '=' (equals) symbol to begin the formula or function e.g. =SUM(B2:B5)
Explain the difference between the use of a =COUNTIF and =COUNTA function	The COUNTIF function is used to find a particular criteria within a range of cells e.g. =COUNTIF(E7:E106,"Female") The COUNTA function is used to count the number of non-blank cells in a range of cells e.g. =COUNTA(D7:D106)
In MS Excel, what is meant by 'Data Validation'?	Data Validation works by restricting the type of data or the values that users can enter into a cell to help control what a user can enter into a cell. Types of data validation can include the creation of Drop Down boxes, Input Messages and Error Messages.
How can you make it easier to remember how to structure an IF function in MS Excel?	You can break down the function into three parts: 1. The logical test - What are you checking? 2. Part 2: "Value if true" - What value the cells should display if what you are checking is true 3. Part 3: "Value if false" - What value the cell should display if what you are checking is true e.g. =IF(B2>C4,"Yes", "No")
How do you protect a workbook so it can not be viewed without entering a password?	Click on File > Protect Workbook > Encrypt With Password > [Enter a password] > [Re-enter password]

Career Focus - Where could this take you?



In my role as a **Data Analyst** I translate numbers and data into information that can be used to solve problems or track how well a company is doing in range of different sectors. You need to be able to pay attention to detail, communicate well and be highly organised to perform well in this role.

Challenge Activities

1. Use one of the datasets from the unit tasks (or download a dataset from the internet) to create an interactive Dashboard to help you visually represent key data and perform a quick analysis of the data
2. Create a tutorial video or document to explain the different ways that you are able to format data using MS Excel. Make sure it includes a step-by-step breakdown of each formatting tool.
3. Create a short vlog about the types of careers you could get into with the skills you have developed in this unit. Explain what you would need to study at college and university to pursue these career paths.

Topic Links Additional Resources

This topic links to:
Computing Curriculum:

- 3.1 Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems

Other subject links:

- Art and design (creative design, colour schemes etc.)
- Maths (logical approach, formulae and analysing data)

To further practise and develop your knowledge see:

- MS Excel for beginners:
<https://www.youtube.com/watch?v=0tdIR1rBwkM>
- MS Excel Basic Formulae and Functions:
<https://www.youtube.com/watch?v=y1126PQ5zRU>



Our students will:

- produce creative work, exploring their ideas and recording their experiences
 - become proficient in drawing, painting, sculpture and other art, craft and design techniques
 - evaluate and analyse creative works using the language of art, craft and design
 - know about great artists, craft makers and designers, and understand the historical and cultural development of their art forms.
-
- develop competence to excel in a broad range of physical activities
 - are physically active for sustained periods of time
 - engage in competitive sports and activities
 - lead healthy, active lives.

The aims of the sequence are to ensure that all students:

- Understand the difference between Street Art and vandalism
- Can identify the work of different street artists
- Will develop their observational drawing skills

- Will be able to research relevant sources to use in final piece
- Will be able to produce a composition that has a focal point and demonstrates overlapping
- Will experiment with mixed media to produce a personal outcome

Keyword	Definition
Street Art	Independent visual art created in public locations such as the walls of buildings for public visibility.
Graffiti	Written, painted or drawn on a wall or other surface, usually without permission and within public view.
Brand	A product or service that has a unique and immediately recognizable identity that distinguishes itself from others in its industry.
Logo	A graphic mark, emblem, or symbol used to aid and promote public identification and recognition.
Icon	A person or thing widely admired especially for having great influence or significance.
Focal point	The area of a picture that attracts the eye.
Layering	Creating the impression that one shape is in front of, or behind another

Key Concepts

STREET ART



JEROME CLEM
Jerome Clem is a French artist. He decided to revive his childhood by painting characters from his youth. He draws his inspiration from Marvel's superheroes and Walt Disney or Looney Tunes characters, which he mixes with street art, graffiti or ads from the same period.



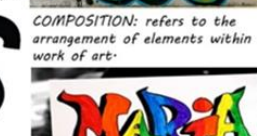
www.graffiticreator.net
www.fontspace.com
TEXTILES
You can find fonts similar to those used by Ben Eine on fontspace. The font above is called 'Cast Iron'.
genius



BEN EINE
Ben Eine is one of the most successful street artists in the world and is regarded as a pioneer in the exploration of graffiti letterforms. His typographic style is distinctive and looks like a circus font.



KEITH HARING
Keith Haring was an instant star of the 1980's art world. His style is highly recognizable. It consists mostly of simple figures surrounded by rhythmic lines that make them appear to vibrate or move.



COMPOSITION: refers to the arrangement of elements within a work of art.
OVERLAP: extend over so as to cover partly.



LOBO
LOBO is a Brazilian street artist. The strong colours and bold iconic landmarks are features of his art. LOBO aims to show people's stories, illustrated using icons of the main cities of the world.



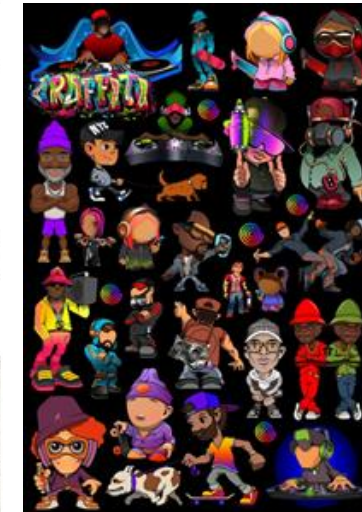
SILHOUETTE: the dark shape and outline of someone or something against a brighter background.



BANKSY
Banksy is a street artist from Bristol, UK. He makes satirical, humorous art using stencils and spray paint.



STENCIL: a thin sheet of card, plastic, or metal with a pattern or letters cut out of it. Ink or paint is applied through the holes to produce an image.





- The aims of the sequence of learning are to ensure that all students:
- Understand the difference between Street Art and vandalism
 - Can identify the work of different street artists
 - Will develop their observational drawing skills

- Will be able to research relevant sources to use in final piece
- Will be able to produce a composition that has a focal point and demonstrates overlapping
- Will experiment with mixed media to produce a personal outcome

Retrieval Practice



Questions	Answers
Why is it important to layer your images in your final piece?	So that it resembles the work of Jerome Clem, and makes your piece visually interesting.
What is a mixed-media piece of art?	Artwork that uses more than one material to make it, for example Paint, charcoal, collage, stitch, pastels, markers.
Why is street art important to culture?	It can help express the lives and values of a community. It can highlight the values that people share or want to celebrate, for example, a portrait of someone who is well respected in the area helps to give a sense of pride
What is a monogram?	A design consisting of two or more alphabetic letters combined or interlaced, commonly one's initials, often printed on stationery, or embroidered on clothing.
Why do artists create artwork of icons?	An icon is easily recognised by a large number of people, including them in artwork will make the work relatable to more people.
What makes Banksy so famous (and popular)?	His distinctive style often combines elements of irony, humor, and political commentary. Banksy's art is often critical of government and societal institutions, and he has used his work to raise awareness of issues such as poverty, war, and immigration.

