Year 7 – HT5

Newsome Academy
Everyone Exceptional Everyday

Knowledge Organisers

Name:

Team:

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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.

Year 7 – Addition & Subtraction of Fractions

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To be able to construct, measure and understand basic geometry.
To reason with number and apply to problem solving.

What do I need to be able to do?

By the end of this unit you should be able to:

- Convert between mixed numbers and fractions
- Add/Subtract unit fractions (same denominator)
- Add/Subtract fractions (same denominator)
- Add/Subtract fractions from integers
- Use equivalent fractions
- Add/Subtract any fractions
- Add/Subtract improper fractions and mixed numbers
- Use fractions in algebraic contexts

Keywords

Numerator : the number above the line on a fraction. The top number. Represents how many parts are taken

Denominator: the number below the line on a fraction. The number represent the total number of parts

Equivalent: of equal value

Mixed numbers: a number with an integer and a proper fraction

Improper fractions: a fraction with a bigger numerator than denominator

Substitute: replace a variable with a numerical value

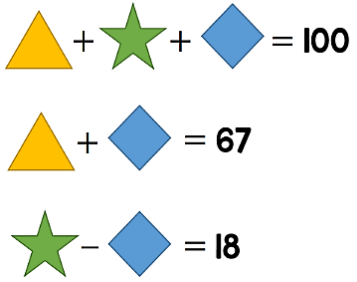
Place value: the value of a digit depending on its place in a number. In our decimal number system, each place is 10 times bigger than the place to its right

Career Focus - Where could this take you?

As a pharmacist, I need to have a good understanding of fractions and negative numbers when making and storing pharmaceutical drugs.

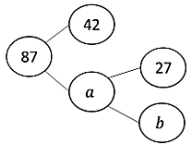
Challenge Activities

Work out the value of each symbol.



Retrieval Practice

What are the missing numbers?



Subtract 512 from two thousand three hundred.

Write $\frac{4}{5}$ as a percentage.

What is the 4 worth in the number 8.3471?

Topic Links

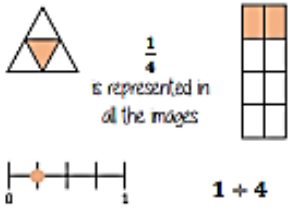
This topic links to:

- Addition, subtraction, fractions, and algebra.

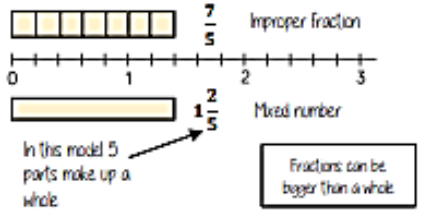
Additional Resources

To further practice and develop your knowledge see:
https://corbettmaths.com/contents/
Number: 132-133, 139-140

Representing Fractions

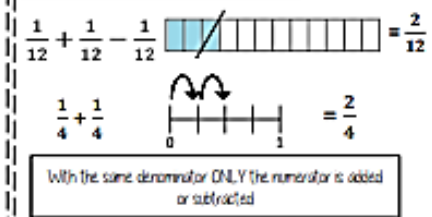


Mixed numbers and fractions



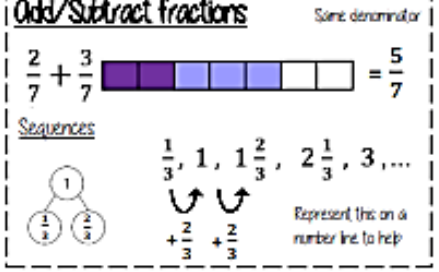
Add/Subtract unit fractions

Same denominator

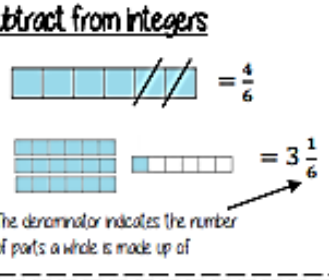


Add/Subtract fractions

Same denominator

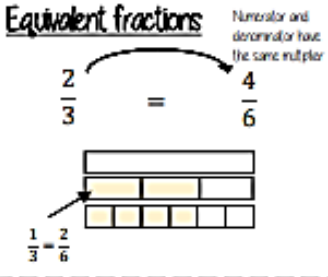


Add/Subtract from integers

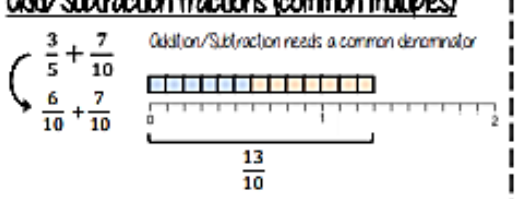


Equivalent fractions

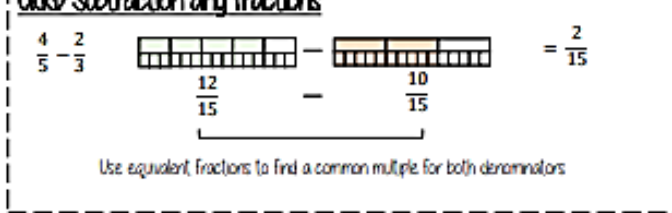
Numerator and denominator have the same multiplier



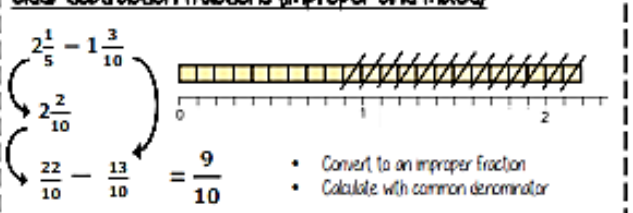
Add/Subtraction fractions (common multiples)



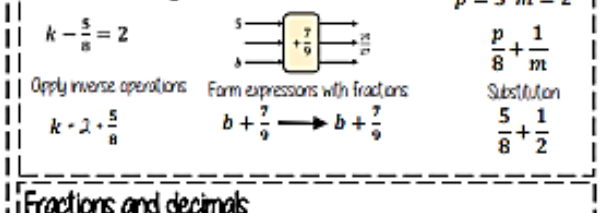
Add/Subtraction any fractions



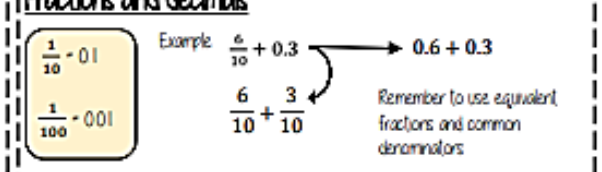
Add/Subtraction fractions (improper and mixed)



Fractions in algebraic contexts



Fractions and decimals



Year 7 – Developing Geometric Reasoning

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What do I need to be able to do?

By the end of this unit you should be able to:

- Understand/use the sum of angles at a point
- Understand/use the sum of angles on a straight line
- Understand/use equality of vertically opposite angles
- Know and apply the sum of angles in a triangle
- Know and apply the sum of angles in a quadrilateral

Keywords

Vertically Opposite: angles formed when two or more straight lines cross at a point
Interior Angles: angles inside the shape
Sum: total, add all the interior angles together
Convex Quadrilateral: a four-sided polygon where every interior angle is less than 180°
Concave Quadrilateral: a four-sided polygon where one interior angle exceeds 180°
Polygon: A 2D shape made with straight lines
Scalene triangle: a triangle with all different sides and angles
Isosceles triangle: a triangle with two angles the same size and two angles the same size
Right-angled triangle: a triangle with a right angle

Career Focus - Where could this take you?

As a construction worker, I use angles everyday when building walls, roofs and floors to make sure houses are built safely and properly.

Challenge Activities

The diameter of a 10p coin is 24.5 mm.
The diameter of a 5p coin is 18 mm.
Some coins are laid out end to end.

What is the distance marked *b* in the diagram?

Retrieval Practice

How many degrees are there in a full turn?

Subtract 0.15 from three-quarters.

Write $\frac{120}{300}$ in simplest form.

Work out $-4-8\div4$

Topic Links

This topic links to:

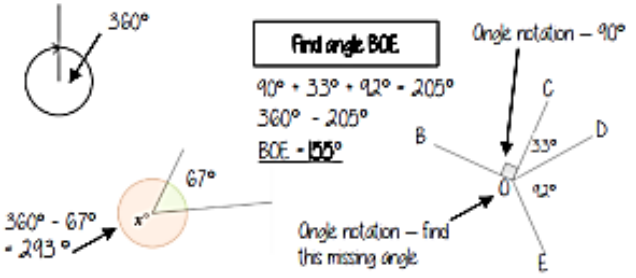
- Angles, trigonometry, pie charts and algebra.

Additional Resources

To further practice and develop your knowledge see:
https://corbettmaths.com/contents/
Number: 30, 33, 35, 37, 39

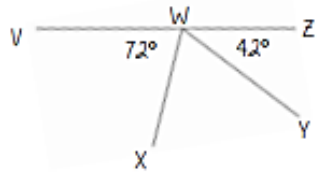
Sum of angles at a point

The sum of angles around a point is 360°

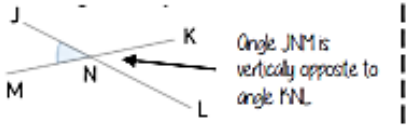


Sum of angles on a straight line

Adjacent angles that share a common point on a line add up to 180°



Vertically opposite angles

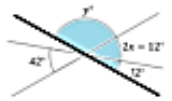


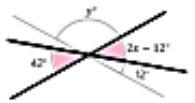
Angle JNM is vertically opposite to angle KNL

JNM = KNL

Vertically opposite angles are the same

Other angle rules still apply
Look for straight line sums and angles around a point

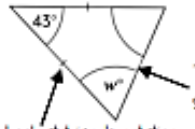




Form equations with information from diagrams:
$2x - 12 = 42$
$2x = 54$
$x = 27°$

Sum of angles in triangles

Sum of interior angles in a triangle = 180°



The two base angles will be the same size

Look at triangle notation
This indicates an isosceles triangle
∴ 180 - 43 = 137
137 ÷ 2 = 68.5°

A triangle can only have ONE right angle

Have a go!
Tearing the corners from triangles forms a straight line which is therefore 180°

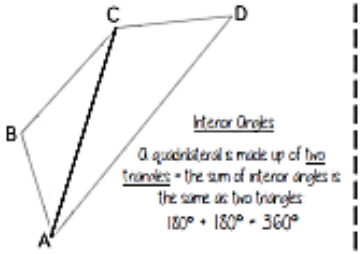
Sum of angles in quadrilaterals

Sum of interior angles in a quadrilateral = 360°

Convex Quadrilateral

Concave Quadrilateral

Interior angles are those that make up the perimeter (outline) of the shape



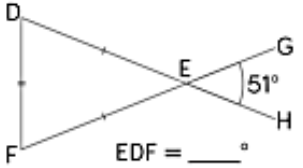
Interior Angles

A quadrilateral is made up of two triangles - the sum of interior angles is the same as two triangles
180° + 180° = 360°

Angle Problems

Split up the problem into chunks and explain your reasoning at each point using angle notation

Keep working out clear and notes together



1. Angle DEF = 51° because it is a vertically opposite angle DEF = GEH
2. Triangle DEF is isosceles (triangle notation) ∴ EDF = EFD and the sum of interior angles is 180°
   180° - 51° = 129° 129° ÷ 2 = 64.5°
3. Angle EDF = 64.5°

Year 7 – Constructing, Measuring & Using Geometric Notation

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To be able to construct, measure and understand basic geometry.
To reason with number and apply to problem solving.

What do I need to be able to do?

By the end of this unit you should be able to:

- Use letter and labelling conventions
- Draw and measure line segments and angles
- Identify parallel and perpendicular lines
- Recognise types of triangle
- Recognise types of quadrilateral
- Identify polygons
- Construct triangles (SQS, SSS, ASA)
- Draw Pie charts

Keywords

Polygon: A 2D shape made with straight lines
Scalene triangle: a triangle with all different sides and angles
Isosceles triangle: a triangle with two angles the same size and two angles the same size
Right-angled triangle: a triangle with a right angle
Frequency: the number of times a data value occurs
Sector: part of a circle made by two radii touching the centre
Rotation: turn in a given direction
Protractor: equipment used to measure angles
Compass: equipment used to draw arcs and circles

Career Focus - Where could this take you?

As a construction worker, I use angles everyday when building walls, roofs and floors to make sure houses are built safely and properly.

Challenge Activities

£290 is shared between 10 boys and 12 girls.
Each girl receives £15
How much money does each boy receive, if they each get the same amount of money?

Retrieval Practice

Add $\frac{3}{5}$ to 0.3

Solve the equation $3x = \frac{1}{5}$

Change $\frac{47}{7}$ to a mixed number.

Simplify $8ab + 6ab - ab$

Topic Links

This topic links to:

- Angles, circles, pie charts and shape.

Additional Resources

To further practice and develop your knowledge see:
https://corbettmaths.com/contents/
Number: 25, 33-35, 37-39

Letter and labelling convention

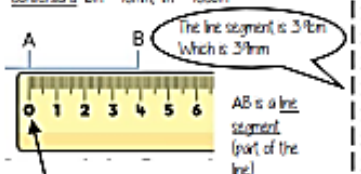
The letter in the middle is the angle
The arc represents the angle

Angle Notation: three letters **ABC**
This is the angle at B = 113°

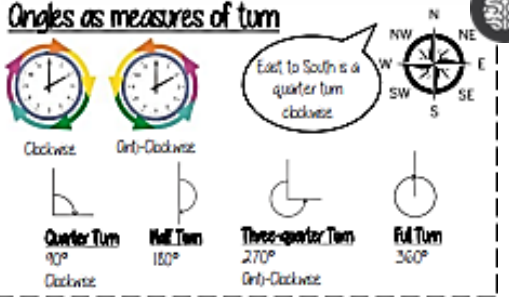
Line Notation: two letters **BC**
The line that joins B to C

Draw and measure line segments

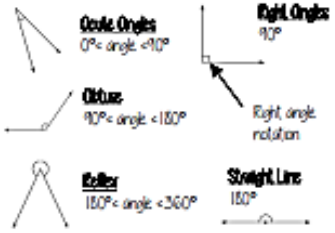
Conversions: 1cm = 10mm, 1m = 100cm



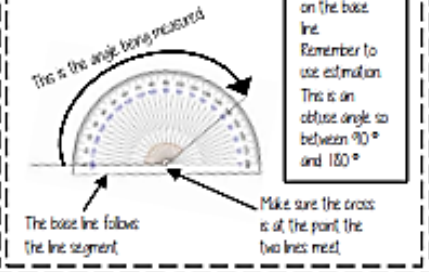
Angles as measures of turn



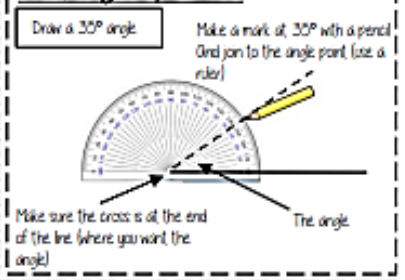
Classify angles



Measure angles to 180°



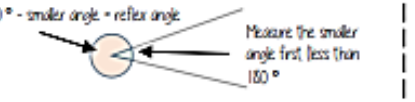
Draw angles up to 180°



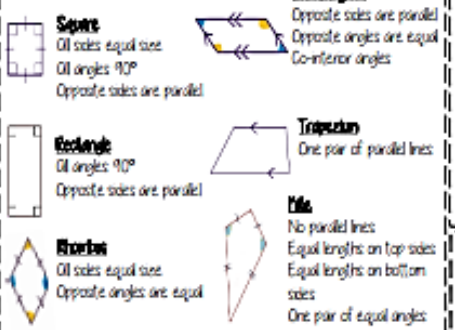
Parallel and Perpendicular lines

Angles over 180°

Use your knowledge of straight lines 180° and angles around a point 360°



Properties of Quadrilaterals



Draw Pie Charts

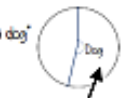
Type of pet	Dog	Cat	Hamster
Frequency	32	25	3

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

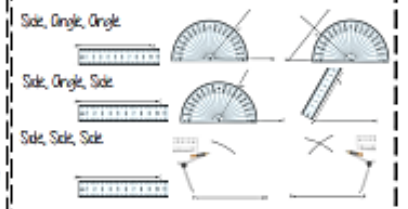
This fraction of the 360 degrees represents dogs

$\frac{32}{60} \times 360 = 192°$

Use a protractor to draw
This is 192°



SQS, SSS, ASA constructions



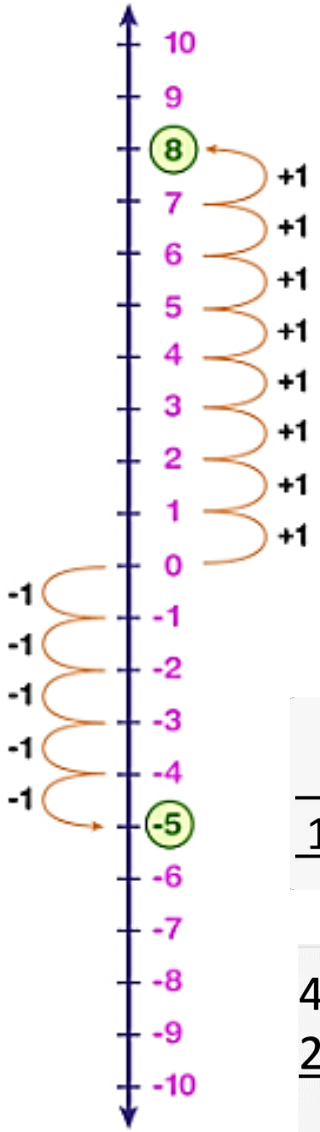
Polygons

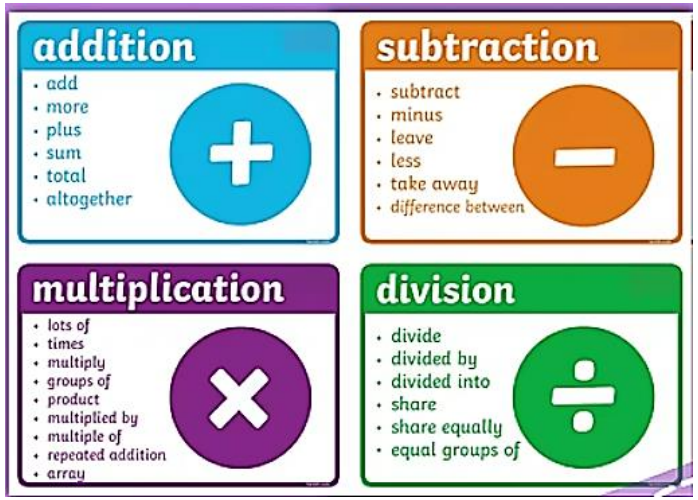
3	- Triangle	5	- Pentagon	8	- Octagon
4	- Quadrilateral	6	- Hexagon	9	- Nonagon
		7	- Heptagon	10	- Decagon

If all the sides and angles are the same, it is a **regular** polygon

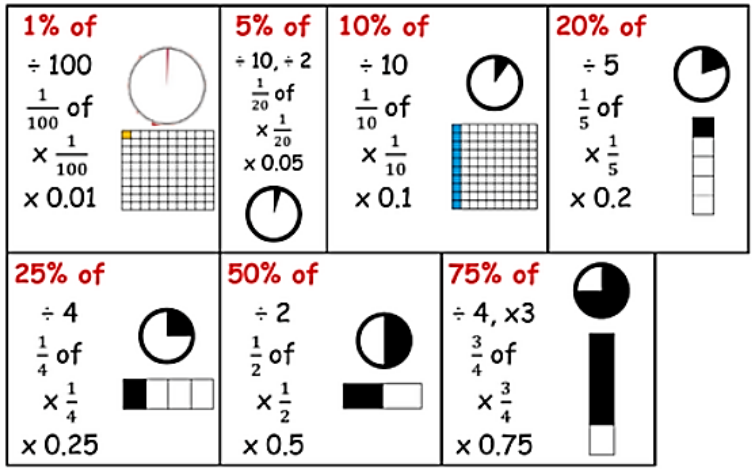
Maths Quick Reference: Number Skills

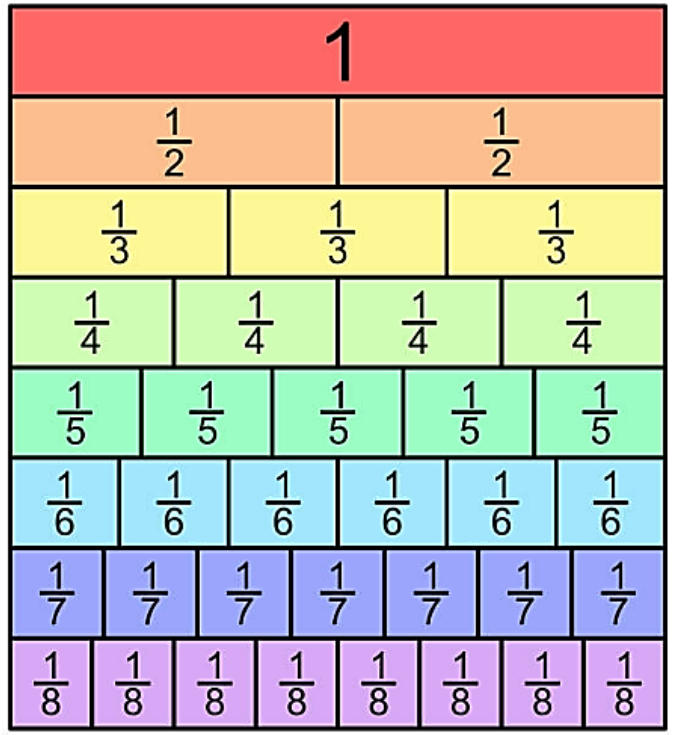
100	10	1	·	$\frac{1}{10}$	$\frac{1}{100}$
Hundreds	Tens	Units		Tenths	Hundredths
3	5	2	·	7	1





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





$$\begin{array}{r} 476 + \\ 874 \\ \hline 1350 \\ 1\ 1 \end{array}$$

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

$$8\overline{)3^{3}6^{4}0} \quad 045$$

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

BIDMAS

() x^y ÷ or × + or −

Brackets Indices Divide & Multiply Add & Subtract

Order of Operations

$156000. = 1.56 \times 10^{5}$

Move decimal point 5 places left, exponent goes up by 5

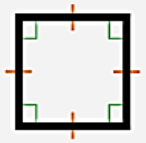
$0.0000053 = 5.3 \times 10^{-6}$

Move decimal point 6 places right, exponent goes down by 6

Maths Quick Reference: Geometry & Measures

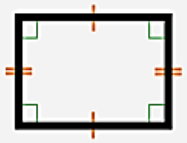
Quadrilaterals

Square



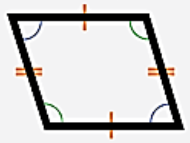
Four sides of equal length, four internal right angles.

Rectangle



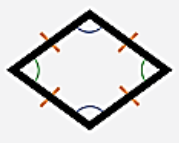
Four internal right angles, opposite sides of equal length.

Parallelogram



Opposite sides are parallel and equal in length, opposite angles are equal.

Rhombus



All four sides are the same length, like a square that has been squashed sideways.

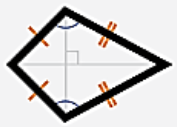
Trapezium (or trapezoid)

Two sides are parallel. Side lengths and angles are not equal.

Isosceles Trapezium (or trapezoid)

Two sides are parallel and base angles are equal, non-parallel sides are equal length.

Kite

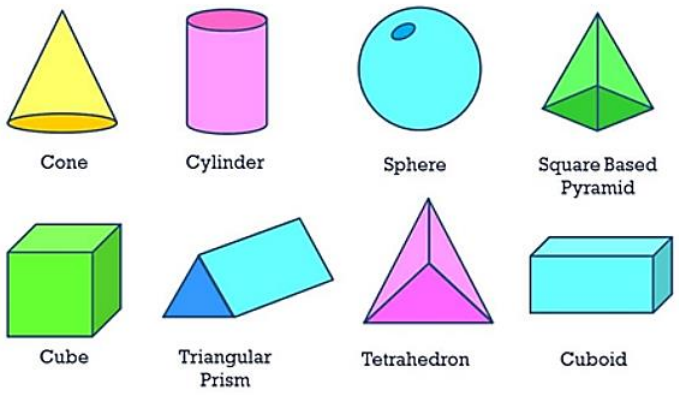


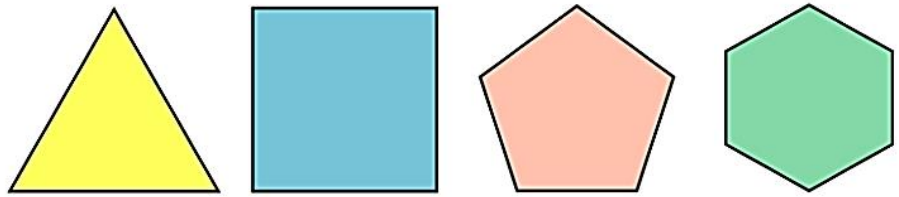
Two pairs of adjacent sides are of equal length; the shape has an axis of symmetry.

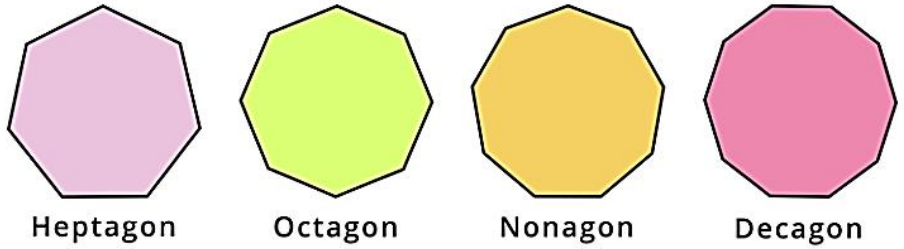
Irregular Quadrilateral

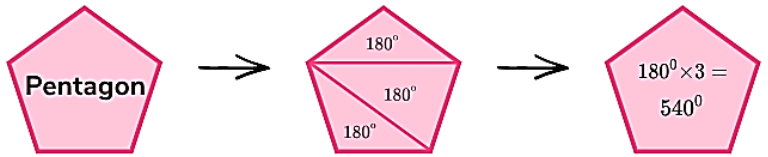
No sides are equal in length and no internal angles are the same.

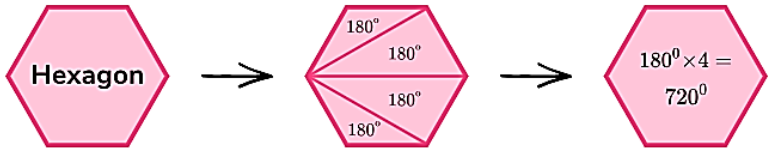
3D shapes

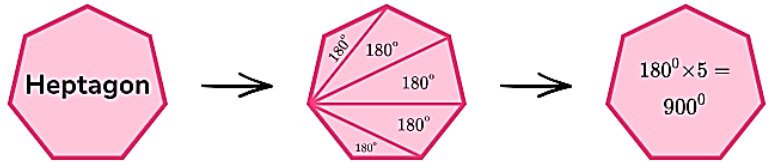


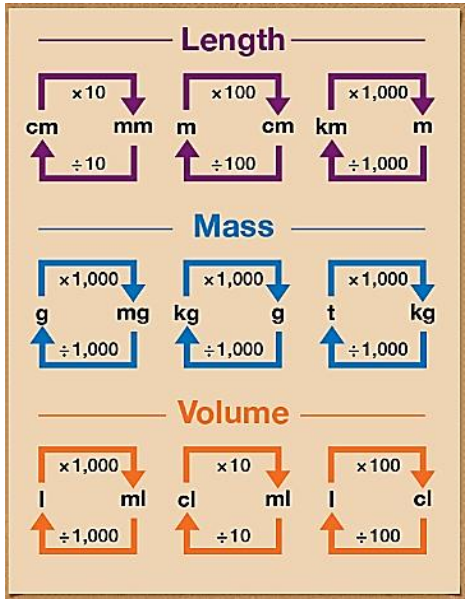












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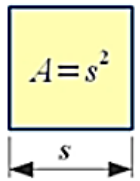
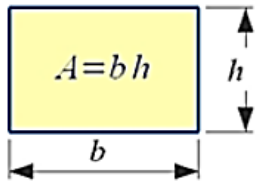
Maths Quick Reference: Geometry (Areas & Volumes)

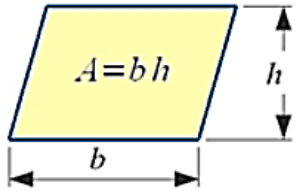
Square



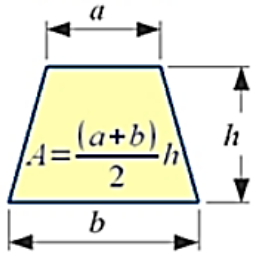
Rectangle



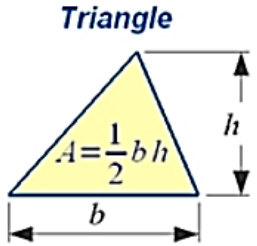
Parallelogram



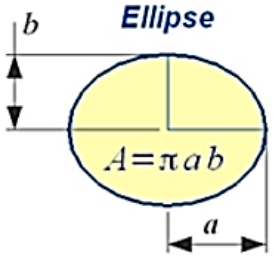
Trapezoid



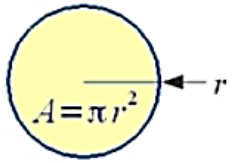
Triangle



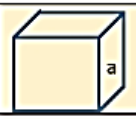
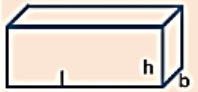
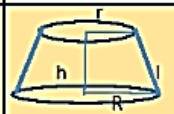
Ellipse



Circle

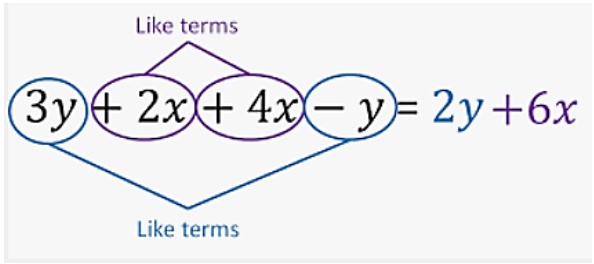


Area and volume of 3d figures

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

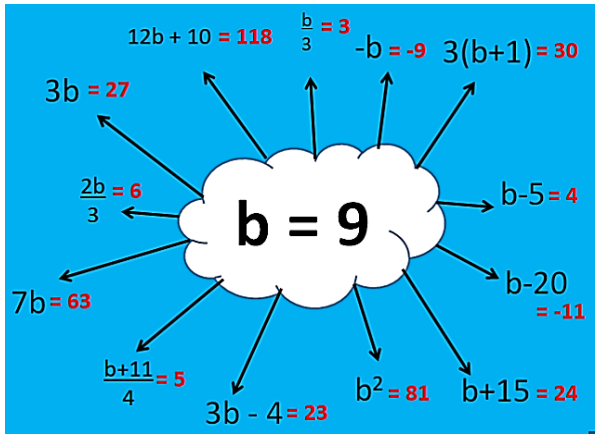


$C \times C \times C \times C = C^4$

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

An Expression	An Equation
$4a + 7b$	$4a + 12 = 60$
A Formula	**An Identity**
$A = \pi r^2$	$(a+b)^2 = a^2 + 2ab + b^2$

Substitution



Expanding Brackets

multiply

$7(x+2)$

$7x+14$

multiply

$5a(b-4)$

$5ab-20a$

FOIL Method

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

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

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

Factorising Brackets

$7x+14$

Common factor?

$7(x+2)$

$5ab-20a$

Common factor?

$5a(b-4)$

Expand & Simplify...

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

$5x + 15 + 6x - 24$

$11x - 9$

Solving Equations

$6x - 5 = 7$

$+5 \quad +5$

$6x = 12$

$\div 6 \quad \div 6$

$x = 2$

Maths Quick Reference: Statistics

Mode
most common

Mean
$\frac{\text{sum of values}}{\text{number of values}}$

Median
middle value

Range
largest value – smallest value

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

Median

7, 3, 4, 1, 7, 6

Arrange in order and pick the middle value

1, 3, 4, 6, 7, 7

Median = (4+6)/2 = 5

Mode

7, 3, 4, 1, 7, 6

Most common number

7, 3, 4, 1, 7, 6

Mode = 7

Range

7, 3, 4, 1, 7, 6

Difference between highest and lowest

Range = 7 – 1 = 6

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

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

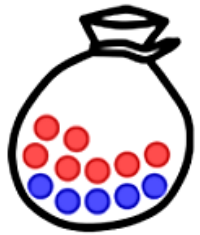
Length (x cm)	Frequency	Midpoint	Midpoint × frequency
$0 < x \leq 10$	4	× 5	= 20
$10 < x \leq 20$	10	× 15	= 150
$20 < x \leq 30$	7	× 25	= 175
$30 < x \leq 40$	4	× 35	= 140
	25		**485**

estimated mean = 485 ÷ 25 = **19·4 cm**

Maths Quick Reference: Probability

Simple Probability

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



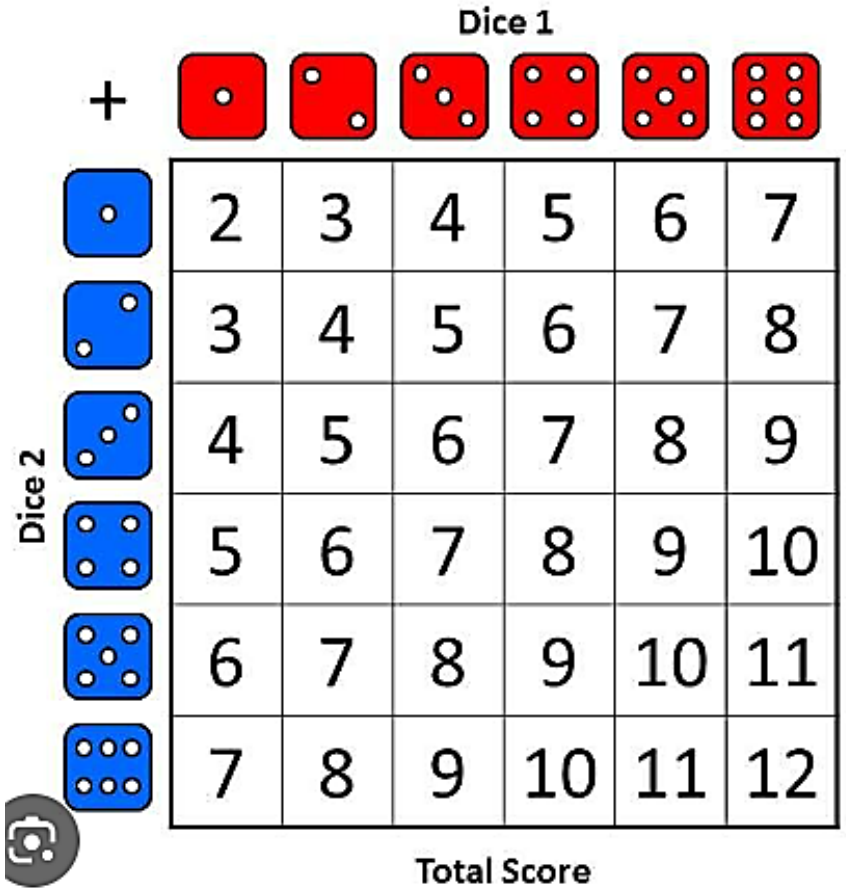
Example:

$P(red) = \frac{7}{12}$ ← Number of red marbles / Total number of marbles (sample space)

$P(blue) = \frac{5}{12}$ ← 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



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English

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.