Career Focus - Where could this take you?



I am a retailer of vintage clothes. I rework clothes to create unique garments, often collaborating with well known brands. I manage online shops and run a physical shop. I have to have an

eye for quality products and an understanding of current trends.



Challenge Activities

Have a go at creating your own graffiti writing online
[Graffiti Creator Online - Free Graffiti Font Text Creator - No Download Required](#)

Create your own stencil art.
[STENCIL ART FOR BEGINNERS -Step by Step.. - YouTube](#)

Topic Links



This topic links to:

- English – being able to debate a subject, and arguing the case for both sides.

Additional Resources



To further practise and develop your knowledge see:

[Colour Ways: Using street art and graffiti to break barriers | Creative Scotland](#)

[The Story Behind Banksy | Arts & Culture | Smithsonian Magazine](#)

The aims of the sequence of learning are to ensure that all students:

- Demonstrate safe use of tools and equipment.
- Explain a range of Decorative Techniques
- Rank Smart Fibres in order of environmental impact.

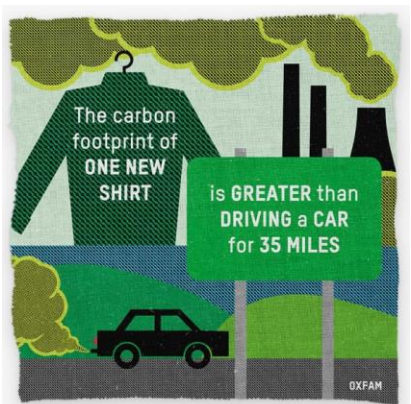
- Annotated a range of design ideas which include moral and cultural issues.
- Demonstrate an understanding of smart materials.

Keyword	Definition
Corrugated	Describing a series of parallel ridges and furrows
Fabric	Cloth or other material produced by weaving or knitting fibres.
Synthetic	Made by chemical synthesis, especially to imitate a natural product.
Smart Fibres	Smart fibres and structures can be defined as materials and structures that can sense and react to environmental conditions or stimuli, mechanical, thermal, chemical, electrical, magnetic.
Regenerated	Class of materials manufactured by the conversion of natural cellulose
Textiles	A type of cloth or woven/ knitted fabric.
Aesthetics	A set of principles concerned with the nature and appreciation of beauty.
Encapsulated	These microspheres gradually release active agents when rubbed, which rupture the thin-walled membrane.
Design	A plan or drawing produced to show the look and function or workings of a building, garment, or other object before it is built or made
Microfibre	Thinner than human hairs and can be coiled to provide a very warm, soft or absorbent material
Resistant	Offering resistance to something
Conductive	Allow a small electrical current to safely pass through them.
Couching	Yarn or other materials are laid across the surface of the ground fabric and fastened in place with small stitches of the same or a different yarn.
Equipment	Supplying someone or something with items necessary for a particular purpose:
Embroidery	Craft of decorating fabric or other materials using a needle to apply thread or yarn.

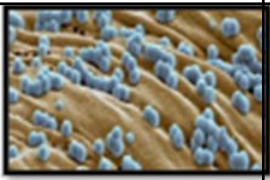
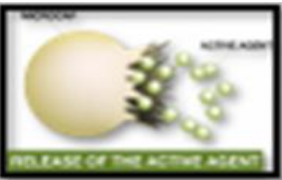



Key Concepts



Some manufacturers are also working on ways to reduce the environmental impact from the production of their jeans, while others have been developing ways of recycling denim or even jeans that will decompose within a few months when composted.



SMART FIBRES

Antimicrobial Nano Silver	Micro Encapsulated	Thermochromic	Kevlar	Photochromic
				



ACCESS FM

- A AESTHETICS**
 - WHERE DID THE DESIGNER GET THEIR INSPIRATION? COULD THE PRODUCT LOOK BETTER?
 - DO YOU THINK IT LOOKS ATTRACTIVE OR UGLY, WHY?
 - WHAT DOES THE PRODUCT LOOK LIKE? THINK SHAPE, FORM, MATERIALS, SIZE, BEAUTY, UGLINESS
- C COST**
 - IS IT AFFORDABLE TO YOUR CUSTOMER? WILL IT MAKE A PROFIT?
 - IS IT VALUE FOR MONEY?
 - HOW MUCH DOES IT COST?
- C CUSTOMER**
 - WHAT IMPACT WOULD IT HAVE ON A CUSTOMERS LIFE?
 - WHY WOULD A CUSTOMER BUY IT? WHAT MAKES IT SUITABLE FOR THEM?
 - WHO WOULD BUY IT? WHO WOULD USE IT?
- E ENVIRONMENT**
 - WHAT IS THE PRODUCTS IMPACT ON THE ENVIRONMENT? THINK BATTERIES, RETHINK, REFUSE, REDUCE, REUSE, RECYCLE, LIFE-CYCLE
 - HOW WOULD THE PRODUCT BE DISPOSED OF?
 - IS THE PRODUCT NEEDED OR WANTED? HOW LONG WILL IT LAST?
- S SAFETY**
 - IS THE PRODUCT HIGH QUALITY? DOES IT MEET SAFETY STANDARDS?
 - HOW HAS THE DESIGNER CONSIDERED SAFETY?
 - COULD THE PRODUCT HURT ANYONE? ARE THERE ANY SHARP EDGES?
- S SIZE**
 - IS IT AN APPROPRIATE SIZE? WOULD IT WORK BETTER IF IT WAS BIGGER OR SMALLER?
 - DOES IT COME IN DIFFERENT SIZES?
 - HOW BIG IS IT?
- F FUNCTION**
 - DOES THE PRODUCT WORK? COULD THE PRODUCT WORK BETTER?
 - HOW DOES THE PRODUCT WORK? WHY IS THE PRODUCT NEEDED?
 - WHAT DOES THE PRODUCT DO? IS IT EASY TO USE?
- M MATERIALS**
 - WHAT IMPACT COULD THE DESIGNERS CHOICE OF MATERIAL HAVE ON THE ENVIRONMENT?
 - WOULD A DIFFERENT MATERIAL MAKE IT BETTER?
 - WHAT MATERIAL HAS IT BEEN MADE FROM?

- Demonstrate safe use of tools and equipment.
- Explain a range of Decorative Techniques
- Rank Smart Fibres in order of environmental impact.

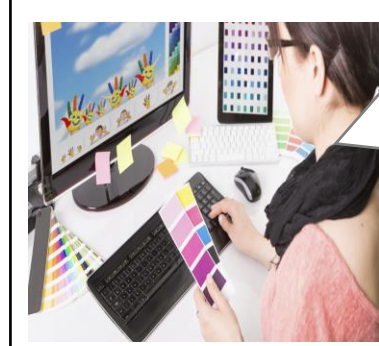
- Annotate a range of design ideas which include moral and cultural issues.
- Demonstrate an understanding of smart materials.