Year 7 War Poetry

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

- Contextual understanding of the impact of war
- Explore symbolism and allegory
- Recognise 'Form' in poetry
- Demonstrate comprehension skills
- Develop vocabulary and inference skills

Key Concepts

Contrast	The internal conflict of the soldiers as they grapple with their role within war
Craft	How the writers use poetic methods to create meanings in their poems
Context	WWI and the rise of technology in warfare; Politics - countries involved
Characterisation	The narrative perspective in the poems and how that affects the authenticity of the material being discussed

Metacognitive approaches

Poetry Comprehension 5 Ws	**Who?** *Who is speaking? Who is being addressed?* **What?** *What event is being described?* **Where?** Where are the ideas set? **When?** *Time / Past memories & present feelings?* **Why?** *Why has the poet created these ideas? What was their intention?*
Essay Paragraph structure	**S**tatement, **E**vidence/method, **I**nfer, **Z**oom, **E**ffect
MI CCC	What is the **main image**? How is it **created**? How is it **continued**? How is it **contrasted**?
SLIMS	**S**tructure, **L**anguage, **I**magery, **M**ovement, **S**ound

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Year 7 War Poetry

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

- Contextual understanding of the impact of war
- Explore symbolism and allegory
- Recognise 'Form' in poetry
- Demonstrate comprehension skills
- Develop vocabulary and inference skills

Retrieval Practice

Questions	Answers
What does connotation mean?	an idea or feeling which a word invokes for a person in addition to its literal or primary meaning.
Can you name the seven deadly sins?	Lust, Gluttony, Greed, Laziness, Wrath, Envy, Pride,
What is an allegory?	A story with a hidden meaning
What is the Garden of Eden?	The place that God created where Adam and Eve lived before being banished from it.
What are the virtues opposing the deadly sins?	Chastity, Temperance / abstinence, Charity, Diligence, Patience, Gratitude, Humility
What is meant by context?	The historical, societal and cultural factors influencing the writer and their intent.
When was WWI?	28th July 1914 and lasted until 11th November 1918
What is propaganda?	Information, often only giving one part of an argument, with the intention of influencing people's opinions.
What is Latin?	The Italic language of ancient Latium and of Rome and until modern times the dominant language of school, church, and state in western Europe

Career Focus - Where could this take you?

"As a war correspondent, I do get to witness the true horror of war, but also the stories of heroism, of kindness and of stoic resilience against unimaginable forces. I feel, at my core, that the work I do, to bring the stories unfolding on the front lines of war zones around the world, is vital in reporting the truth in a propaganda driven, deep fake, AI, social media world. Whether I am shooting photos or film, I will never shy away from reporting what I see, so those without a voice can be heard through me."

Challenge Activities

- Create a story board for the Adam and Eve story in the Christian Bible.
- Write a letter home about life in the trenches.
- Using your knowledge of analysing poetry, write a poem of your own.

Topic Links

This topic links to:

- Yr 8 Modern Warfare
- Yr 9 Poetic forms
- GCSE War Poetry, Unseen Poetry

Additional Resources

To further practise and develop your knowledge see:

- The Trenches
- Dulce analysis
- Propaganda
- Has poetry distorted our view of WWI?

Year 7 War Poetry

Vocabulary

You will be tested on five words per week.

Keyword	Definition
Armistice	An agreement made by both sides in a war to stop fighting and call a truce.
Bayonet	A knife fixed to the end of a rifle and used as a weapon
Brutality	savage physical violence; great cruelty
Conscription	Compulsory joining of the armed forces ordered by the government
Deserter	A member of the armed forces who deserts
Futile	incapable of producing any useful result; pointless
Innocence	lack of corruption; pure
Jingoistic / Jingoism	Extreme patriotism
Naïve	a person lacking experience, wisdom or judgement
Patriotic / Patriotic	Devotion and support for your country
Pity	The felling of great sadness caused by the suffering and misfortunes of others.
Propaganda	information, especially of a biased or misleading nature, used to promote a political cause or point of view.

Keyword	Definition
Remembrance	the action of remembering something
Sin	an immoral act
Shellshock	Now called PTSD, a condition that comes from extreme stress in battle
Trenches	a long narrow ditch
Allegory	a story with a hidden meaning
Alliteration	is a series of words all staring with the same sound
Connotation	what a word suggests rather than literally what it means
Metaphor	a word or phrase that describes an object or action in a way that isn't literally true.
Onomatopoeia	a word that replicates a sound.
Personification	the attribution of a personal nature or human characteristics to something non-human.
Semantic Field	a group of words that all are related to one another through their meanings.
Simile	a phrase that compares one thing to another thing of a different kind using the word **like** or **as**.
Symbolic	when something stands for or suggests something else; it represents something beyond literal meaning.

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Science

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.

Year 7 Reproductive Systems

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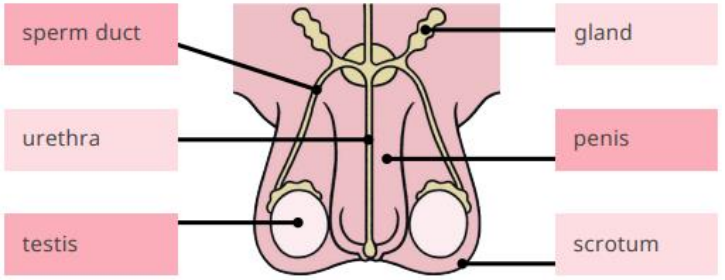
The aims of the sequence of learning are to ensure that all students:
- **Describe the biological processes involved in human reproduction**
- **Explain how plants reproduce and disperse seeds**

Keyword	Definition
Biological sex	Determined by the reproductive organs a person has and the sex chromosomes in their body.
Gamete	A sex cell.
Egg cell	The female sex cell that is released from the ovaries.
Sperm	The male sex cell that is produced in the testes.
Adaptation	The features that a cell has that allow it to perform a particular function.
Puberty	A period when changes occur in males and females to allow them to become sexually mature.
Hormone	A chemical messenger that travels around the body.
Oestrogen	The main female reproductive hormone that thickens the uterus wall.
Testosterone	The main male reproductive hormone that stimulates sperm production.
Conception	The process of becoming pregnant.
Fertilisation	When the sperm and the egg cell fuse together to form a cell.
Embryo	The first 8 weeks of development once a sperm and egg fuse.
Foetus	8 weeks after conception the embryo becomes a foetus.
Contraception	Methods that can be used to prevent pregnancy.

Key Concepts

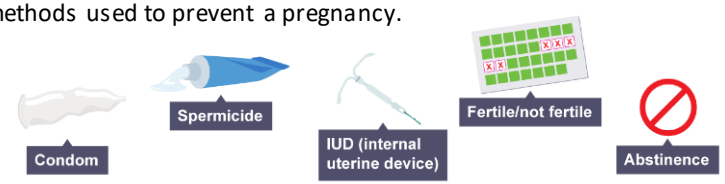
Male reproductive system



Sperm duct	Carries sperm cell to the urethra
Urethra	A tube that transports urine or semen
Testis	Produces sperm cells
Gland	Produces a fluid for the transport of sperm cells
Penis	Where urine and semen pass out of the body
Scrotum	Where the testes are found

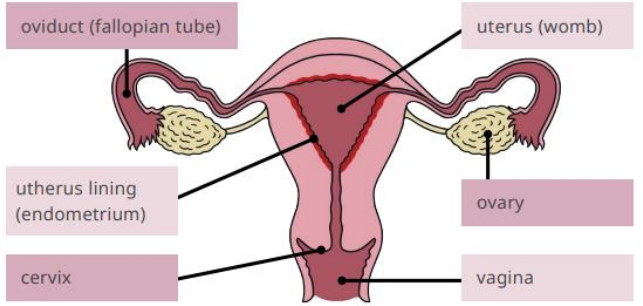
Contraception

There are **mechanical, chemical, surgical and natural** contraceptive methods used to prevent a pregnancy.



The natural method may be chosen by some groups opposed to contraception for religious or ethical reasons.

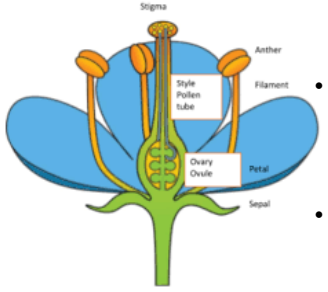
Female reproductive system



Oviduct	Carries egg cells to the uterus
Cervix	Ring of muscle at the bottom of the uterus
Uterus	Where the foetus develops during pregnancy
Ovary	Where egg cells mature and are released
Vagina	A tube leading from the cervix to outside the body

Plant reproductive systems

How seeds are made



- Pollen is carried by insects or blown by the wind from one flower to another. This process is called pollination.
- Pollen reaches the new flower and travels to the ovary where it fertilises egg cells (ovules) to make seeds. This is fertilisation.
- The seeds are scattered by animals or the wind. This process is called dispersal. Some of the seeds will grow into new plants.

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Year 7 Reproductive Systems

The aims of the sequence of learning are to ensure that all students:
- **Describe the biological processes involved in human reproduction**
- **Explain how plants reproduce and disperse seeds**

Retrieval Practice

Questions	Answers
What is the fusion of egg and sperm called?	Fertilisation
How is a sperm cell adapted for fertilisation?	A long tail to allow it to move towards the egg cell. Many mitochondria to release energy for movement.
How is an egg cell adapted for fertilisation?	Large size for nutrients for growing embryo. Cell membrane changes after fertilisation to stop more sperm from entering.
What is the name given to a developing baby more than eight weeks after conception?	Foetus
Describe the changes that occur in males during puberty.	Facial hair, growth spurt, mood changes, penis and testes grow, underarm and pubic hair grow, testes produce sperm.
Describe the changes that occur in females during puberty.	Growth spurt, mood changes, breasts develop, hips widen, menstrual cycle begins, pubic and underarm hair grow, vaginal discharge occurs.
Name the parts of the male reproductive system.	Testes, Penis, Urethra, Sperm duct, Gland and Scrotum.
Name the parts of the female reproductive system.	Ovaries, Oviduct, Uterus, Cervix, Vagina
Where does fertilisation take place?	In the oviduct (fallopian tubes)
Where does the embryo/foetus develop?	In the uterus
Name the parts of a flowering plant.	Stem, Sepal, Ovary, Ovule, Filament, Anther, Petal, Stigma, Style
What is pollination?	When pollen is transferred by insects or wind from one flower to another
How are seeds dispersed?	Via animals, the wind or water

Career Focus - Where could this take you?

I am a Horticulturist. I grow and sell plants for food and for display. I have a good understanding of how plants reproduce and how to maximise growth.
The qualities I need for this job include patience to experiment with growing unusual or exotic plants, and resilience as sometimes the growth of plants in out of my control and may be affected by thigs such as pests and weather.
I sometimes sell directly to the public at markets, or I sell to shops and restaurants. I need a good understanding of how to make a profit.
I became a horticulturist through an apprenticeship and completing college courses.

Challenge Activities

1. Make flash cards for the key words.
2. Create a mind map of the reproductive systems topic. Remember to include key words and links between information.
3. Produce a fact file or a poster about plant reproduction and seed dispersal. Include some examples of unusual plants.
4. Write a letter to a teenager explaining the changes that will happen during puberty and why these changes happen.
5. Research a scientist that changed our understanding of reproduction.

Topic Links

This topic links to:
- Specialized cells
- Interdependence

We will also be practising how to
- Research information
- Test different methods of seed dispersal

Additional Resources

To further practise and develop youR knowledge see:

Educake - https://www.educake.co.uk/
BBC Bitesize - https://www.bbc.co.uk/bitesize/topics/zybbkqt
YouTube Cognito - https://www.youtube.com/watch?v=Gf_WLrXAqIA

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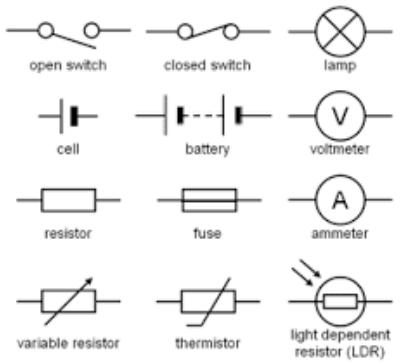
Year 7 Electric Circuits

The aims of the sequence of learning are to ensure that all students:
- **Describe series and parallel circuits**
- **Explain the uses of magnets**

Keyword	Definition
Circuit	A complete loop of conductors that allow electricity to flow.
Charge	Flows in an electric circuit. This is the negative electrons moving around the circuit.
Current	The flow of electrical charge. Measured in amps (A)
Potential Difference	The amount of push (energy) provided by the battery. Also known as voltage (V).
Resistance	A measure of how difficult it is for a charge to pass through a component such as a bulb or resistor.
Component	Part of a circuit, usually drawn as a symbol.
Series	Components are linked one after another, making one loop.
Parallel	Components are linked in more than one loop.
Ammeter	An instrument used to measure current in a circuit.
Voltmeter	An instrument used to measure the potential difference between two points in a circuit.
Battery	Store chemical energy and transfer it as current in an electrical circuit.
Magnetism	A non-contact force where magnetic materials are attracted to a magnet.
Magnetic Field Lines	The magnetic field around a magnet drawn as lines. Moving from the north pole to the south pole.
Electromagnet	Can be created when an electric current is passed through a metal resulting in a magnetic field.

Key Concepts

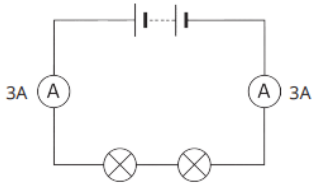
Circuit Diagrams



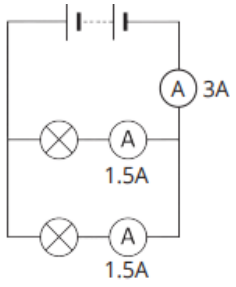
- Circuit diagrams are used to show how electrical **components** are connected in a **circuit**.
- Individual circuit components are represented using circuit symbols.
- When drawing a circuit diagram these symbols are connected in either a series or a parallel circuit.

Series and Parallel Circuits

Series Circuits
When we connect **components** in series they are all in the same loop one after another.
The components are connected end-to-end with the last wire completing the circuit to form the single loop, meaning there is only one path for the **current** to flow.
The current is the same everywhere in a series circuit.



Parallel Circuits
When we connect **components** in **parallel**, the components are connected on different branches of the circuit. There are two or more 'loops' and multiple paths for a **current** to flow.
The current is split between multiple branches in a parallel circuit.



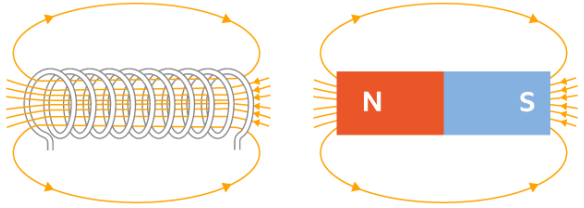
Resistance

- Resistance (R) is a measure of how difficult it is for current to flow. Resistance is measured in units called ohms (Ω).
- The amount of **current** flowing in a circuit is affected by the resistance of that circuit.
- Each component in a circuit has a resistance.
- Resistance can be calculated using the equation:
  Resistance = potential difference ÷ current

Some materials are better conductors of electricity than others.
Conductors allow electrons to flow more easily, whereas insulators make this more difficult.

Electromagnets

When an electrical charge flows through a wire, a magnetic field is created. The larger the current the stronger the electromagnet. The strength can also be increased by increasing the number of coils around the iron core.



Year 7 Electric Circuits

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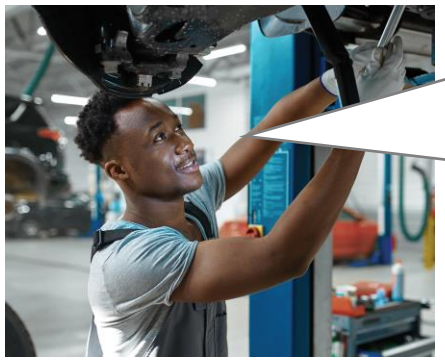
The aims of the sequence of learning are to ensure that all students:

- **Describe series and parallel circuits**
- **Explain the uses of magnets**

Retrieval Practice

Questions	Answers
What is a circuit?	A network of components connected by wires.
Name the component used to measure current.	An ammeter – measures current in amps (A).
Name the component used to measure potential difference.	A voltmeter – measures voltage in volts (V).
What is an electrical conductor?	A material that allows current to flow through it.
What is an electrical insulator?	A material that doesn't allow current to flow through it.
What is charge?	A property of a particle that is either positive or negative – measured in coulombs.
What is current?	How much charge passes a certain point each second – measured in amps.
What is a series circuit?	A series circuit is a circuit made from only one loop.
What is a parallel circuit?	A parallel circuit is a circuit made from multiple loops and junctions.
How does current behave in a series circuit?	Current is the same throughout the series circuit.
How does current behave in a parallel circuit?	Current splits at junctions in a parallel circuit; it is different in different loops.
What factors affect resistance?	The type of material, the width of the wire, the length of the wire and temperature.
How can we alter the strength of an electromagnet?	Increase the current or increase the number of coils.
What are the advantages of using an electromagnet?	The strength can be changed, it can be switched on and off, it can be reversed.

Career Focus - Where could this take you?



I am an electric vehicle mechanic. Recently there has been a huge increase in people switching to electric vehicles so my job is more important than ever.
To be an electric vehicle mechanic it is important that I understand circuits so I can easily identify faults. I start off by connecting a diagnostic system to the car to help identify the fault but sometimes I must figure out which component needs replacing myself.
In order to become qualified, I had to undergo a specialist training programme where I learnt about the risks involved and how the battery and motor worked.

Challenge Activities

1. Make flash cards for the key words.
2. Create a mind map of the electric circuits topic. Remember to include key words and links between information.
3. Draw a series and parallel circuit identify the key components. Compare the two circuits and explain what happens to bulbs in each circuit if one breaks.
4. Research more about electric cars and produce a fact file about them. How do they work? Are they better for the environment?
5. Find out about a scientist that changed our understanding of electricity. What experiments did they do? What technology did they invent?

Topic Links

This topic links to:

- Atoms
- Energy
- Organisation – the heart

We will also be practising how to

- Draw scientific diagrams
- Measure and calculate current
- Use equations

Additional Resources

To further practise and develop your knowledge see:

Educake - https://www.educake.co.uk/
BBC Bitesize - https://www.bbc.co.uk/bitesize/topics/zgy39j6/artides/zjm8kty
YouTube Cognito - https://www.youtube.com/watch?v=R3hdaLpq2AA

Year 7 Earth Cycles

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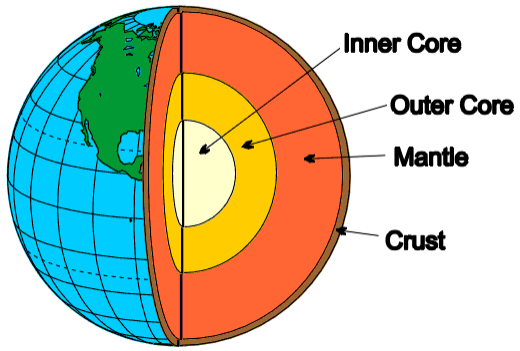
The aims of the sequence of learning are to ensure that all students:

- **Describe the rock, water and carbon cycle**
- **Explain the effects of pollution and climate change**

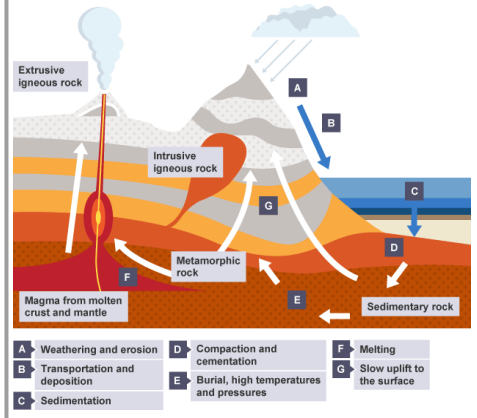
Keyword	Definition
Sedimentary Rock	Formed from the broken remains of other rocks that become joined together.
Igneous Rock	Formed from molten (liquid) rock that has cooled and solidified.
Metamorphic Rock	Formed from other rocks which change due to **heat** or **pressure**.
Evaporation	The process of turning a liquid into a gas..
Condensation	The process of turning a gas into a liquid.
Transpiration	When plants take up water from the soil and release it into the atmosphere vis their leaves.
Precipitation	Water that falls from clouds to the ground as rain, snow or hail.
Run off	Water that runs on the surface of the land.
Atmospheric CO2	The amount of carbon dioxide that is found in the air. Currently around 0.04%
Photosynthesis	The process green plants use to turn water and carbon dioxide into glucose and oxygen using light energy.
Respiration	The process of breaking down sugar in living organisms and returning it back to the atmosphere.
Decomposition	When living things are broken down into simpler molecules.
Global Warming	The long-term warming of the planet's overall temperature.

Key Concepts

The Structure of the Earth

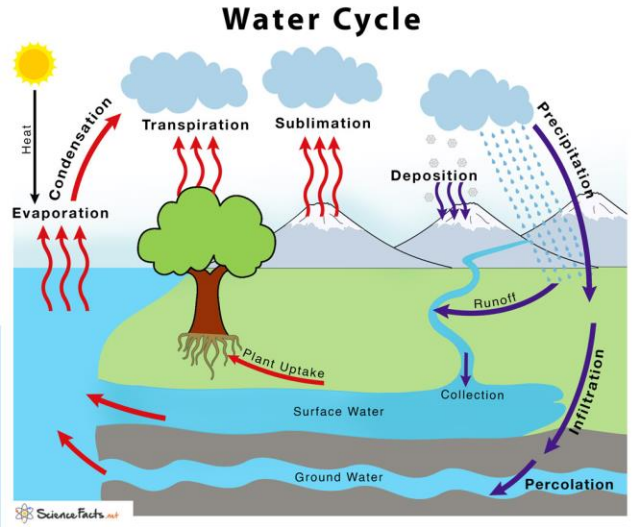


The Rock Cycle



- The rocks on Earth are constantly changing due to many different processes.
- There are three main types of rock, with rocks changing between each type over millions of years.
- There are sedimentary, igneous (intrusive and extrusive) and metamorphic rocks. Due to how they were formed they have key characteristics.
- This rock recycling is a process called the rock cycle.

The Water Cycle

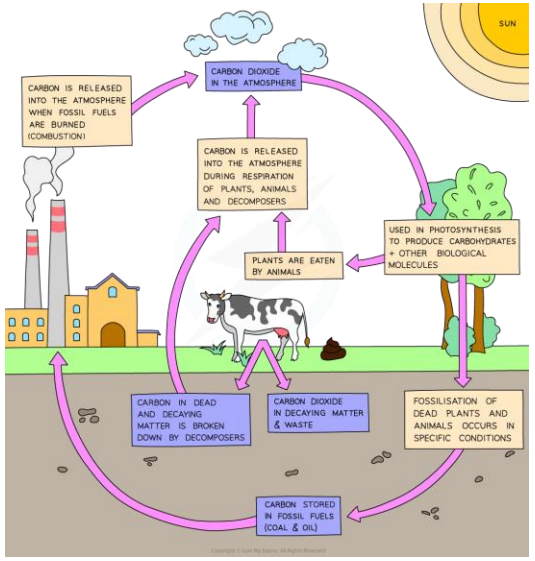


The Carbon Cycle

Carbon is an essential element for life on Earth.

Every living organism has carbon compounds inside each of its cells, such as fats and proteins.

The carbon cycle shows how atoms of carbon can exist within different compounds at different times and be recycled between living organisms and the environment.



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Year 7 Earth Cycles

The aims of the sequence of learning are to ensure that all students:
- **Describe the rock, water and carbon cycle**
- **Explain the effects of pollution and climate change**

Retrieval Practice

Questions	Answers
Name the parts of the Earth.	Crust, Mantle, Outer core and inner core.
How is igneous rock formed?	Formed when magma or lava cools and solidifies.
How is sedimentary rock formed?	Formed from compressed or cemented layers of sediment.
How is metamorphic rock formed?	Formed through heat and pressure
What is the rock cycle?	The continuous process by which rocks form and change.
What is the water cycle?	The continuous process by which water moves from Earth's surface to the atmosphere and back.
Name the 2 main processes that move water into the atmosphere.	Evaporation and transpiration
Name the process that removes water from the atmosphere.	Precipitation.
What is the carbon cycle?	The process by which carbon atoms are continually added and removed from the atmosphere. Carbon is stored in rock, sediment, ocean and living organisms.
What natural processes add carbon to the atmosphere?	Respiration and decomposition.
What process **adds** extra carbon to the atmosphere (in the form of CO_2)?	Combustion
What process removes carbon from the atmosphere?	Photosynthesis.
Carbon dioxide is a greenhouse gas. What does this mean?	It is a gas in the atmosphere that traps heat – stops it escaping back into space.

Career Focus - Where could this take you?

I am a climate scientist. I study the influences that humans are having in the Earth's climate . I monitor the parts of the Earth that are changing such as the air, sea temperatures and how fast glaciers are melting. I then predict how these changes might affect the planet in the future.
I can also be involved in designing and building equipment used to gather data or write predictions about the future effects of climate change. Policy makers such as government advisers rely on my advice.
In order to qualify I needed a science degree and to carry out some postgraduate studies.

Challenge Activities

1. Make flash cards for the key words.
2. Create a mind map of the earth cycles topic. Remember to include key words and links between information.
3. Construct a poster about different types of igneous, metamorphic and sedimentary rocks. Name them and describe what they are used for.
4. Research how new technologies are trying to reduce the amount of CO_2 in the atmosphere. How expensive are they? Will they be used a lot?
5. Find out about a scientist that changed our understanding of climate change and how their research has changed our everyday lives.

Topic Links

This topic links to:
- Chemical reactions
- Energy
- Climate change

We will also be practising how to
- Use percentages
- Evaluate evidence for climate change

Additional Resources

To further practise and develop your knowledge see:

Educake - https://www.educake.co.uk/
BBC Bitesize - https://www.bbc.co.uk/bitesize/topics/z3fv4wx
YouTube Cognito - https://www.youtube.com/watch?v=urzpnjwazV0

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Humanities

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

Year 7: Medieval England

The aims of the sequence of learning are to ensure that all students:
- Argue whether Medieval England was filthy
- Explain whether the Black Death was significant in shaping England

Keyword	Definition
Archaeologist	A person who studies history by discovering and analysing artefacts.
Excavate	Removing earth carefully in order to find artefacts or remains.
Domesday book	A record of the extent, value and ownership of land in England, made in 1086 by order of King William I.
Villein	Someone who is under the control of a lord or master and farms in return for the land they live on.
Freeman	A person who is not a slave.
Jury	A group of ordinary people who hear both sides of a case and decide on a verdict in a court.
The Hue and Cry	A way to alert people in a medieval village that a crime had been committed.
Tithings	A group of ten men over age twelve, who ensured that nobody else in the group broke the law.
Pilgrimage	A long and hard journey to a place of religious importance.
Doom painting	A painting of the moment Jesus judges souls and decides whether they should go to heaven or hell.
Purgatory	Believed to be a place where souls go after death, to be cleansed of their sins before they enter heaven.
Soul	The spiritual part of a human being or animal.
Black death	A disease which spread around England in 1348.
Revolt	Taking violent action against a government or ruler
Protest	Taking action, peacefully or violently against something that you disagree with.

Key Concepts

What did medieval Villages look like?
Nearly everyone in the middle ages lived in the countryside. Historians know what medieval villages looked like through research and archaeology. For example, the pictures below show the medieval village of Wharram Percy in Yorkshire. The first picture shows the remains of the village from above, the second picture shows a reconstruction of the town based on the archaeological excavation that took place at the site.

Villages such as Wharram Percy, that had land around them, were called Manors. They were held and controlled by a lord of the manor.

Life in a medieval village: Men and women worked hard in medieval villages. Work that continued all year round included; collecting firewood, digging drainage ditches, looking after animals and repairing houses. On top of the work they did on their own homes, villeins also had to work for the lord! At busy times of the year, such as the harvest, this could take up all of their time. And remember, they did not get paid for this work, the work for the lord was merely in return for the land they farmed and lived on.

Justice in the Middle Ages: The medieval justice system is different to the justice system that we have today. E.g. the hue and Cry, ensured everyone in the village helped to catch people that broke the law. E.g. if a villager was attacked they could raise the hue and cry, everyone who could hear them would come to help catch the guilty person. Other forms of medieval justice included Tithings and the Manorial court, which helped make sure the Villeins did the work they owed the lord and kept law and order in the village.

Religion in the Middle Ages: Religion played a very important role in peoples lives in the middle ages. Everyone had to go to church on Sundays and on holy days, people believed that god controlled every part of their lives and most importantly God decided whether you went to heaven or hell.

Doom Painting: Most people could not read the bible for themselves so wall paintings (murals) were put on the walls of churches so people could understand the teachings of the church.

This shows the souls of people climbing the ladder to get to heaven. People were terrified of ending up in hell where they would be in agony forever.

The Black Death 1348: People in Medieval England always faced famine and disease, but in 1348 they had to face the Black Death. It spread from Asia to Europe and then to England. At the time doctors did not know about germs and did not know how to treat the illness. As a result one third of the population died. This caused major unrest in the decades after the outbreak.

The Peasants Revolt 1381: Most of the population in the middle ages were powerless. However, in 1381 the peasants rose up against King Richard II. They rose up because they were unhappy with their treatment and angry about high taxes. So in 1381 a large group of peasants from the south east of England set off to London to protest, several houses were set on fire and the Archbishop of Canterbury was killed in the protest.

Year 7: Medieval England

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

- Argue whether Medieval England was filthy
- Explain whether the Black Death was significant in shaping England

Retrieval Practice

Questions	Answers
How do Historians know what medieval villages looked like?	Through research and archaeology, historians can analyse evidence, such as the remains of buildings and artefacts to reconstruct medieval villages.
Name three features of a medieval village.	Barn, Manor house, Church, Villagers houses, field for animals to graze, kitchen garden for the manor house.
What was the busiest time of year for villeins? Why?	The harvest, this would involve gathering all the crops grown on the lord's land. This could mean they would have to work for the lord 7 days a week!
What was trial by ordeal?	This was a feature of the medieval justice system. It was used when the courts could not decide if someone was guilty or not guilty, a trial by ordeal 'let God decide'.
Why was religion so important to people in the middle ages?	People believed that Gid controlled every aspect of their lives and most importantly decided whether or not they would go to heaven of hell when they died.
Describe the medieval view of Hell.	People were terrified of hell as they believed they would burn in agony for all eternity. In the doom paintings that depicted hell, images show people being boiled alive and placed on spikes.
Name two ways you could increase your chances of getting to heaven.	Pilgrimages and buying your way to heaven.
What were the two types of plague that spread in 1348?	Bubonic plague and the Pneumonic plague.
What were the symptoms of the Bubonic Plague?	Fever, buboes (swellings) in the groin and in the armpit. 70% died and it took around 4 to 7 days for them to die.
Why did the peasants revolt in 1381?	They believed that they were not treated very well by their lords and disagreed with the high taxes.

Career Focus - Where could this take you?

I am a Sociologist- My job is to study human behaviour, interaction, and organisation. I observe the activity of social, religious, political, and economic groups, organisations, and institutions. I examine the effect of social influences, including organisations and institutions, on different individuals and groups. I can help people understand why they act and feel certain ways and also help businesses understand what will appeal to their customers.

Challenge Activities

1. **Create your own version of a doom painting.** Use the doom painting from the key concepts box for inspiration. Also do your own research. Make it as detailed as possible and ensure you include the key features: A ladder, peoples souls, heaven and hell.
2. **Create a leaflet instructing people how they can get to heaven.** Remember! You are writing the leaflet as though you are living in Medieval England, the leaflet should be persuasive, You should also add pictures to make the leaflet eye catching
3. **Make a poster about how life in Medieval England compares to life in England today.** One half should detail what life was like in medieval times e.g. Villages, Houses, Farming, Justice, Religion and Illness. The other half should focus on aspects of life in modern England. The best posters will add information about how life now compares to life in the middle ages. For example how has healthcare changed?

Topic Links

This topic links to:

- The Norman Conquest
- Medicine through time
- Christianity
- Democracy

Additional Resources

To further practise and develop you knowledge see:

- https://www.bbc.co.uk/bitesize/topics/zbn7jsg/articles/zwyh6g8#zw3nhcw6
- https://www.historyhit.com/life-of-medieval-peasants/

Timeline

TIMELINE 0-2000 AD

A timeline is a way to record important events and track when they happened.

43 AD – Romans invade Britain.

71 AD – Romans conquer Northern England.

140 AD – Romans conquer Scotland.

400–410 AD – The Romans withdraw from Britain.

516 AD – British defeat Anglo-Saxons at the Battle of Mount Badon.

867 AD – Vikings capture Northumbria.

926 AD – Anglo-Saxons conquer Eastern England.

ROMAN BRITAIN 43–410 AD

ANGLO-SAXON & VIKING BRITAIN 410–1066 AD

0 | 100 AD | 200 AD | 300 AD | 400 AD | 500 AD | 600 AD | 700 AD | 800 AD | 900 AD | 1000 AD

78 AD – Romans conquer Wales.

122 AD – Emperor Hadrian orders his soldiers to build a wall across Northern Britain. It became known as Hadrian's Wall.

449 AD – Anglo-Saxons invade Britain.

789 AD – The Vikings first invade England in Dorset.

874 AD – The Vikings conquer the Kingdom of Mercia.

1939–1945 AD – The Second World War occurs.

1066 AD – William of Normandy defeats King Harold at the Battle of Hastings and becomes King of England.

1348 AD – The Black Death arrives in England and kills almost half of the population.

1534 AD – Henry VIII forms the Church of England and makes himself Head of the Church.

1707 AD – The Act of Union joins England and Scotland into one country.

1800 AD – The Acts of Union join Ireland with England and Scotland.

MEDIEVAL BRITAIN 1066–1485 AD

TUDOR BRITAIN 1485–1603 AD

STUART BRITAIN 1603–1714 AD

GEORGIAN BRITAIN 1714–1837 AD

VICTORIAN BRITAIN 1837–1901 AD

20TH CENTURY BRITAIN 1901–2000 AD

1000 AD | 1100 AD | 1200 AD | 1300 AD | 1400 AD | 1500 AD | 1600 AD | 1700 AD | 1800 AD | 1900 AD | 2000 AD

1914–1918 AD – The First World War occurs.