Retrieval Practice

Question	A1	A2	A3	A4	A5
A. What is Applique?	A Decorative Technique	A sewing technique	A type of material	A type of Felt	A design technique
B. What is a Material Life Cycle?	The Cycle of Silkworms	The Cycle of Smart Fibres	The cycle of a product	The cycle of fibres	The cycle of a Design process
C. What is a Design Specification?	A list of design solutions	A list of costings	A list of design issues	A list of important points	A detailed list of what the product must be/
D. What are Fibres?	A thin thread of a natural or synthetic substance	A source of material	An origin of cotton	A type of synthetic fibre	A fraying edge
E. What are Smart Materials?	A material which collects water	Intelligent or responsive materials.	A washing process	A type of clever fabric	A fibre which stretches
F. What are Decorative Techniques?	Methods of decorating the walls	Techniques to improve the design	Methods of decorating fabrics.	Decorations to add to a Christmas tree	Techniques to add to shoes

Question	Quick Corrections (bridge learning gaps & misconceptions)

Career Focus - Where could this take you?



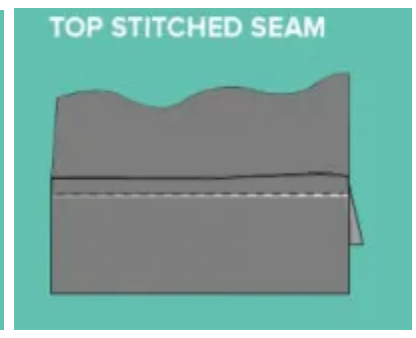
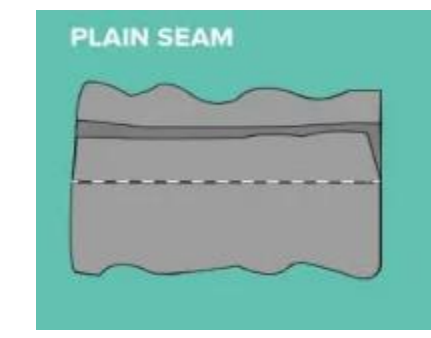
A Graphic Designer creates visual images or layouts for their clients. Graphic designers use digital software to create their unique images. A graphic designer can create visuals for a range of media, including social media posts, websites, company logos and print materials.

Huddersfield University offer an BA Hons degree in Graphics Design, and you will need 5 GCSE grades 5 and above and a higher-level certificate in the subject.

Salaries usually range from £45,000 - £67,000

Challenge Activities

Can you create the seams opposite? If you have a Sewing machine, it will Make it easy for you. If not, you can sew it by hand,



Topic Links

This topic links to:

- Science- How smart fibres are created and used in end products.
- English- Subject specific Vocabulary knowledge, understanding and spelling.
- Maths- Calculating our own carbon footprint.

Additional Resources

To further practise and develop your knowledge see:

[What is Smart Textiles - YouTube](#)


[Technical Textile - Types and Application of Technical Textile - YouTube](#)

[Textiles Decorative techniques - YouTube](#)

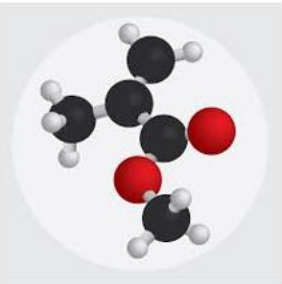
[Heat Transfer Printing | textile art | 열전사염 | Basic Part III - YouTube](#)

Keyword	Definition
Seasonal	Seasoning wood is the process of correctly drying timber in order to remove moisture in the cells of the wood walls.
Specification	an act of describing or identifying something precisely or of stating a precise requirement.
Mass Production	the production of large quantities of a standardized article by an automated mechanical process.
Batch Production	Batch production is a method of manufacturing where the products are made as specified groups or amounts, within a time frame
Ergonomics	Human factors and ergonomics are the application of psychological and physiological principles to the engineering and design of products.
Anthropometric Data	A list of <u>units of measurement</u> based on <u>human body</u> parts or the attributes and abilities of humans.
JIT Production	Just-in-time manufacturing tries to match <u>production</u> to <u>demand</u> by only supplying <u>goods</u> which have been ordered and focuses on efficiency.
Continuous Production	Continuous production is a <u>flow production</u> method used to <u>manufacture</u> , produce, or process materials without interruption.
Resistor	A resistor is a <u>passive two-terminal electrical component</u> that implements <u>electrical resistance</u> as a circuit.
Micro Controller	A microcontroller contains one or more <u>CPUs (processor cores)</u> along with <u>memory</u> and programmable <u>input/output</u> peripherals.
Modifications	A change in design/ product which makes it better.
LED	is a light-emitting diode.
PET	most common thermoplastic polymer resin of the polyester family
Poly Propylene	a thermoplastic polymer used in a wide variety of applications.
HDPE	<u>thermoplastic polymer</u> produced from the monomer <u>ethylene</u>

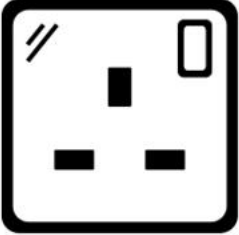
Key Concepts




Polythene



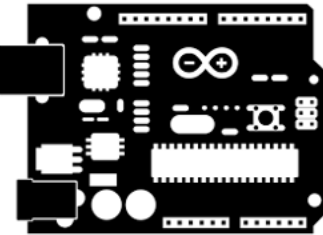
Acrylic




ABS




Vacuum Former




Microcontroller



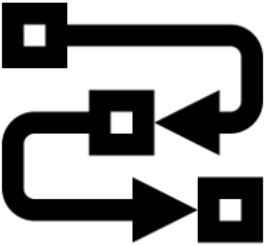
Switch




LED




Resistor




Process



Health & Safety



Time Constraints



Modifications

Retrieval Practice

Question	A1	A2	A3	A4	A5
A. What is rethinking?	Designing	Making	Discarding	Creating	Upscaling
B. What is reusing?	Maintaining	Discarding	Making	Upscaling	Creating
C. What is recycling?	Creating	Upscaling	Discarding	Making	Collecting
D. What is repairing?	Making	Fixing	Creating	Discarding	Upscaling
E. What is reducing?	Discarding	Making	Imprint	Creating	Upscaling
F. What is refusing?	Creating	Discarding	Upscaling	Morals	Making
G. What is mass production?	Detailed	Maintenance	Rapid	Thousands	Expensive
H. What is batch production?	Hundreds	Detailed	Detailed	Maintenance	Rapid
I. What is one off?	Maintenance	Rapid	Expensive	Detailed	Singular
J. What is continuous?	Expensive	Ongoing	Maintenance	Rapid	Detailed
K. What is seasonal?	Rapid	Expensive	Monthly	Maintenance	Thousands
L. What does the JIT process provide?	Expensive	Thousands	Rapid	Efficiency	Maintenance

Question	Quick Corrections (bridge learning gaps & misconceptions)

Career Focus - Where could this take you?