1086 AD – The Domesday Book is compiled to record what people in Britain owned and calculate how much tax they owed.

1337 AD – King Edward III invades France and the Hundred Years War begins.

1453 AD – The Hundred Years War ends.

1588 AD – The English defeat the Spanish Armada.

1776 AD – The American colonies declare independence from Britain during the War of Independence.

1845 AD – The Great Irish Potato Famine begins. Millions of people die or migrate to other countries.

Year 7 Maps and Mapping

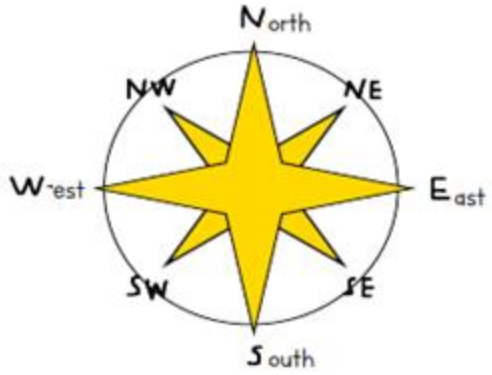
The aims of the sequence of learning are to ensure that all students:

- Accurately use an 8- and 16-point compass
- Use four and six-figure grid references, to locate places on maps
- Measure distances on a map, and use the scale to work out actual distances
- Interpret contour lines and their patterns, and spot heights on maps
- Accurately use a world map to locate places using lines of longitude and latitude

Keyword	Definition
Aerial Photo	Taking of photographs from an aircraft or other airborne platform
Contour lines	A line drawn on a map to indicate ground elevation
Degrees	To measure longitude and latitude.
Grid Reference	Used to locate a particular square/ location on a map
Latitude	Lines which run parallel to the equator and measure the distance north or south of the equator
Longitude	Lines of longitude run in a north to south direction to locate places
Minutes	Degrees of longitude and latitude are divided into minutes (60 minutes in 1 degree)
Prime Meridian	The line of 0° longitude, starting point for measuring distance both east and west around Earth
Scale	The relationship between distance on a map and the corresponding distance on the ground
Spot Heights	An exact point on a map with its height
Topography	The features and forms of land surfaces

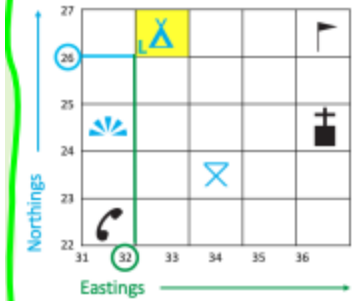
Key Concepts

COMPASS POINTS



4 FIGURE GRID REFERENCES

Along the edges of each map there are numbers. These numbers help you work out where a location is on a map. Northings are numbers that go from bottom to top, Eastings go from left to right.



The first two numbers give the eastings.

32 26

The second two numbers give the northings.

Remember... eastings then northings!

Along the corridor and up the stairs!

6 FIGURE GRID REFERENCES

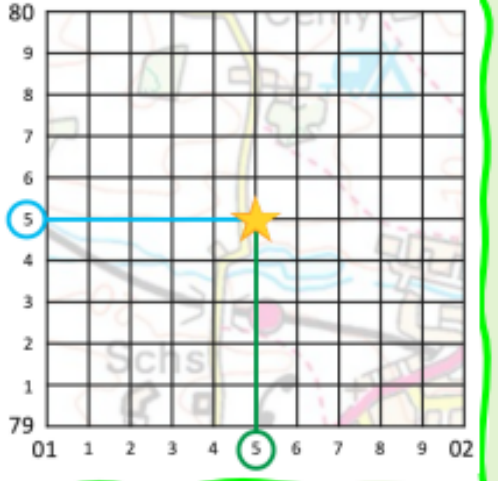
We can use six-figure grid references to find an exact location within a grid square, so they are much more accurate The grid square is divided into tenths.

Example:

015 795

The first three numbers give the easting which includes the number of tenths.

The last three numbers give the northing which includes the number of tenths.



Year 7 Maps and Mapping

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

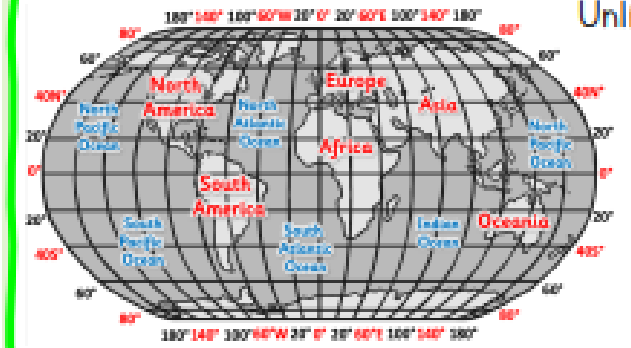
- Accurately use an 8- and 16-point compass
- Use four and six-figure grid references, to locate places on maps
- Measure distances on a map, and use the scale to work out actual distances
- Interpret contour lines and their patterns, and spot heights on maps
- Accurately use a world map to locate places using lines of longitude and latitude

Key Concepts

MAP SYMBOLS

Symbols are useful for lots of reasons including, space saving on a map, multi-lingual (all languages can understand them), saves time, clear.

LONGITUDE AND LATITUDE



Unlike grid lines where we go along the corridor and the stairs, here we go **UP** and **ACROSS**

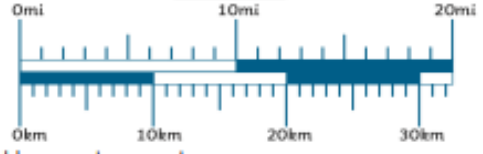
LATITUDE
Flat lines. Flat-itude!

LONGITUDE
Long lines – up and down

SCALE AND DISTANCE

OS maps have a scale. On some smaller maps, 1cm on the map equals 250m in real life. On some larger maps, 1cm on the map equals 500m. Different maps might have different scales, so check on your map to find its scale.

LINE SCALE



Using a line scale on a map is as easy as using a ruler. The important thing to remember is that a line scale shows measurements in km and the measurements on a ruler are in cm.

WORD SCALE

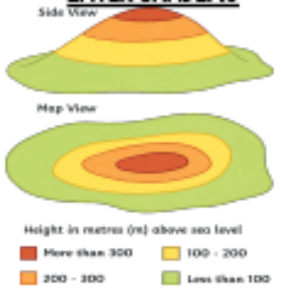
One centimeter on the map represents 3 kilometers on the ground. (1cm = 3 km)

Using the scale above, if we measure the distance on a map between two places with our ruler. The measurement is 4cm. We then have to multiply that measurement by 3 to calculate that the real distance between the two places is 12km.

HEIGHT AND RELIEF

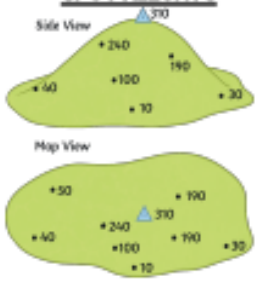
RELIEF the difference between the highest and lowest heights of an area.
TOPOGRAPHY the surface features of the earth like hills, mountains, valleys etc.

LAYER SHADING



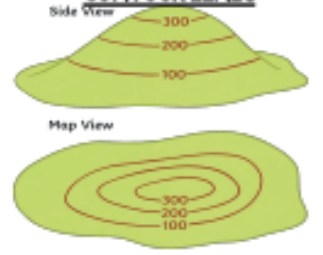
Areas of different heights are shown using different colours. A key is used to show how high the land is.

SPOT HEIGHTS



The exact height of a place above the ground is measured and written onto a map.

CONTOUR LINES



Contour lines are lines on a map which join up places of the same height. Everywhere along a contour line is the same height.

Year 7 Maps and Mapping

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

- Accurately use an 8- and 16-point compass
- Use four and six-figure grid references, to locate places on maps
- Measure distances on a map, and use the scale to work out actual distances
- Interpret contour lines and their patterns, and spot heights on maps
- Accurately use a world map to locate places using lines of longitude and latitude

Retrieval Practice

Questions	Answers
Which compass point is opposite South West?	North East
Which compass point is opposite North West?	South East
What are Northings?	Numbers on a map which go from the bottom to the top
What are Eastings?	Numbers on a map which go from left to right
What is meant by the term topography?	The surface features of the earth like hills and valleys
What are the lines on a world map referred to as?	Lines of longitude and latitude
What do contour lines close to each other show?	A steep slope
What are the map symbols for a bus station and parking?	 and 
What does a 6-figure grid reference show?	The exact location of a point within a grid square. They are more accurate

Career Focus - Cartographer

As a cartographer I design digital or paper-based maps, I check maps and charts are accurate and to scale. I also edit maps by adding or removing new roads, structures or landmarks. I also collect and analyse data from remote sensors on satellites and planes

Challenge Activities

- Create a contour model of a hill, using cardboard - try to give your hill different types of slope and relief
- Design your own map symbols and then create a map of your local area and add your symbols to show the features of the area where you live
- Write a set of detailed instructions you could provide to a friend to get them from school to your house, or from one location to another of your choice

Topic Links

This topic links to:

- Maths
- Science

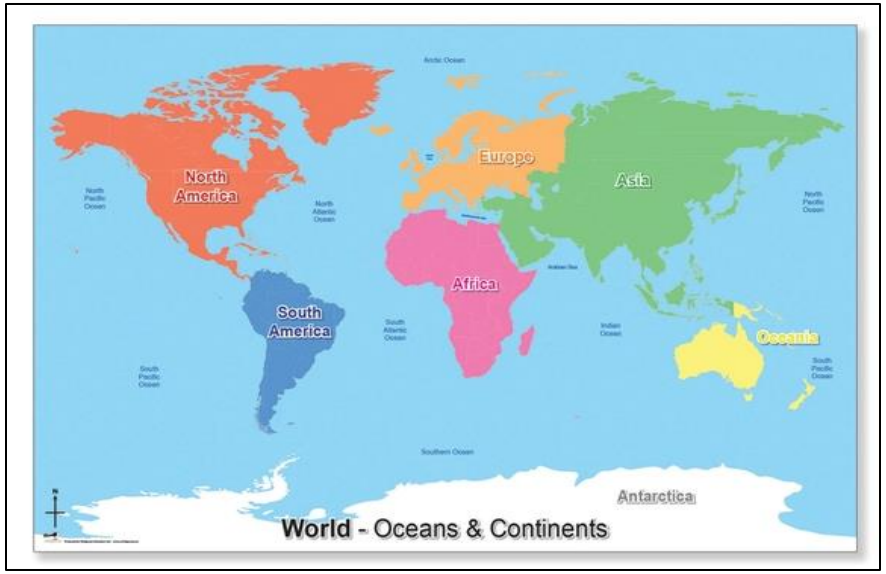
Additional Resources

To further practise and develop your knowledge see:

Map symbols, direction & relief Grid references & distance

Geography

Key Concepts: World – Countries and Oceans



Year 7 Hinduism - Practices

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

- Discuss why there is such a focus on the three avatars of God
- Describe how going to a Mandir is the best way for a Hindu to show their faith

Keyword	Definition
Hinduism	A religion which has cultural traditions which developed from Vedic religion.
Samskaras	A ceremony or a rite, which marks a major event in the life of a Hindu.
Sacred	Something that is dedicated or set apart for the services or worship of a deity; is considered worthy of spiritual respect or devotion.
Ceremony	A set of acts, often traditional or religious, performed at formal occasions. In Hinduism rituals are performed to bring spirituality into human life.
Symbolism	Hinduism is rich on symbolism. Many acts of worship, such as puja are symbolic. Symbolism is the idea that things represent other things.
Pilgrimage	A journey, especially a long one, which is made to some sacred place as an act of religious devotion. Pilgrimage in Hinduism is the practice of journeying to sites where religious powers, knowledge, or experience have been marked or been present.

Key Concepts

Samskaras

Religious people often have ceremonies to mark changes in their life. Hindu rites of passage cover a person's birth to their death through various traditions and customs.

Hindu sacraments are called 'sanskars'

The sacraments performed at the time of a wedding are called 'Vivah Sanskar'.

This sanskar marks the start of the second and the most important stage of life called the 'Grihistha Ashrama' which involves setting up of a new family unit.

Sacred Thread ceremony (Upanayana)

The Sacred Thread ceremony is a ceremony for boys in some Hindu communities to confirm they are of an age to take on religious responsibility.

Girls are sometimes honoured in the same way, but it is rare for them to receive and wear the thread.

In some Hindu communities, the male participant's head is shaved for the ceremony, symbolising a cleansing from their old ways of living. New clothes are put on after bathing. Gifts and blessings from family and friends are often received.

In some communities, the person asks family and friends for **alms** to show that they no longer expect the family to automatically provide for them now they are an adult.

Features of the Sacred Thread ceremony include:

- The **Janoi** is made up of three strands, representing purity of thought, words and actions
- The cotton strands go over the left shoulder and under the right arm
- Janoi wearers may chant a special **mantra** when putting on and taking off their sacred thread
- Vows are made to obey all aspects of the first **ashrama**
- Some young Hindus also accept a **Guru** at this point and start their study of **scripture**. It is increasingly common for young Hindus in the UK and in urban India to have the ceremony at different ages.

Year 7 Hinduism - Practices

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

- Discuss why there is such a focus on the three avatars of God
- Describe how going to a Mandir is the best way for a Hindu to show their faith

Key Concepts

Puja Tray

The Puja Tray

On the puja tray there is

- A pot of water for ritual cleansing.
- A bell to call the family to worship.
- A tiny pot of red gum paste to mark the forehead. This mark means that a woman's soul (her husband) is with her.
- An Aarti lamp for the Aarti ceremony.
- An incense burner or jos stick holder.

Holi

A Hindu festival that celebrates spring, love, and new life.

Some families hold religious ceremonies, but for many Holi is more a time for fun. It's a colourful festival, with dancing, singing and throwing of powder paint and coloured water.

Holi is also known as the **"festival of colours".**

Kumbh Mela

One of the most important pilgrimages in Hinduism is **Kumbh Mela**. This is the largest gathering of people in the world.

Millions of people attend and bathe in the Ganges (in North India).

The main Kumbh Mela gathering takes place every 12 years, with other events taking place every three years at four different sites (a different site is used every three years).

Hindu Pilgrimage

Hindu practices allow those who follow the religion to demonstrate their commitment to the faith and this includes worshipping in temples and at shrines.

Hindu practices might also involve showing a commitment to the wider community, such as pilgrimage and charity work.

Varanasi

The most sacred city in Hinduism is **Varanasi**, as it is one of the oldest and most respected cities. It is believed to be the city where **Shiva**, the god of destruction, lived a long time ago.

The **River Ganges**, which is one of the most sacred rivers in the world, runs through the city and is important as it is where Hindus bathe in the hope, they can wash their sins away. A lot of Hindus believe that people who die in the city of Varanasi can achieve moksha.

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Year 7 Hinduism - Practices

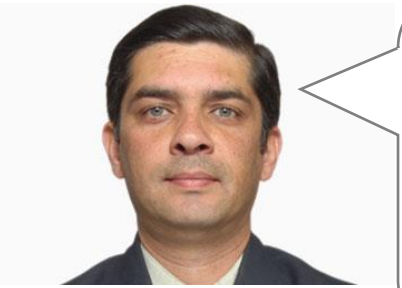
The aims of the sequence of learning are to ensure that all students:

- Discuss why there is such a focus on the three avatars of God
- Describe how going to a Mandir is the best way for a Hindu to show their faith

Retrieval Practice

Questions	Answers
What are Samskaras?	Samskaras are rites of passage within Hinduism. Marking important event within their life.
Why is the thread ceremony important within Hinduism?	The Sacred Thread ceremony is a ceremony for boys in some Hindu communities to confirm they are of an age to take on religious responsibility. This represents a new beginning as well as maturity to help and provide for their family.
Whose story lies between the festival of Holi?	The story of Holika and Prahlad. The story behind Holi is about good triumphing over evil.
What do Hindus use in worship?	Hindus use a puja tray, when they are worshipping.
Where do Hindus go for pilgrimage?	Hindus go to Varanasi, as this is the sacred site in Hinduism.
Why is Varanasi a sacred site for Hindus?	It is believed to be the city where **Shiva**, the god of destruction, lived a long time ago. The **River Ganges**, which is one of the most sacred rivers in the world, runs through the city and is important as it is where Hindus bathe in the hope, they can wash their sins away. A lot of Hindus believe that people who die in the city of Varanasi can achieve moksha.
Why do Hindus celebrate Navratri?	Navratri is a time when Hindus celebrate the goddess Durga for killing the demon, Mahishasura. Nav means **nine** and Ratri means **nights**. Hindus celebrate Navratri by dancing and different colours which symbolises one of her distinct characteristics. Many Hindus wear a different coloured traditional outfit each day to reflect this.

Career Focus - Where could this take you?



Global coordinator for Hindu Swayamsevak Sangh: "I love to help around and look after the plants and the world around us, there is a famous slogan which states 'Service to Mankind is Service to God' this motivates me to help the people and the communities around me."

"Religious education has given me skills to understand the world we live in now, how animals and humans need to be looked after, as well as the world around us. Our community projects have included; Voluntary work at Old People Homes, Blood Donation, Distribution of fruit to local hospitals, trees planting, careers fair etc."

Challenge Activities

- Explain the stories behind the festivals of Holi and Navrati. Why are they important to Hindus today?
- Can you name any other sacred events within a life of a Hindu?
- Create a leaflet for someone to explain the key practices of Hinduism.
- Research the different Gods/Goddesses in Hinduism and create flash cards.
- Make your own puja tray and take a picture of it.