Architects are responsible for designing buildings that meet the needs of their clients and comply with local building codes. Architects work with clients and other professionals to develop project plans that outline the scope, budget, and timeline for the project

Huddersfield University offer an Architectural Technology BSc(Hons) and you will need 5 GCSE grades 5 and above and a higher-level certificate in the subject.

Salaries usually range from £21,000-£80,000

Challenge Activities- Can you match the correct product to material?



HDPE
PTE
Poly Propylene

Topic Links Additional Resources

This topic links to:


- Science- The creation of Plastics.
- English- Subject specific Vocabulary knowledge, understanding and spelling.
- Maths- Measurements and scales of productions.

To further practise and develop your knowledge see:

<https://youtu.be/iO3SA4YyFYU>

https://youtu.be/_6xINyWPpB8

<https://youtu.be/eISJ33Scnrc>

Keyword	Definition 
Legislation	rules or laws relating to a particular activity that are made by a government
FSA (food standards agency)	responsible for food safety and food hygiene in England, Wales and Northern Ireland.
Food safety act	The Food Safety Act 1990 is a vital part of environmental law and is an act that all food businesses in the UK must comply with.
Adaptation	Changing the ingredients or cooking methods of a dish in some way
Shortening	Shortening is any fat that is a solid at room temperature and used to make crumbly pastry and other food products.
Aeration	Aeration is the process of adding very tiny pockets of air to something. In the case of fats and oils, this is normally done using mechanical/physical means, such as creaming a mixture together using a wooden spoon or using an electric whisk.
Coagulation	Coagulation is defined as the change in the structure of protein (from a liquid form to solid or a thicker liquid) brought about by heat, mechanical action or acids. Enzymes may also cause protein coagulation e.g. cheese making.
Food choices	Calcium is a mineral your body needs to build and maintain strong bones and to carry out many important functions.
Dietary needs	Carbohydrates provide energy for the body. The body breaks carbohydrates down into glucose, which is the primary energy source for the brain and muscles.
Coeliac	Coeliac disease is a condition where your immune system attacks your own tissues when you eat gluten.
Lactose intolerance	Lactose intolerance is when you get symptoms, such as tummy pain, after eating food containing lactose, a sugar found in dairy products.
Allergy	An allergy is a reaction the body has to a particular food or substance.
Intolerance	an inability to eat a food or take a drug without adverse effects.
Vegan	Veganism is the practice of abstaining from the use of animal product—particularly in diet—and an associated philosophy that rejects the commodity status of animals.
Ethics/ethical	relating to beliefs about what is morally right and wrong

Key Concepts

The **Food Standards Agency (FSA)** is responsible for food safety and food hygiene in England, Wales and Northern Ireland. It works with local authorities to enforce food safety regulations and its staff work in meat plants to check the standards are being met.

Food Standards Act 1999

The Act was introduced in the House of Commons in 1999. It sets out our main goal to protect public health in relation to food. It gives us the power to act in the consumer's interest at any stage in the food production and supply chain.

Food Safety Act 1990

The main responsibilities for all food businesses covered by the Act are to ensure that:

- businesses do not include anything in food, remove anything from food or treat food in any way which means it would be damaging to the health of people eating it
- the food businesses serve or sell is of the nature, substance or quality which consumers would expect
- the food is labelled, advertised and presented in a way that is not false or misleading



Beef burgers

Serves 4 people



Equipment:

- Mixing bowl
- Fork
- Brown chopping board
- Green chopping board
- 2 x Sharp knife
- Butter knife

Ingredients:

- 500g lean minced beef
- 1 onion, finely chopped
- 1 tbsp mustard
- 1 medium egg
- 1 tbsp olive oil
- Salt and freshly ground black pepper

To serve the burger (optional):

- 4 slices mature Cheddar cheese
- 2 tbsp mayonnaise
- ¼ iceberg lettuce, shredded
- 4 ciabatta or ordinary bread rolls
- 1 small red onion, thinly sliced
- 1 large tomato, sliced.

Cooking methods:

- Shallow frying and baking

Method:


1. Preheat your oven to 180°C
2. Chop your onion very finely.
3. Place all the burger ingredients in a mixing bowl and mix thoroughly with a fork (or with your clean hands) to combine. Using your hands, shape the mixture into four equal-sized balls and then squash down to create a burger shape.
4. Put a small amount of oil in the frying pan and wait for it to heat (moderate/high). Carefully add your burgers, turn down the heat slightly and turn every 1-2 minutes so that they do not burn, up to 10 minutes.
5. Finally, carefully put your burgers onto a baking sheet and into the oven for 10 minutes to cook through.
6. Check that they are cooked through with the temperature probe


Skills:	Meaning:
1.	General Practical Skills: Weighing ingredients, measuring, preparing ingredients and equipment, correct cooking times, testing for readiness and sensory testing.
2.	Knife skills: Can use equipment safely. Slicing, dicing and chopping. Peeling.
3.	Preparing fruit and vegetables: I can prepare fruit and vegetables in many different ways: Slicing, peeling, grating, dicing and chopping.
4.	Use of the cooker (and Skills 6: Cooking Methods): Using the cooker including: the hob, grill and oven.
6.	Cooking Methods: Using the cooker including: the hob, grill and oven.
7.	Preparing, combine and shape: Techniques to prepare, cook and combine different ingredients


KITCHEN CONVERSIONS

SPOONS & CUPS

TSP	TBSP	FL OZ	CUP	PINT	QUART	GALLON
3	1	1/2	1/16	1/32	-	-
6	2	1	1/8	1/16	1/32	-
12	4	2	1/4	1/8	1/16	-
18	6	3	3/8	-	-	-
24	8	4	1/2	1/4	1/8	1/32
36	12	6	3/4	-	-	-
48	16	8	1	1/2	1/4	1/16
96	32	16	1	1	1/2	1/8
-	64	32	4	2	1	1/4
-	256	128	16	8	4	1


 TABLESPOON
15 ML


 DESSERTSPOON
10 ML



 TEASPOON
5 ML


MILLILITERS


OZ	ML	CUP	ML
2	60	1/4	60
4	115	1/2	120
6	150	2/3	160
8	230	2/4	180
10	285	1	240
12	340	2	480

GRAMS

OZ	G	LB
2	58	-
4	114	-
6	170	-
8	226	1/2
12	340	-
16	454	1


 1/4 CUP
 FLOUR 32g
 SUGAR 50g
 BUTTER 55g


 1/2 CUP
 FLOUR 64g
 SUGAR 100g
 BUTTER 112g


 1 CUP
 FLOUR 125g
 SUGAR 200g
 BUTTER 225g

- Use safe and hygienic practices in a working kitchen environment
- Demonstrate sound preparation skills of both equipment and ingredients

- Safely use a range of cooking techniques, appropriate to the task

Butterfly Buns



Ingredients

- 110g butter
- 100g caster sugar
- 110g self-raising flour
- 2 eggs

School will provide:

- 1 tsp vanilla extract
- ½ tsp baking powder
- Jam and filling

Equipment

- Cupcake tin and cases
- Mixing Bowl
- Electric whisk
- Cooking rack
- Knife
- Teaspoon

Skills:	Meaning
1.	General Practical Skills: Weighing ingredients, measuring, preparing ingredients and equipment, correct cooking times, testing for readiness and sensory testing.
2.	Knife skills: Can use equipment safely. Slicing, dicing and chopping
3.	Preparing fruit and vegetables: I can prepare fruit and vegetables in many different ways: Slicing, peeling, grating, dicing and chopping.
4.	Use of the cooker (and Skills 6: Cooking Methods): Using the cooker including: the hob, grill and oven.
6.	Cooking Methods: Using the cooker including: the hob, grill and oven.
7.	Preparing, combine and shape: Techniques to prepare, cook and combine different ingredients.
11.	Raising Agents: Use of raising agents including: eggs, chemical, steam and biological.