Don't forget!
Point
Explain
Evidence (Quote)

Topic Links

This topic links to other RE topics such as

- Sikhism
- Buddhism

Cross curricular subjects include:

- Geography

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/bitesize/topics/zh86n39/articles/z4qqy9q

https://www.bbc.co.uk/religion/religions/hinduism/ritesrituals/weddings.shtml

Year 7 Ethics - Justice

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

- Explain what is Justice
- Identify the difference between Absolute & Relative poverty
- Identify key people who have fought for justice
- Research a key person who has fought for justice
- Identify the link between poverty in injustice
- Identify two charities, Christian Aid & Muslim Aid and how they help individuals around the world

Keyword	Definition
Justice	The quality of being fair and reasonable
Absolute Poverty	This is when household income is below a certain level. This makes it impossible for the person or family to meet basic needs of life including food, shelter, safe drinking water, education and healthcare.
Relative Poverty	This is when households receive 50% less than any average household. So, they do have some money but still not enough money to afford anything above the basics.
Injustice	A lack of fairness and justice
Fairtrade	Fairtrade aims to ensure a set of standards are met in the production and supply of a product or ingredient. Fairtrade means workers' rights, safer working conditions and fair pay.
Social Justice	Everyone deserves an equal chance and opportunity.
Ahimsa	Hindu and Buddhist belief to respect all living things and a belief in non-violence.
Equality	Everyone is treated equally regardless of who they are.

Key Concepts

Justice in the UK means that everyone should be treated fairly and equally under the law, regardless of their background or circumstances. It is the responsibility of the government to ensure that the legal system is fair and impartial, and that everyone has access to justice. This means that if someone breaks the law, they will be held accountable and punished appropriately. It also means that people have the right to defend themselves and to have a fair trial.

"Access to justice is a fundamental human right."

Absolute poverty Absolute poverty is when a person or family doesn't have enough money to afford the basic things they need to survive, like food, clean water, shelter, and clothing. It means they are living in very difficult and sometimes dangerous conditions, and they may not have access to things like healthcare or education. This kind of poverty can be very hard to escape from, and it affects millions of people around the world. The standards set for absolute poverty are the same across countries.

When it was established in 1990, the World Bank set the global absolute poverty line as living on less than $1 a day.

Relative poverty is a situation where someone's income or living conditions are not as good as other people in their society. For example, a family may have a home and enough food to eat, but they might not be able to afford some things that most other people in their community can, like the internet, new clothes, transport fares. This can make them feel left out or different from their peers, and it can make it hard for them to participate in some activities or events or even find a job. Relative poverty is about not having the same things as the people around you, even if you have enough to get by. Relative poverty is considered the easiest way to measure the level of poverty in an individual country but it changes from country to country.

Year 7 Ethics - Justice

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

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- Identify two charities, Christian Aid & Muslim Aid and how they help individuals around the world

Key Concepts

Mohandas Gandhi believed in nonviolent resistance, which means he promoted peaceful ways of protesting against unfair treatment. He led peaceful protests, boycotts, and strikes to challenge British rule and fight for Indian independence such as the Salt March.
He also advocated for the rights of the poor and the untouchables, who were considered to be of a lower caste in Indian society.
Gandhi is known for his philosophy of "satyagraha," which means "truth-force" or "soul-force."
He believed in the power of truth and love to overcome injustice, and he worked to inspire people to act with compassion and kindness towards others.

Dr. Martin Luther King Jr. was a leader in the Civil Rights Movement in the United States during the 1950s-60s. He believed in nonviolent protest, which means that people could peacefully speak out against injustices, discrimination, and segregation.
Dr. King was a powerful speaker, and he used his words to inspire people to work together to bring about change. He organised protests and boycotts to draw attention to the unequal treatment of Black people in America. He helped to push for new laws that protected people's civil rights.
He was awarded the Nobel Peace Prize for his work in promoting peace and justice.

Mother Teresa was a Catholic nun who dedicated her life to helping the poor and sick in India. She spent many years teaching in India before starting her own order, the Missionaries of Charity, in 1950. They provided food, shelter, and medical care to the poorest and most vulnerable members of society, including the sick, dying, and disabled.
Mother Teresa is remembered for her compassion and selflessness. She believed that everyone, regardless of their background or circumstances, deserved love and respect. She was awarded the Nobel Peace Prize in 1979 for her humanitarian work.

Malala Yousafzai is a Pakistani activist and the youngest person to ever win the Nobel Peace Prize. She was born in 1997 in Pakistan and grew up in a region where the Taliban, a militant group, had banned girls from attending school.
When Malala was11 years old, she began speaking out publicly against the Taliban's rule and advocating for girls' right to education. She wrote a blog about it, which brought international attention to the situation.
However, this also made her a target for the Taliban.
In 2012, Malala was shot by a Taliban gunman while on her way to school. She survived the attack and continued her advocacy for girls' education from the United Kingdom.

Christian Aid is a charity that works to help people who are living in poverty around the world. They work with communities in some of the poorest countries in the world to provide support and assistance. They help to fund programs that provide food and clean water, build schools and clinics, and provide emergency aid in times of crisis, such as natural disasters or conflict.
One of the things that sets Christian Aid apart is that they help communities find long-term solutions to poverty. This means that they work with people to identify the root causes of poverty and help them find sustainable ways to improve their lives. It is inspired by Christian values of compassion, justice, and equality, and they work to make the world a better place by helping those in need.

Muslim Aid is a charity that works to help people in need around the world. They are inspired by Islamic values of compassion, generosity, and service to others.
Muslim Aid provides assistance in a variety of ways, including emergency relief, education, healthcare, and development projects. They work in some of the poorest and most vulnerable communities in the world, including those affected by natural disasters, conflict, and poverty.
They work with local communities to provide assistance. They believe that this helps to ensure that their work is effective, sustainable, and respectful of local culture and customs.
Muslim Aid is dedicated to helping people regardless of their race, religion, or background. They believe that all people have the right to live with dignity and respect.

Year 7 Ethics - Justice

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

- Explain what is Justice
- Identify the difference between Absolute & Relative poverty
- Identify key people who have fought for justice
- Identify the link between poverty in injustice
- Identify two charities, Christian Aid & Muslim Aid and how they help individuals around the world

Retrieval Practice

Questions	Answers
What does Justice mean?	Justice means the quality of being just. Justice helps us to figure out what is fair, what is right and wrong.
Define the term relative poverty.	Relative poverty is when someone has some necessities to live life. less than any average household. So, they do have some money but still not enough money to afford anything above the basics.
What does absolute poverty mean?	Absolute poverty means when someone cannot afford/ meet the basic needs of life including food, shelter, safe drinking water, education and healthcare.
What does UN stand for?	UN is short for United Nations.
What is Gandhi famous for?	Non-violence protests.
What did Martin Luther King Jr. stand up for and why?	Martin Luther King Jr stood up for the rights of black people.
Who was Mother Teresa?	Mother Teresa was a Catholic nun and missionary. She is famous for helping the poor, hungry and sick people of India.
What is fairtrade?	Fairtrade aims to ensure a set of standards are met in the production and supply of a product or ingredient. Fairtrade means workers' rights, safer working conditions and fair pay.

Career Focus - Where could this take you?

I volunteer for a charity, I might help out in many different ways. I could help at a food bank by sorting and packing food for people who need it, or I could help at a homeless shelter by serving meals and talking to people who are staying there. Sometimes, I might help raise money for the charity by organising a fundraising event or doing a sponsored run.

Challenge Activities

- Write down three points that suggest someone is in absolute poverty. Explain the points in detail
- Create a poster on your own charity. How can the charity help someone and explain the key beliefs/values of the charity (who is it aimed at)
- Research one historical figure from the knowledge organiser. Create a fact file on the chosen individual or group.

Topic Links

This topic links to other RE topics and cross curricular subjects such as

- Key people
- Sikhism/Islam/Christianity
- History
- Business

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/bitesize/guides/zdrxbdm/revision/11

https://www.nspcc.org.uk/

https://www.christianaid.org.uk/

https://islamicaid.com/

Religious Studies

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)

2000 BC	1500BC	560 BC	0	30 AD	610 AD	1500 AD
Hinduism	**Judaism**	**Buddhism**		**Christianity**	**Islam**	**Sikhism**

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MFL

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.

Year 7 À la maison

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The aims of the sequence of learning are to ensure that all students can:
- Describe people in their family.
- Say w here they live.
- Say w hat they eat and drink.
- ask and answer simple questions.
- use more complex structures with time phrases.

Essential vocabulary and grammar.

Talking about where you live

Où habites-tu? *Where do you live?*

J'habite *I live* Nous habitons *We live*	dans *in*	un appartement *a flat* une maison *a house*	à Huddersfield *in Hudds* à Edimbourg *in Edinburgh* à Belfast *in Belfast* à Wrexham *in Wrexham*	en Angleterre. *in England.* en Écosse. *in Scotland.* en Irlande du Nord. *in Northern Ireland.* au pays de Galles. *in Wales.*

J'aime habiter ici *I like living here* Je n'aime pas habiter ici *I don't like living here* Nous aimons habiter ici *We like living here* Nous n'aimons pas habiter ici *We don't like living here*	parce que c'est *because it's*	confortable. *comfortable.* grand. *big.* tranquille. *peaceful.* trop petit. *too small.*
	parce qu'il n'y a pas de place. *because there's no space/room.*	

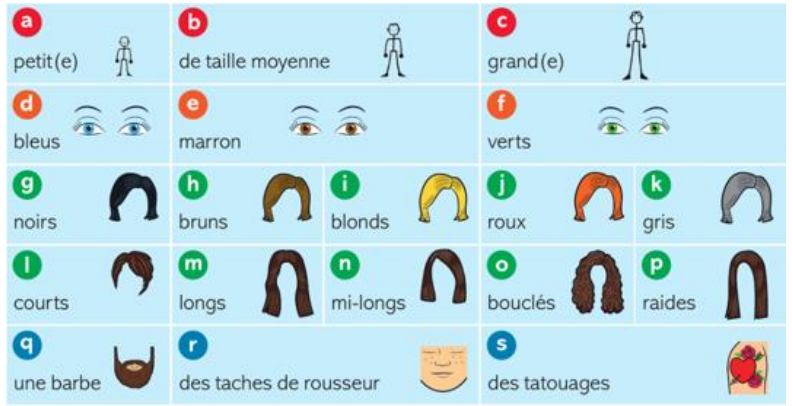
Talking about what you eat for breakfast.

je mange *I eat*	un *a*	croissant. *croissant.* fruit. *piece of fruit.*
	du *(some)*	beurre. *butter.* pain *bread.* pain grillé. *toast.* yaourt. *yoghurt.*
	une *a*	tartine. *slice of bread with jam or spread.*
	de la *(some)*	confiture. *jam.*
	des *(some)*	céréales. *cereal.* œufs. *eggs.*
je bois *I drink*	du *(some)*	chocolat chaud. *hot chocolate.* jus de fruits. *fruit juice.* lait. *milk.*
	de l' *(some)*	eau. *water.*

je ne mange rien. *I don't eat anything.*
je ne bois rien. *I don't drink anything.*

Tu est comment? What do you look like?

J'ai	**I have**	**Il a**	**He has**
Tu as	**You have**	**Elle a**	**She has**
Je suis	**I am**	**Il / elle est**	**He/she is**
Les yeux	**Eyes**	**Les cheveux**	**hair**



Using higher numbers.

20 vingt	70 soixante-dix (60+10)	82 quatre-vingt-deux (4x20+2)
30 trente	71 soixante-et-onze (60+11)	90 quatre-vingt-dix (4x20+10)
40 quarante	72 soixante-douze (60+12)	91 quatre-vingt-onze (4x20+11)
50 cinquante	80 quatre-vingts (4x20)	92 quatre-vingt-douze (4x20+12)
60 soixante	81 quatre-vingt-un (4x20+1)	100 cent

Décris- moi ta famille – describe your family

Il y a ……
(There is…)

Dans ma famille il y a ..

(In my family there is……)

mon *my*	père. *father.* beau-père. *step-father.* grand-père. *grandfather.* frère. *brother.* demi-frère. *half-brother/step-brother.*
ma *my*	mère. *mother.* belle-mère. *step-mother.* grand-mère. *grandmother.* sœur. *sister.* demi-sœur. *half-sister/step-sister.*
mes *my*	parents. *parents.* grands-parents. *grandparents.* frères. *brothers.* sœurs. *sisters.*

Il s'appelle…… He's called…..
Elle s'appelle…… She is called…..
Ils / elles s'appellent …… They are called……..

Essential sounds

en/an

grand	parent
	

in

lapin	vingt
	20

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Year 7 À la maison

The aims of the sequence of learning are to ensure that all students can:
- Describe people in their family.
- Say w here they live.
- Say w hat they eat and drink.
- **ask and answer simple questions.**
- **use more complex structures with time phrases.**

Retrieval Practice

Questions	Answers
Comment t'appelles-tu?	Je m'appelle **Jaques.**
Décris-moi ta famille.	Dans ma famille il y a **ma mère** et **mon frère.**
Elle est comment ta mère?	Elle est **de taille moyenne** et elle a les yeux **bleus.**
Tu es comment?	Je suis **petit(e)** et j'ai les cheveux **longs** et **bruns.**
Quel âge a ton grand-père?	Il a **soixante-huit** ans.
Tu as un animal?	✓Oui j'ai **un serpent** qui s'appelle **Bob**✓ ❌Non je n'ai pas d'animal.❌
Où habites-tu?	J'habite dans une maison à **Huddersfield** en **Angleterre.**
Tu aimes habiter ici?	Oui j'adore habiter ici parce que **c'est confortable.**
Qu'est-ce que tu prends au petit-déjeuner?	Normalement, je mange **un croissant avec du beurre.** Je bois **du café**

Career Focus - Where could this take you?

I am a chef. I am lucky because I can work all over the world. I can travel to different countries and learn about their cuisine. Many chefs train in classical French cuisine so a knowledge of French is helpful.

Challenge Activities

1. Create a wanted poster. Make sure you describe your wanted person in lots of detail. We need to find them!
2. Research what people in France eat for breakfast and other meals. Is it different to what you eat?
3. Complete the Sentence Builders activities.
4. Design a breakfast poster for what you would like to see at breakfast club.

Topic Links

This topic links to:
- All about me.
- Likes and dislikes
- Healthy Lifestyles.

Additional Resources

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

Your teacher can remind you of your login.

Year 7 French – Essential Grammar and Vocabulary

Greetings

Bonjour – Good morning
Salut – hello
Bonsoir – good evening

Au revoir – Goodbye
À plus – See you later

Comment tu t'appelles ? What's your name?

Je m'appelle – I am called

Pleasantries

(Comment) ça va? How are you ?

ça va très bien merci – I'm very well thank you

ça va – ok
ça va mal – Bad

1. Quel âge as-tu – How old are you ?
Tu as des frères ou des soeurs ? –Have you got any brothers or sisters?

Key verbs – avoir

Avoir – to have
J''ai – I have
Tu as – you have
Elle/ il a – she/he has

Nous avons – we have
Vous avez – you have
Elles/ils ont – they have

_____ ans – _____ years old

une soeur– a sister
un frère– a brother
une demi-soeur– a stepsister / half-sister
un demi-frère – a stepbrother / half-brother
trois soeurs – three sisters

Je n'ai pas de frères ou soeurs – I haven't got any brothers or sisters
Je suis fils/fille unique I am an only child

3. Qu'est-ce que tu aimes ?

Key verbs – opinions

J'aime – I like
Je n'aime pas – I don't like

J'adore – I love
Je déteste – I hate

Il /elle aime – he/she likes

le sport – sport
le collège – school

la danse – dance
la musique – music

les araignées – spiders
les glaces – ice creams

C'est – it's ...
sympa – nice
cool
moderne
nul – rubbish
triste –sad
démodé – old-fashioned

Let's show off!

J'aimerais avoir – I'd like to have
Je pense que – I think that
A mon avis – In my opinión
Personellement – personally

2. Qu'est-ce qu'il y a sur la photo?
What's in the photo?

Describing a photo

Il y a – There is/are

un tableau – a board
un ordinateur – a computer

un/ une professeur – a teacher
une porte – a door
une fenêtre – a window

des tables – some tables
des chaises – some chairs
des élèves – some pupils
des cahiers – some exercise books

WAGOLL
Look at this model text about yourself – do you think you could replicate it with your own information?

Bonjour, je m'appelle **Marc**	Hello. My name is **Marc**
et j'ai **onze** ans.	and I am **11** years old.
Mon anniversaire est le **quatre mai**.	Also, my birthday is the **4th** of **May**.
Je suis très **sympa**	I am very **nice**
y assez **intelligent**	and quite **clever**
mais je ne suis pas **patient**.	but I'm not **patient**.
J'ai **une soeur**	I have a **sister**
mais elle est **méchante**.	but she is **naughty**.
J'aimerais avoir **un frère!**	I would like to have a **brother**!
J'adore **la danse**	I love **dance**
parce que c'est **amusant**	because it's **fun**
Tu aimes **le sport**?	Do you like **sport**?

	indefinite article	definite article
masculine singular	***un*** (a / an) ➡	***le*** / ***l'*** (the)
feminine singular	***une*** (a / an) ➡	***la*** / ***l'*** (the)
plural	***des*** (some) ➡	***les*** (the)

4. Tu es comment? What are you like ?

Key verbs être

être – to be
Je suis – I am
Tu es – you are
Elle/ il est – she/he is

Nous sommes – we are
Vous êtes – you are
Elles/ils sont – they are

Je ne suis pas – I'm not

très – very
trop – too
assez – quite
un peu – a bit

amusant / amusante – fun
arrogant / arrogante – arrogant
méchante / méchante – naughty
patient / patiente – patient
intelligent / intelligente – intelligent
petit / petite – small
grand / grande – tall
bavard / bavarde – chatty
fort / forte – strong
timide – shy

5. C'est quand ton anniversaire? When is your birthday ?

Mon anniversaire c'est le... – my birthday is the...

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

janvier – January
février – February
mars – March
avril – April
mai – May
juin – June
juillet– July
août – August

septembre – September
octobre – October
novembre –November
décembre – December

NO capital letters for months in French!