Method

1. Heat the oven to 180C/160C fan/gas 4.
2. Line a cupcake tin with 10 cases.
3. To make the sponge, tip the butter, sugar, eggs, vanilla, flour, baking powder and milk into a large [mixing bowl](#) and beat with either a hand [whisk](#) or electric mixer until smooth, pale and combined.
4. Divide the batter between the cases and bake for 15 mins until golden brown and a skewer inserted in the middle of a cake comes out clean.
5. Leave on a wire rack to cool.
6. Once the cakes are cool, use a sharp knife to slice off the tops, then cut the tops in half.
7. Pipe or spread the buttercream on top of the cakes, then gently push two semi-circular halves into the buttercream on each cake, doing this at an angle to look like butterfly wings. Y
8. You can serve the cupcakes at this stage, or decorate them with a little blob of jam in the centre and a scattering of sprinkles, if you like.





Sausage roll/plait



Ingredients:

- 200g plain flour
- 100g butter (chilled)
- ½ tsp salt

- 250g sausage meat or 6 sausages (take off the skin).

Can add onion/ herbs or apple.

Other flavouring ideas, chutney, mustard, apple sauce, cheese etc.

Vegetarians: Cheese and onion etc
Or Veggie sausages

Equipment:

- Large bowl
- Table knife
- Grater
- Measuring jug
- Chopping board
- Lined baking tray
- Table spoon
- Rolling pin

Container with a lid

PRACTICAL SKILLS

- Weighting & Measuring
- Glazing
- Pastry making
- Mixing ingredients
- Shaping product
- Oven skills: Baking
- Timing
- Decorating

HYGIENE & SAFETY TIPS

- Wash your hands with warm soapy water before you begin and after touching meat.
- Use red chopping board for meat.
- Check work tops and equipment are clean.
- Any meat is stored in the fridge.
- Gas ovens lit correctly.

Method

1. Place flour in large bowl with salt.
2. Roll butter in flour, then grate into large bowl.
3. Mix with table knife.
4. **Gradually** add cold water a tablespoon at a time and stir with table knife to form a dough. Place in fridge if time allows.
5. Roll out pastry on floured surface into a rectangle.
6. Prepare sausage meat on floured chopping board adding any additional ingredients.
7. Prepare sausage meat in centre of pastry.
8. Use knife to cut diagonally sides of pastry.
9. Fold over both ends then plait pastry sides.
10. Place on baking tray and glaze.
11. Place in oven for 35 to 40 minutes.



KITCHEN CONVERSIONS											
SPOONS & CUPS											
TSP	TBSP	FL OZ	CUP	PINT	QUART	GALLON					
3	1	1/2	1/4	1/32	-	-					
6	2	1	1/8	1/16	1/32	-					
12	4	2	1/4	1/8	1/16	-					
18	6	3	3/8	-	-	-					
24	8	4	1/2	1/4	1/8	1/32					
36	12	6	3/4	-	-	-					
48	16	8	1	1/2	1/4	1/16					
96	32	16	1	1	1/2	1/8					
-	64	32	4	2	1	1/4					
-	256	128	16	8	4	1					
TABLESPOON 15 ML			DESSERTSPOON 5 ML			TEASPOON 5 ML					
MILLILITERS						GRAMS					
OZ	ML	CUP	ML	OZ	G	LB					
2	60	1/4	60	2	58	-					
4	115	1/2	120	4	114	-					
6	150	2/3	160	6	130	-					
8	210	2/4	180	8	226	1/2					
10	285	1	240	10	340	-					
12	340	2	480	16	454	1					
1/4 CUP		1/2 CUP		1 CUP							
FLOUR	32g	FLOUR	64g	FLOUR	128g						
SUGAR	50g	SUGAR	100g	SUGAR	200g						
BUTTER	55g	BUTTER	110g	BUTTER	220g						









The aims of the sequence of learning are to ensure that all students:
 To develop an understanding of Hip Hop and it's surrounding culture.
 To be able to perform Gangsta's Paradise, using appropriate musical technique on the keyboard.
 To develop appropriate musical vocabulary through the MAD TSHIRT mnemonic.
 To be able to identify musical features of Gangsta's Paradise, applying appropriate musical vocabulary.


Keyword	Definition
Melody	The main layer or tune of a piece. Melodies can move by step or in leaps .
Articulation	The way the notes are played: <i>long and smooth</i> or short and choppy. Legato = Long and smooth Staccato = Short and choppy.
Dynamics	How loud or quiet the sound is.
Texture	The layers that make up a piece Monophonic = One Layer On its own. Homophonic = One melody and accompaniment Polyphonic = More than one melody at the same time.
Structure	The way the music is put together in sections . <i>Beginning – Middle – End</i>
Harmony	The chords that accompany the melody. Diatonic – notes that blend well together. Dissonant - notes that do not blend well together. Tonality – What key the music is in.
Instrumentation /Forces	The instruments or voices used to perform a piece of music.
Rhythm	The note values used. Syncopation – off beat rhythm.
Tempo	The speed of the beat


Key Concepts


Rhythmic Dictation


Note	European Name	Value
	Semibreve	4 beats
	Minim	2 beats
	Crotchet	1 beat
	Quaver	½ beat
	Semiquaver	¼ beat


 Coffee

 Blackcurrant


 Coca cola

 Lemonade

 Tea

 Trip er let


What is Hip-hop?



Hip-hop music focuses on rhythm rather than melody and harmony. It is characterised by:

- rapping
- use of samples
- use of programmed beats
- DJing

What is Rapping?



Rapping is rhythmical, rhyming, semi-spoken recitation. Often the lead vocal is joined by another member of the group who:

- doubles the last word of some lines
- adds answering phrases
- adds spoken ad libs



The aims of the sequence of learning are to ensure that all students:


To develop an understanding of Hip Hop and it's surrounding culture.

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To be able to identify musical features of Gangsta's Paradise, applying appropriate musical vocabulary.

Gangsta's Paradise – MAD TSHIRT, Musical analysis.