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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

Unit 7.3: Scratch

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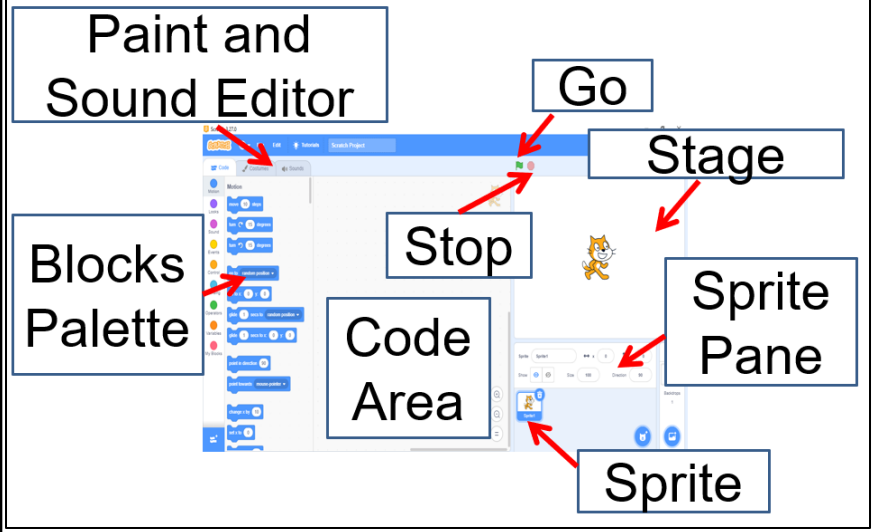
The aims of the sequence of learning are to ensure that all students:

- Demonstrate knowledge of the Scratch layout by naming each section accurately
- Demonstrate knowledge of using Scratch by describing how to accurately use a range of different features
- Apply knowledge of blocks and scripts in Scratch to create and understand the programming for a range of mini-programs
- Apply knowledge from this unit to accurately describe some keywords

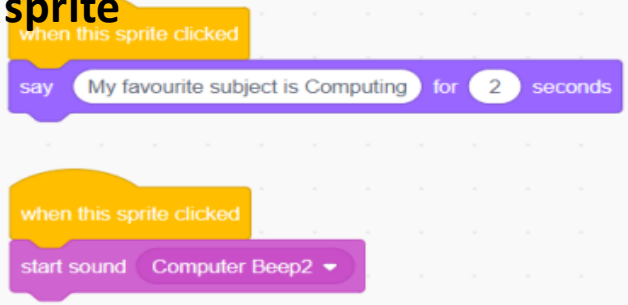
Keyword	Definition
Sprite	The programmable images on a Scratch program screen.
Script	The set of instructions that is used to program in Scratch, usually presented as a collection of blocks that connect with one another.
Costume	The different "frames" or alternate appearances of a sprite. Sprites can change their look to any of its costumes.
Comment	Adjustable yellow coloured textboxes that can be attached to blocks, or left floating, used to add detail to a program.
Sequencing	The specific order in which instructions are performed in a program. If the sequence is incorrect it may cause errors in a program.
Variable	A variable represents a location in memory. It is used to hold a value which you assign to it e.g. 'Lives' = 3
Broadcasting	Used to communicate between sprites or linked scripts to control when specific scripts are run in a program
Iteration (Loop)	The repetition of a sequence of instructions
Conditional Statement	Evaluates the state of a program to determine whether something is either true or false. If true, the conditional script will be used

Key Concepts

The Scratch layout

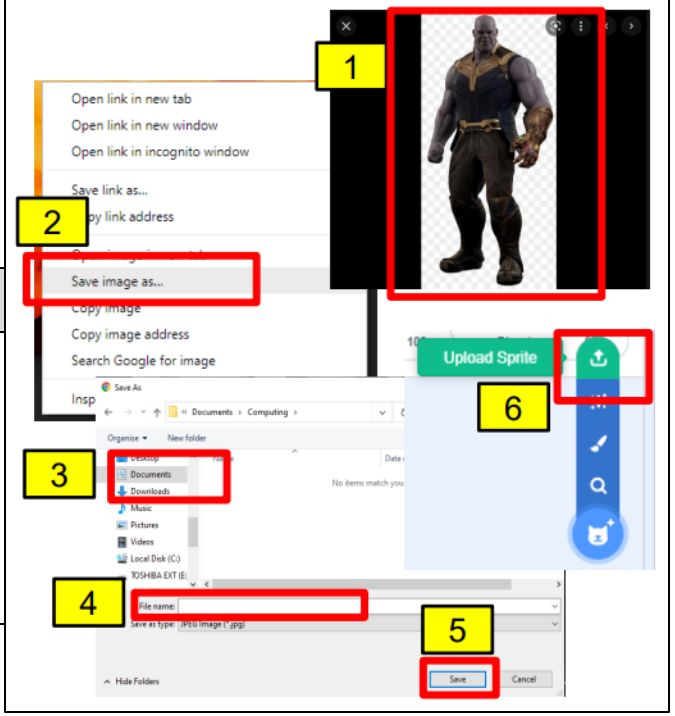


How to code an interactive sprite



How to add custom Sprites

1. Find a high resolution transparent image
2. Right click > Save image as…
3. This PC > Documents > Computing
4. Rename the file to something appropriate
5. Press Save



Unit 7.3: Scratch

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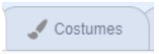
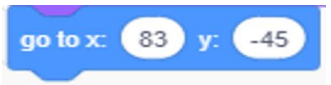
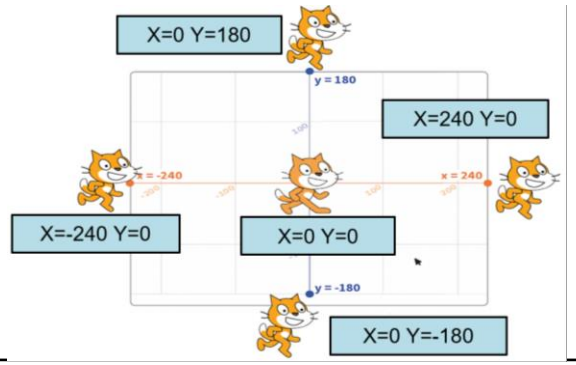
- Apply knowledge from this unit to accurately describe some keywords

Retrieval Practice

Questions	Answers
How do you add a new sprite in Scratch?	 Go the bottom right hand side of the scratch screen and click on the button called "Choose New Sprite". The button likes like a cat.
What happens when you click on the 'Green Flag' and 'Red Button' on Scratch?	 Green Flag: Starts the running of scripts Red Button: Stops the scripts from running
How do you change the costume of a sprite used in the program?	 Go to the top right hand side of the scratch screen and click on the tab called "Costumes"
When using the 'point in direction' block, what will the numbers 0, 180, -90 and 90 do to the sprite? 	This block changes the direction of the sprite: 3D modelling artist
How can you correctly use the 'go to…' block to place sprites in set positions on the stage area. For example: 	Use the correct X and Y co-ordinates in the 'go to' block. 

Number	Sprite Direction
0	Sprite faces upwards
180	Sprite faces downwards
-90	Sprite faces towards the left
90	Sprite faces towards the right

Career Focus - Where could this take you?

I am a **3D modelling artist** and create the models for all 3D art assets within the game – characters, weapons, vehicles, furniture, trees, rocks and so on. Often I start with a brief or 2D drawing from a concept artist

Challenge Activities

1. Create a two player game in Scratch that uses all of the blocks, scripts and techniques you have covered in this unit. Also, research the internet and include the use of new blocks and scripts that have not been covered in this unit.
2. Create a poster on MS PowerPoint that includes one or all of the following details: variables, broadcasting and conditional statements.
3. Create a short vlog about the types of careers you could get into within the gaming industry. Explain what each type of job would involve and which opportunities would be of interest to you.

Topic Links

This topic links to:

- Computing Curriculum: Understand how instructions are stored and executed within a computer system and create, re-use, revise and re-purpose digital artefacts for a given audience
- Mathematics: use of logical inference, problem-solving skills and simple algebra

Additional Resources

To further practise and develop your knowledge see:

- https://scratch.mit.edu/
- https://www.youtube.com/c/ScratchTeam

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CAPE

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.

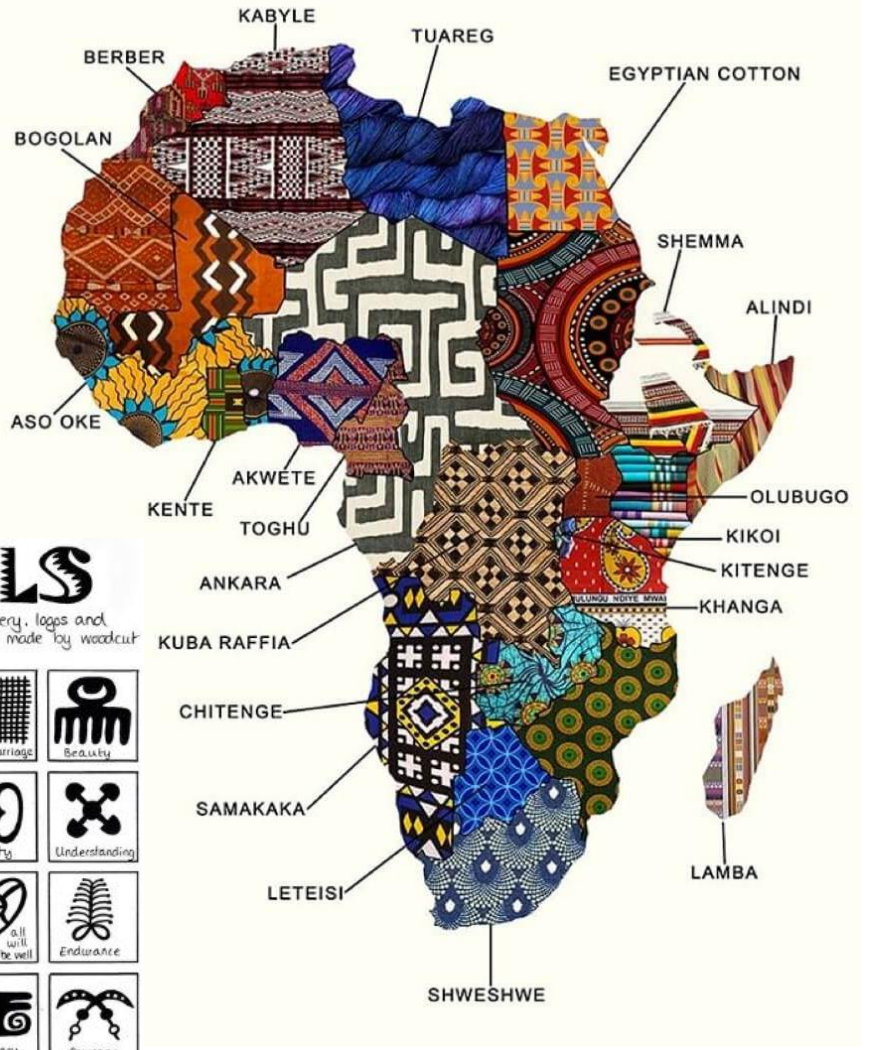
Year 7 African Art

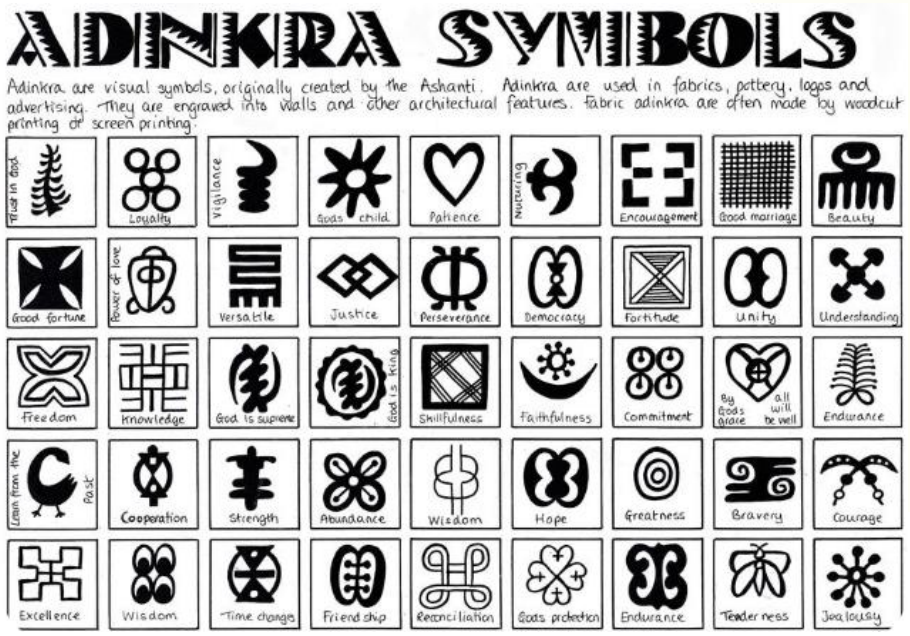
The aims of the sequence of learning are to ensure that all students:

- Learn about different types of traditional African textiles.
- Learn how to carve a stamp.
- Learn how to use wax resist.
- Learn how to weave.
- Develop their presentation skills.
- Learn how traditional African culture inspires contemporary artists.
- Design and make an African mask inspired by ceramicist Kimmy Cantrell.

Keyword	Definition
Textiles	A type of cloth or woven fabric
Adinkra	Hand-printed fabric made in Ghana by the Ashanti people.
Adire	Indigo-dyed cloth made in southwestern Nigeria by Yoruba women, using a variety of resist-dyeing techniques.
Kente	Silk and cotton fabric made of interwoven cloth strips and is native to the Akan tribe in Ghana.
Bogolanfini	Handmade Malian cotton fabric traditionally dyed with fermented mud.
Resist	A technique of combining media that repel or rebuff each other.
Weave	A method of textile production in which two sets of yarns or threads are interlaced at right angles to form a fabric or cloth.
Relief	A sculptural method in which the sculpted pieces remain attached to a solid background of the same material.

Key Concepts





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Year 7 African Art

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- Design and make an African mask inspired by ceramicist Kimmy Cantrell.

Retrieval Practice

Questions	Answers
Who traditionally wore Kente cloth?	It was worn in a toga like fashion by royalty of the Akan people of Ghana.
What does the word Adinkra mean?	Adinkra means "goodbye" or "farewell" in Asante Twi. Adinkra symbols and clothes were only worn during funerals to signify sorrow and bid farewell to the deceased.
What is the machine called that creates woven fabric?	A loom.
What modern materials are commonly used for the resist technique?	Melted wax is used in a technique called batik. Jtanting tools are used to hold the wax and draw intricate designs onto fabric.
What colour are Adire cloths?	Adire are **indigo** dyed cloths. Resist techniques are used to create designs on them in the dying process.
What materials are used to create the designs on bogolanfini cloths?	Fermented mud is used to decorate the traditional Malian cloths.

Career Focus - Where could this take you?

My job is a **weaver**. I set up and operate hand and power operated looms and machines to weave fibre into fabrics and carpet. I have to be analytical and organised to create the different patterns. I have to follow strict safety routines.

Challenge Activities

Make an Adinkra symbol potato carving and create a stamped pattern.
https://www.youtube.com/watch?v=uvz9slnHRJApatterned

Create a paper weaving.
https://www.youtube.com/watch?v=OvH-c6_W4BM

Topic Links

This topic links to:

Geography – Areas of Africa where different textiles originate.

History – Origins of the different textiles.

Additional Resources

To further practise and develop your knowledge see:

- BBC Two - Bitesize Primary, Art and Design 1, African Art, African masks
- https://www.youtube.com/watch?v=IXsolKLnfeY

Year 7 Textiles

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

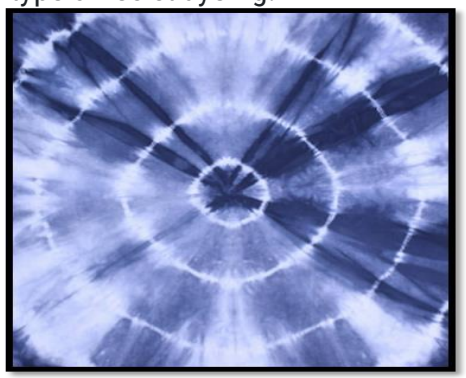
- Explain how a resist method of dyeing is created.
- Demonstrate safe use of tools and equipment.
- Rank Fibres in order of environmental impact.
- Justify the importance of sustainability within Textile manufacture.
- Calculate the costings of materials and production
- Explain the lifecycle of a cotton T-shirt
- Demonstrate a clear understanding of the manufacturing Process

Keyword	Definition
Machine	An apparatus using or applying mechanical power and having several parts.
Fabric	Cloth or other material produced by weaving or knitting fibres
Natural	Existing in or caused by nature; not made or caused by humankind
Fibres	A thread or filament from which a vegetable tissue, mineral substance, or textile
Resist	Withstand the action or effect of:
Textiles	A type of cloth or woven fabric
Aesthetics	A set of principles concerned with the nature and appreciation of beauty
Seam Allowance	Seam allowance is the extra fabric between the seamline and the edge of the fabric when two (or more) pieces of fabric are sewn together.
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
Needle	A very fine slender piece of metal with a point at one end and a hole or eye for thread at the other, used in sewing
Organic	Relating to or derived from living matter
Cotton	A soft white fibrous substance that surrounds the seeds of a tropical and subtropical plant and is used as textile fibre and thread for sewing
Fastening	A device that closes or secures something:
Equipment	The necessary items for a particular purpose:
Decorative	Serving to make something look more attractive, ornamental

Key Concepts

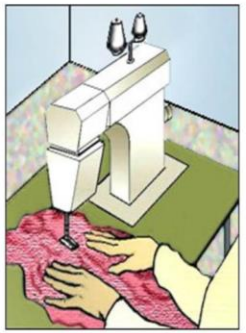
Tie Dye

Resist dyeing is a technique of colouring yarn or fabric in order to create a pattern by resisting certain areas, so that only the unblocked areas receive colours. Resist materials including thread, wax, rice or mud paste are used in this dyeing process on the basis of the patterns. Tie-dye method is a type of resist dyeing.