Hip Hop	Musical Devices	Sampling	Riffs								
<p>Hip Hop is not just a style of music but an entire culture that is made up:</p> <ul style="list-style-type: none"> • DJing and beat making. • B-Boying or Break Dancing, a form of acrobatic group dancing. • Graffiti art • Mc'ing or rapping. 	<p>Musical devices are techniques used by composers (people who write music) to give a certain feel or sound to the music.</p> <p>Using specific musical devices can make the music sound like a specific style.</p> <p>Examples = Riffs / Sampling</p>	<p>In music, sampling is when a short snippet (or sample) of a sound recording is used in another recording.</p> <p>Samples are often changed in some way e.g. by changing the pitch or slowing them down.</p>	<p>A riff is a short repeating pattern in a piece of pop music.</p>								
<p>Gangsta's Paradise: Texture</p> <p>The song uses two types of texture</p> <p>Homophonic – One melody and accompaniment (during the verse sections)</p> <p>Polyphonic – more than one melody at the same time (during the chorus sections).</p>	<p>Gangsta's Paradise: Tonality</p> <p>Gangsta's Paradise is in a minor key.</p> <p>It sounds sad, which fits with the lyrics.</p>	<p>Gangsta's Paradise: Harmony</p> <p>The chord sequence, which repeats throughout the song is:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>G</td> <td>E</td> <td>F#</td> <td>B</td> </tr> <tr> <td>Major</td> <td>minor</td> <td>Major</td> <td>minor</td> </tr> </table>	G	E	F#	B	Major	minor	Major	minor	<p>Time Signature</p> <p>Gangsta's Paradise is in 4/4, meaning each bar has 4 beats.</p> 
G	E	F#	B								
Major	minor	Major	minor								
<p>Breakbeat</p> <p>A short break in the song that is just the drum beat on its own.</p> <p>Breakbeats were sampled a lot because drumbeats are perfect to rap over.</p>	<p>Looping</p> <p>A small section of sound that is repeated.</p>	<p>Vocalisation</p> <p>Wordless singing.</p> <p>Wordless singing can be heard during the chorus of Gangsta's Paradise in the backing vocals</p>	<p>Melisma</p> <p>Signing more than one note per syllable.</p>								



I'm a music producer and my job is to arrange compositions, runs recording sessions, and suggests changes to instrumentation, effects and lyrics. I guide the mastering, mixing of the music and also the recording engineers. I also gather ideas and inspiration for projects and develop the vision and direction for each project.

Challenge Activities



Name that pitch! <https://www.musictheory.net/exercises/note>

Further reading <https://www.musicca.com/notes>

Another quiz! <https://www.musictheoryacademy.com/music-theory-quizzes/>

Topic Links



Additional Resources

This topic links to Maths – understanding of pitch requires knowledge of half steps and full steps and the ability to count in different intervals

Science – pitch is a scientific concept. Concert A has a frequency of 440 Hz vibrations per second

Free sheet music for piano - https://makingmusicfun.net/html/printit_piano_sheet_music_index

Have a go at writing your own melody - <https://www.bbc.co.uk/bitesize/topics/z3dqhyc/articles/z7n2qp3>

Keyword (Tier 3 subject specific language)	Definition
Power	This is the ability to perform maximum strength and maximum speed of your muscles in order to generate forces to move an object or propel yourself forward. Power = strength x speed. This component of fitness is exceptionally important with all throwing events.
Co-ordination	The ability for muscles to work together in pairs to move different body parts at the correct time with ease and efficiency. Having good technique in all athletics events will aid in your performance so you can be faster, stronger and work harder.
Reaction Time	The time taken for a person to respond and initiate movement to a stimulus (the starter or whistle in athletics running events).
Balance	The ability to maintain your centre of mass and control of sports performance either statically (stationary) or dynamically (moving). This is very important with throwing activities so you don't fall over the line and get disqualified.
Speed	The rate at which a person moves as fast as possible to cover a distance over the shortest time possible. Speed=distance/time. Important in all short distance sprint races. The winner in sprinting events is determined by the fastest person.
Cardiovascular endurance	The ability for the heart and blood vessels to transport oxygenated blood to the working muscles in sports performance. The performer can work at a moderate level of intensity for a long period of time without getting fatigued (tired). This is important for long distance running activities including the 1500m.
Muscular strength	This is the maximum force that can be applied from muscles in order to overcome resistance (external force) so that movement can take place. This is an extremely important component of fitness for jumping and throwing activities in order to travel the furthest distance possible in order to win in the event.
Flexibility	This is the range of movement that can be performed around a joint by the muscles, ligaments and tendons without any pain or over stretching.

Key Concepts You should already know: - Some components of fitness and be able to apply them to different athletic events.
You will be assessed on: - Understanding - Technique - Application - Leadership

Athletics Key Concepts- How well am performing?

Personal Challenge

- Set your goals
- Learn the skills
- Practise hard to achieve your goal
- Record your progress
- Reward yourself with a badge and certificate
- Move onto the next stage!

- Develop **CONFIDENCE** and **COMPETENCE**, learning the skills of different Running, Jumping and Throwing activities.
- Progress to becoming **COMPETITIVE** with Confidence and Competence.

INCLUSIVITY
Allows teachers to adjust weights, select distances, hurdle heights and spacings to suit the age and level of performers.

Boys' Award Standards

STAGE PROGRESSIONS	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	Stage 8	Stage 9
SPRINTS	1 Star	2 Star	3 Star	Bronze	Silver	Gold	Platinum	Elite	Podium
50m Standards	14.8s	12.0s	10.3s	9.6s	8.9s	8.3s	7.8s	7.4s	7.0s
75m Standards	21.0s	17.0s	15.0s	13.5s	12.5s	11.5s	10.7s	10.0s	9.5s
100m Standards	23.0s	18.7s	16.7s	14.6s	14.2s	13.8s	13.4s	13.0s	12.7s
200m Standards	-	-	-	30.3s	29.3s	28.8s	27.6s	27.0s	26.0s
300m Standards	-	-	-	56.5s	54.0s	51.5s	48.5s	45.0s	42.5s
HURDLES	1 Star	2 Star	3 Star	Bronze	Silver	Gold	Platinum	Elite	Podium
60m Standards	25.0s	19.0s	15.5s	13.5s	12.0s	11.0s	10.5s	10.1s	9.7s
70m Standards	24.0s	20.4s	17.3s	15.8s	14.5s	13.6s	13.0s	12.5s	12.2s
75m Standards	23.0s	21.0s	18.0s	16.5s	15.3s	14.5s	13.8s	13.5s	13.2s
80m Standards	-	-	-	-	-	15.2s	14.4s	14.0s	13.4s
ENDURANCE	1 Star	2 Star	3 Star	Bronze	Silver	Gold	Platinum	Elite	Podium
400m Standards	3m 20s	2m 30s	2m 05s	1m 45s	1m 35s	1m 20s	1m 10s	1m 05s	1m 00s
600m Standards	6m 00s	4m 30s	3m 20s	2m 50s	2m 30s	2m 15s	2m 05s	2m 00s	1m 50s
800m Standards	4m 00s	3m 40s	3m 20s	3m 00s	2m 50s	2m 41s	2m 33s	2m 27s	2m 20s
1500m Standards	6m 20s	6m 05s	5m 50s	5m 38s	5m 28s	5m 19s	5m 10s	4m 59s	4m 46s
JUMPS	1 Star	2 Star	3 Star	Bronze	Silver	Gold	Platinum	Elite	Podium
Standing Long Jump	0.35m	0.90m	1.40m	1.60m	1.80m	2.00m	2.30m	2.60m	2.80m
Long Jump	1.00m	1.80m	2.40m	3.00m	3.50m	4.00m	4.40m	4.70m	5.05m
Standing Triple Jump	1.00m	2.40m	4.00m	4.60m	5.10m	5.60m	-	-	-
Triple Jump	-	-	-	-	-	6.40m	8.50m	9.70m	10.60m
High Jump	0.20m	0.50m	0.80m	1.00m	1.10m	1.20m	1.30m	1.40m	1.50m
THROWS	1 Star	2 Star	3 Star	Bronze	Silver	Gold	Platinum	Elite	Podium
Shot Put	1.00m	2.00m	3.25m	4.80m	5.80m	6.80m	8.00m	9.40m	10.15m
Javelin	1.00m	5.00m	10.00m	12.00m	15.00m	19.00m	26.00m	30.00m	33.50m
Discus	1.00m	5.00m	8.00m	10.00m	12.00m	17.00m	22.00m	24.00m	26.00m

Girls' Award Standards

STAGE PROGRESSIONS	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6	Stage 7	Stage 8	Stage 9
SPRINTS	1 Star	2 Star	3 Star	Bronze	Silver	Gold	Platinum	Elite	Podium
50m Standards	14.8s	12.2s	10.6s	9.9s	9.2s	8.6s	8.1s	7.7s	7.3s
75m Standards	21.0s	17.3s	15.3s	13.8s	12.8s	12.1s	11.5s	11.0s	10.5s
100m Standards	23.0s	19.0s	17.0s	15.5s	15.0s	14.6s	14.2s	13.9s	13.7s
200m Standards	-	-	-	31.7s	30.8s	30.5s	29.7s	29.2s	28.5s
300m Standards	-	-	-	55.0s	53.5s	52.0s	50.0s	48.5s	46.0s
HURDLES	1 Star	2 Star	3 Star	Bronze	Silver	Gold	Platinum	Elite	Podium
60m Standards	25.0s	19.3s	16.0s	14.0s	12.5s	11.5s	11.0s	10.5s	10.1s
70m Standards	24.0s	21.0s	18.9s	17.3s	15.9s	14.6s	13.7s	13.1s	12.7s
75m Standards	23.0s	21.0s	18.5s	17.0s	16.0s	15.0s	14.0s	13.7s	13.4s
80m Standards	-	-	-	-	-	15.0s	14.2s	13.9s	13.6s
ENDURANCE	1 Star	2 Star	3 Star	Bronze	Silver	Gold	Platinum	Elite	Podium
400m Standards	3m 20s	2m 30s	2m 10s	1m 55s	1m 40s	1m 25s	1m 15s	1m 10s	1m 05s
600m Standards	6m 00s	4m 30s	3m 30s	3m 00s	2m 40s	2m 30s	2m 20s	2m 10s	2m 00s
800m Standards	5m 00s	4m 45s	4m 30s	4m 10s	3m 45s	3m 20s	2m 55s	2m 45s	2m 35s
1500m Standards	7m 20s	7m 00s	6m 44s	6m 30s	6m 17s	6m 06s	5m 55s	5m 42s	5m 24s
JUMPS	1 Star	2 Star	3 Star	Bronze	Silver	Gold	Platinum	Elite	Podium
Standing Long Jump	0.35m	0.90m	1.35m	1.55m	1.70m	1.90m	2.20m	2.40s	2.60m
Long Jump	1.00m	1.80m	2.30m	2.80m	3.10m	3.40m	3.70m	4.00m	4.30m
Standing Triple Jump	1.00m	2.40m	3.60m	4.40m	4.80m	5.20m	-	-	-
High Jump	0.20m	0.50m	0.75m	0.90m	1.00m	1.10m	1.20m	1.28m	1.36m
THROWS	1 Star	2 Star	3 Star	Bronze	Silver	Gold	Platinum	Elite	Podium
Shot Put	1.00m	2.00m	3.00m	4.25m	5.25m	6.00m	6.50m	7.00m	8.00m
Javelin	1.00m	5.00m	7.00m	9.00m	12.00m	15.00m	18.00m	21.00m	24.00m
Discus	1.00m	3.00m	5.00m	7.00m	9.00m	13.00m	17.00m	19.00m	21.00m



Career Focus - Where could this take you?



My career is known as an athletics umpire. I am responsible for track and field athletics events. I am responsible for judging the various events to make sure all athletes compete with fair play and to make sure they are kept safe whilst performing. They can be sub-divided into four main groups: field judges, track judges, timekeepers, and starters. My career takes me all over the UK during the domestic season and every four years I umpire at the Olympic games.



Challenge Activities

Design a throwing activity skill card:-

Can you create a skill card that shall help a student in your class develop the correct technique in a throwing activity. Include diagrams and basic key written points that is clear for them to understand.

Create a key words poster:-

This can be used by all students in their PE lessons as memory recall revision task. Select between five to eight different key words and match them to a correct track and field event. Remember to use pictures of the events and students can match the definitions to the events. Remember that some events may have more than one key word linked to them.

Topic Links

- This topic links to:
- RSHE – Understanding how physical activity can reduce stress and anxiety and promote physical, mental and social wellbeing
 - English – understanding and defining key terminology
 - Mathematics – problem solving, recording figures and analysing performance. Time keeping and scoring against data.
 - Voice 21 – Discussing techniques, acting as race officials.

Additional Resources

- To further practise and develop your knowledge see:
- <https://howard.staffs.sch.uk/news/2021-06-11-english-schools-athletic-association>
 - <https://olympics.com/en/>
 - <https://www.britannica.com/story/what-do-the-olympic-rings-and-flame-represent>



Use the skill cards to help you have a full understanding on how to perform the techniques in your next PE lesson on javelin and triple jump.

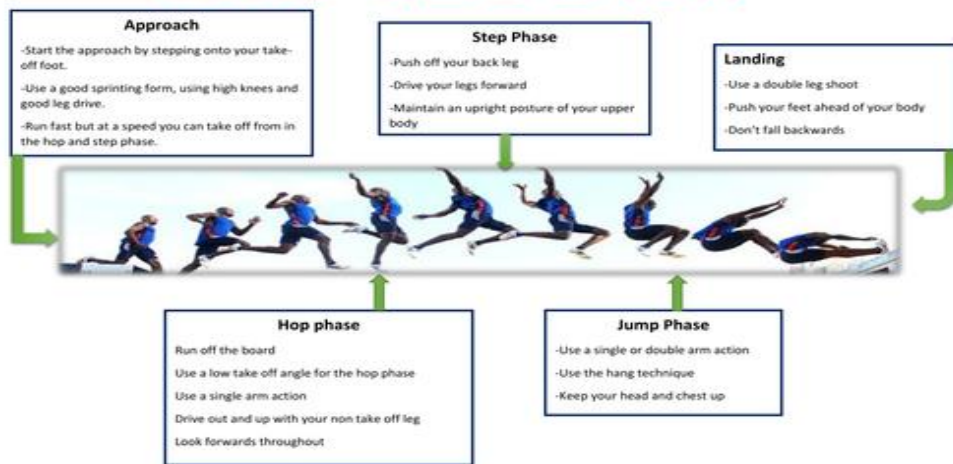


Technique Card: Javelin

The javelin throw aims to create a block with the front foot and to create maximum range of movement in order to deliver the javelin at high speed through an angle of 40 degrees.



TRIPLE JUMP

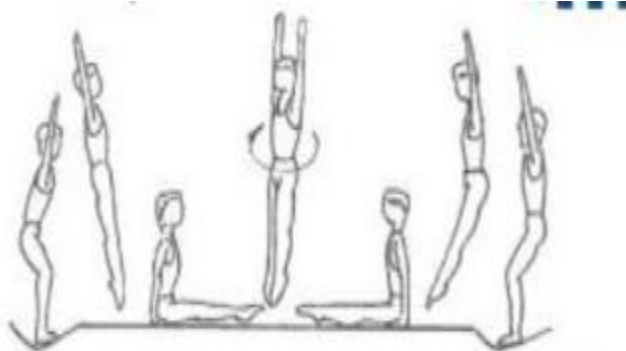


- Identify at least 6 core trampolining skills.
- Demonstrate core skills such as a swivel hips.

Keyword	Definition
Spotting	Standing around the trampoline to help prevent the performer from falling.
Aesthetic	The way something looks/something looking artistic.
Flexibility	The range of motion allowed at a joint.
Pike	Jumping with the legs extended out in front of the body and toes pointed.
Tuck	Jumping with the knees flexed and toes pointed down.
Straddle	Jumping with the legs extended diagonally from the hips.
Feedback	Information given to an individual/team about their performance.
Bounce count	The amount of times the bed is touched during a routine.
Parallel	Straight lines that do not intersect.
Routine	A set of core skills performed together to create a routine.
Biomechanics	The study of the mechanical laws relating to the movement or structure of living organisms.

Key Concepts

Advancing the seat landing

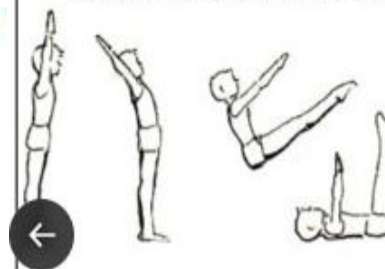


SWIVEL HIPS

Teaching Points

- Follow stages for a seat landing
- Swing your arms and look under the armpit (towards the direction of twist)
- Land back in the seat position, with hands by your side

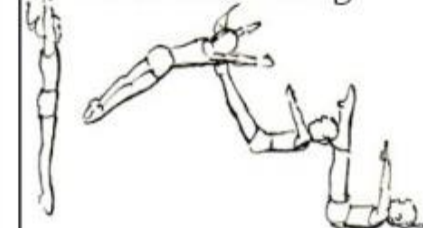
BACK LANDING!



Key points:

- At the top of the bounce, your hips and feet drive forwards, horizontal to the trampoline
- Arms stay by your ears, until landing (as demonstrated in image)
- Legs also need to be positioned like the diagram, tense core muscles on landing.

Half twist to back landing!



Key points:

- Start of the skill is the same positioning as a front landing. Your body must take off as if completing a front landing.
- On take-off push feet back
- Head remains looking forwards
- Once in mid air, initiate the twist by looking under your armpit (depending on direction of twist)
- Arms remain by your ears, straight
- Once completing 180 degree twist, hips bend, keeping your legs straight to land in a back landing position.

Peer feedback sentence starters:

- Moving forwards you need to...
- For your next performance include...
- To improve your aesthetics, make sure that you...
- You showed great...



What you should already know:

- At least 5 core trampolining skills.
- Demonstrate an 8 bounce routine.
- The biomechanics of a seat drop.

- Identify at least 6 core trampolining skills.
- Demonstrate core skills such as a swivel hips.

- Demonstrate a 10 bounce routine.
- Lead a small group of peers in a cool down.

Retrieval Practice. Recall routines for your performance.



Routine #6:

Full twist jump
Tuck jump
Pike jump
½ twist to seat landing
½ twist to feet

Routine #7:

½ twist jump
Straddle jump
Tuck jump
Front landing
To feet

Routine #8:

Full twist
Straddle jump
Pike jump
Back landing
To feet

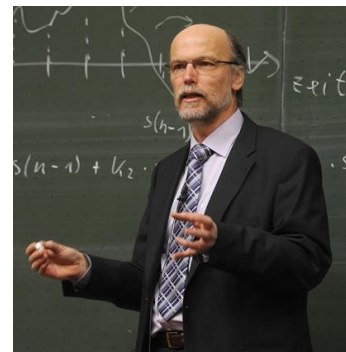
Depending on your progress levels in trampolining:-

If you are unable to complete a front drop or back drop, then you can replace with a seat landing with a twist or a swivel hips

If you are unable to complete the routine, then have two bounces between each skill.

Questions	Answers
Why does a trampolinist require good flexibility?	Without flexibility, a trampolinist will struggle to perform their moves aesthetically due to a lack of pointed toes and straight body lines.
Explain the importance of an aesthetic performance.	An aesthetic performance is important as it allows people to fully enjoy the performance and ensures the performance looks good to the audience.
Why does a seat drop require good core strength?	Because without good core strength, the body will not stay tense and upright.
Give 3 safety points for trampolining.	All jewellery removed, hair tied back, socks worn.

Career Focus - Where could this take you?



A **biomechanics lecturer** teaches adults about the body and how it works in different settings against **biomechanics principles**.

Challenge Activities



Create:

- Create a 10 bounce routine using the correct trampolining terminology. You can use this routine in class so make sure it only has skills in which you can perform. Try to include at least 2 different shapes.
- Create a skill card for a skill of your choice. Include diagrams and key terminology.

Topic Links



This topic links to:

- Science – anatomy and physiology
- Maths – Angles
- Voice 21 – verbal feedback to peers
- English – understanding and defining key terminology

Additional Resources



To further practise and develop your knowledge see:

- <https://www.bbc.co.uk/bitesize/guides/z39ck7h/revision/1>
- <https://www.british-gymnastics.org/technical-pages/trampoline-technical-resources>

Username and Passwords