Health and Safety — Sewing Machines

- Only use sewing machines in a designated area of the classroom.
- Unplug the sewing machine when not in use.
- Do not use bent or broken needles.
- Switch off the sewing machine whilst making adjustments in the needle area.
- Keep fingers away from moving parts.
- Make sure foot peddle wiring is tidy and kept away from moving parts.
- Turn off the sewing machine before removing the plug from the socket.
- Make sure the machine is switched off and the foot peddle is packed away when finished.



NATURAL FIBRES

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Year 7 Tool Roll Project

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

- Explain how a resist method of dyeing is created.
- Demonstrate safe use of tools and equipment.
- Rank fibres in order of environmental impact.
- Justify the importance of sustainability within textile manufacture.
- Calculate the costings of materials and production
- Explain the lifecycle of a cotton T-shirt
- Demonstrate a clear understanding of the manufacturing process

Retrieval Practice

Questions	A1	A2	A3	A4	A5
A. How is cotton produced?	From a plant	From a factory	From Coal & oil	From Aldi	From a tree
B. Where does Silk come from?	A rabbit	A moth	A butterfly	A worm	A cow
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 is Tie Dye?	A method of adding colour to fabric with paint	A Type of Resist Dyeing	A type a pattern dyeing	A type of printing	A type of fabric testing
F. What physical properties do fabrics have? (select more than 1)	Stretchy	Soft handle	Creases easily	Stiff	Strong

Which questions did you get wrong?	Quick Corrections (bridge learning gaps & misconceptions)

Career Focus - Where could this take you?

Textile designers create designs for knitted, printed and woven textiles.
Textile design can include designing:

- textiles for clothing and accessories
- fabrics and furnishings
- printed, paper-based products

You will need a foundation diploma in Art & Design or A level equivalent, Kirklees College offer a Level 1-3 in Art and Design and Leeds City College offer a Level 3 diploma in Fashion and Textiles, you will need 4 GCSE grades 4 and above including maths and English.
Salaries usually range from around £13,000 to £40,000 a year.

Challenge Activities

Properties _____

Suggested Fibre Type _____

Product Type _____

Properties _____

Suggested Fibre Type _____

Product Type _____

Topic Links

This topic links to:

- Science- How fibre properties are created and used.
- English- Subject specific Vocabulary knowledge, understanding and spelling.
- Maths - Material costings and standard measurements in length.

Additional Resources

To further practise and develop your knowledge see:

- The ONLY textiles recycling video YOU NEED TO WATCH – YouTube
- How to Tie-Dye at Home Like a Pro - Try These 5 Easy Techniques! – YouTube
- Classification Of Textile Fibers - Sources Of Textile Fibre – YouTube
- Fairtrade - How Cotton Is Produced - YouTube

Year 7 Resistant Materials

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

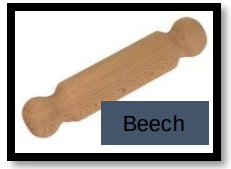
- Demonstrate safe use of tools and equipment.
- Explain a range of Decorative Techniques
- Rank Smart Fibres in order of environmental impact.
- Annotated a range of design ideas which include moral and cultural issues.
- Demonstrate an understanding of smart materials.

Keyword	Definition
Timber	**Timber** refers specifically to unprocessed wood fibre, such as cut logs or standing trees that have yet to be cut.
Softwood	Softwood is wood from gymnosperm trees such as conifers.
Hardwoods	Hardwood is wood from dicot trees. These are usually found in broad-leaved temperate and tropical forests.
Butt Joint	A butt joint is a technique in which two pieces of material are joined by simply placing their ends together without any special shaping.
Scroll Saw	A scroll saw is a small electric or pedal-operated saw used to cut intricate curves in wood,
Analysis	is the process of breaking a complex topic or substance into smaller parts in order to gain a better understanding of it.
Design Brief	A design brief is a document for a design project developed by a person or team (the *designer* or *design team*) in consultation with the *client/customer*.
Product Analysis	Product analysis involves examining product features, costs, availability, quality, appearance and other aspects.
Ergonomics	Human factors and ergonomics are the application of psychological and physiological principles to the engineering and design of products.
Dowel	A dowel is a cylindrical rod, usually made of wood, plastic, or metal.
Coping Saw	A coping saw is a type of bow saw used to cut intricate external shapes and interior cut-outs in woodworking or carpentry.
Orthographic	Orthographic projection is a means of representing three-dimensional objects in two dimensions.
Design	A design is a concept of either an object, a process, or a system that is specific and, in most cases, detailed.
Function	Means how a product works, what does it do.
Glass Paper	Thick paper which has tiny glass particles glues to the surface, used to sand down rough surfaces in wood,

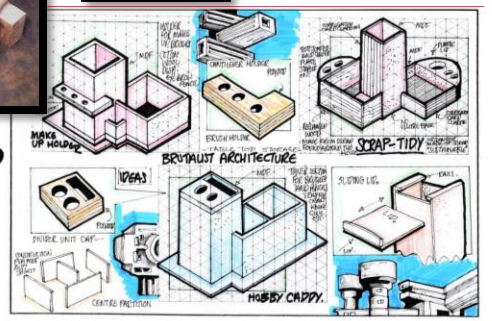
Key Concepts

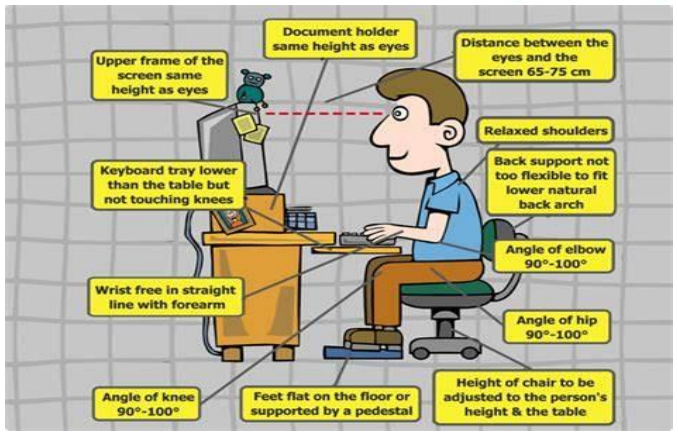
Product Analysis

Material Types



Ergonomics





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Year 7 Desk Tidy Project

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.

Retrieval Practice

Question	A1	A2	A3	A4	A5
A. What is a Design Brief	Story	List	Outline	Prices	Function
B. What is a product analysis?	Function	Research	Aesthetics	Disassembling	Fixing
C. Types of Softwood. (select more than one)	Oak	Pine	Spruce	Teak	Balsa
D. Types of Hardwood. (select more than one)	Teak	Pine	Mahogany	Oak	Balsa
E. What is a consumer?	Maker	Buyer	Designer	User	Maintainer
F. What is ergonomics?	Measurements	Human interaction	Environmental	Costs	Protection

Questions Which you got wrong	Quick Corrections (bridge learning gaps & misconceptions)

Career Focus - Where could this take you?

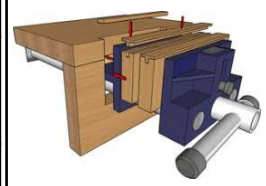
Carpenters apply diverse skills and use various materials and equipment to build or repair houses and other structures, wooden fittings and furniture. If you enjoy creating or restoration work, you may find a career in specialist carpentry a good fit for you.

Kirklees college offer an Onsite Construction: Carpentry and Joinery Level 3 you will need 5 GCSE grades 4 or above must include Maths and English.

Salaries usually range from £25,000-£48,000

Challenge Activities

Can you name the selection of equipment and explain how it is used?



Topic Links

This topic links to:

- Science- How trees are made and fiber properties.
- English- Subject specific Vocabulary knowledge, understanding and spelling.
- Maths- Measurements in cm for practical.

Additional Resources

To further practise and develop your knowledge see:

https://youtu.be/zfK7TLobsv0

https://youtu.be/7LBv2UWOI4Y

https://youtu.be/7s-l3XOobTM

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Year 7 Food Tech

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

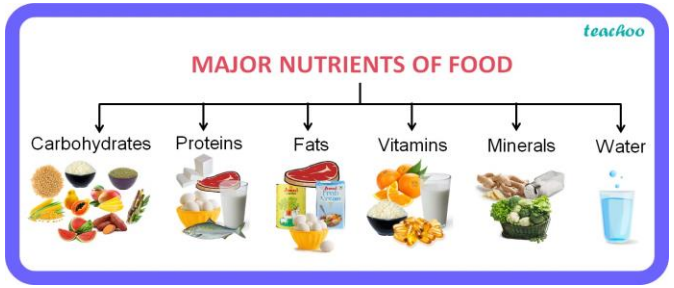
- Use safe and hygienic practices in a working kitchen environment
- Demonstrate sound preparation skills of both equipment and ingredients
- Safely use a range of cooking techniques, appropriate to the task

Keyword	Definition
Food origin	Where the food originated in the world
Food provenance	Whether the food was grown, caught or reared
Transportation	How food is transported from one place to another
Food processing	Changing food in some way, e.g washing, chopping, pasteurising, freezing, fermenting, packaging
Food manufacturing	Food manufacturing refers to transforming raw ingredients into edible products such as using wheat, oat, and sugar to make cereals, desserts, and pet food.
Farming	Farming is the activity of growing crops or keeping animals on a farm.
Calcium	Calcium is a mineral your body needs to build and maintain strong bones and to carry out many important functions.
Carbohydrate	Carbohydrates provide energy for the body. The body breaks carbohydrates down into glucose, which is the primary energy source for the brain and muscles.
Protein	Protein is one of the three nutrients found in food that the body needs in large amounts. It is essential for the maintenance and building of body tissues and muscle.
Fibre	Fibre is a type of carbohydrate that the body cannot break down and so it passes through our gut into our large intestine (or colon). It is found naturally in plant foods like wholegrains, beans, nuts, fruit and vegetables and is sometimes added to foods or drinks. Fibre helps to keep our digestive system healthy and helps to prevent constipation.
Fat	The body uses fat as a fuel source, and fat is the major storage form of energy in the body. Fat also has many other important functions in the body, and a moderate amount is needed in the diet for good health. Too much fat or too much of the wrong type of fat can be unhealthy.
Cross-contamination	Cross-contamination is the physical movement or transfer of harmful bacteria from one person, object or place to another.
Nutrient	a substance that provides nourishment essential for the maintenance of life and for growth.
Healthy	In a good physical or mental condition; in good health.

Key Concepts

The 4Cs Concept

By practicing the four Cs of food hygiene **cross-contamination, cleaning, cooking and chilling** those working with food can avoid food poisoning and other illnesses.



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Year 7 Food Tech

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

- 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

Stuffed Peppers

Equipment:

- Chopping board
- Vegetable knife
- Colander
- Wooden spoon
- Mixing bowl
- Table spoon
- Baking tray

Ingredients

25g couscous (provided by Miss Cole
1 large pepper
40ml boiling water
Stock cube
Spring onion/half red onion
1 tomato or 3 cherry tomatoes
30g grated cheese
Teaspoon parsley

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.
7.	**Preparing, combine and shape:** Techniques to prepare, cook and combine different ingredients.

Method:

1. Preheat oven to 180°c
2. Put your couscous into bowl and cover with 40ml boiling water. Add half of a stock cube and stir once. Cover with a plate.
3. Chop your spring onion, parsley and tomatoes finely.
4. Grate your cheese onto a plate.
5. Very carefully remove the top from your pepper and empty the seeds out. Use a metal spoon to help you scrape the insides out.
6. Mix your vegetables with your couscous and put inside your pepper.
7. Add the cheese on top of the pepper and wrap the pepper in tin foil.
8. Carefully put the pepper into the oven for 20 minutes. A few minutes before the end, very carefully remove the foil so that the cheese bubbles and caramalises

Blueberry and Cinnamon muffins

Equipment

Weighing scales, sieve, large bowl, measuring spoons, small bowl, fork, measuring jug, wooden spoon, muffin cases, muffin tin, oven gloves, cooling rack.

Method

1. Preheat the oven to 180 ºC or gas mark 4.
2. Sift the flour, baking powder, sugar and cinnamon into a large bowl.
3. Whisk the egg in a small bowl using a fork.
4. Pour the milk, oil and egg into the flour mixture and mix well to form a smooth batter.
5. Stir in the blueberries.
6. Spoon the mixture into the muffin cases.
7. Bake for 20 – 25 minutes until the muffins have risen and are golden brown.
8. Carefully take the muffins out of the tin and allow to cool on a cooling rack.

Top tips

Try using other fruit such as cranberries, banana or apple.
Use drained canned fruit instead of fresh.

Food skills

Weigh, Measure, Sift, Whisk, Mix and stir, Bake.

Ingredients

125g self-raising flour
1 x 5ml spoon baking powder
1 x 5ml spoon cinnamon powder
50g caster sugar
125ml milk
1 egg
45ml oil
75g blueberries

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Year 7 Food Tech

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

- 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

Pancake Stack

Equipment

Chopping board
Knife
Weighing scales
Sieve
Mixing bowl
Whisk
Measuring jug
Frying pan
15ml spoon
Fish slice

Ingredients

100g self-raising flour
25g wholemeal self-raising flour
1x15ml spoon caster sugar
180ml milk
1 egg (medium)
100g fruit, e.g. blueberries, raspberries, banana, sultanas

Nutella, biscoff spread or jam to stack them up with

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.
7.	**Preparing, combine and shape:** Techniques to prepare, cook and combine different ingredients.

Method:

1.Chop the fruit into small chunks, or keep whole (depending on size of fruit)
2. Sift the flours into the bowl and add the sugar.
3. Whisk the egg and milk into the flour.
4. Stir in the fruit.
5. Pour into the measuring jug
6.Heat the frying pan and add a few drops of oil.
7. Pour in 2 x 15ml spoons of mixture for each pancake.
8.Cook until bubbles appear on the surface and then turn, using the fish slice.
9.Cook the underside of the pancake for one minute, or until golden brown.

Let the pancakes cool a little and then stack them up, using

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Year 7 Food Tech

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

- 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

Retrieval Practice

Questions	Answers
What are 8 tips for healthy eating?	• Base your meals on higher fibre starchy carbohydrates. • Eat lots of fruit and veg. • Eat more fish, including a portion of oily fish. • Cut down on saturated fat and sugar. • Eat less salt: no more than 6g a day for adults. • Get active and be a healthy weight. • Do not get thirsty. • Do not skip breakfast
Why is weighing and measuring important?	Weighing and Measuring for good results in most recipes, accurate weighing and measuring is essential. When you are baking with flour, sugar and liquids, you must measure accurately, or your cooking will be spoiled. If you weigh out too much sugar or too little raising agent, your cakes will not rise or you could spoil the taste and/or texture. Food can be weighed in Grams (g). 1000g = 1 Kilogram (kg). Liquid is measured in Millilitres (ml) or litres (l). 1000ml = 1 Litre(l)
What are the most important health and safety and personal hygiene rules?	• Be aware of sharp equipment such as knives, peelers and graters- store them carefully and use the bridge hold and claw grip when chopping. • Take care with hot equipment and food/ liquids- turn pan handles in, always use oven gloves and avoid splashes when stirring or draining foods. • Wipe up spills quickly so you do not slip over • Be aware of others in the kitchen • Report any accidents to the teacher • Tie hair back • Wash your hands

Career Focus - Where could this take you?

My job is a **food technologist** and I study foods and their nutritional content. I use laboratory skills and techniques to identify nutrients and calorie content of foods.
I need a genuine interest in science and how it is applied to food and cookery,
high standards of cleanliness and the ability to adhere to strict hygiene rules.

Challenge Activities

Try some of these recipes at home
Follow the links below:

Energy Bar

Home made burgers

Chapatti recipe

For Further 30 minute recipes

Food skills are acquired, developed and secured over time

.

Bridge hold

Claw grip

Topic Links

This topic links to:

- English - relating explicitly to known vocabulary and understanding it with the help of context
- Mathematics - use standard units of mass, length, time, other measures
- Science: Nutrition and digestion RSE - What constitutes a healthy diet
- Physical health and fitness - The characteristics and mental and physical benefits of an active lifestyle.

Additional Resources

To further practise and develop your knowledge see:

Eat well guide Quiz

Eat well guide

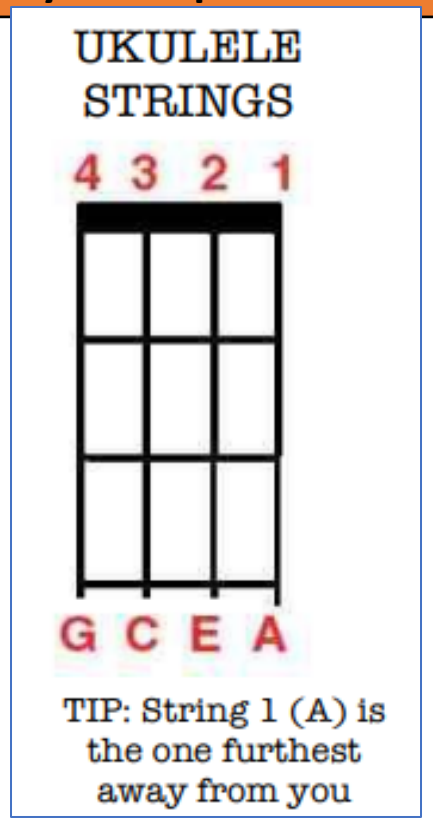
Eat well video resource

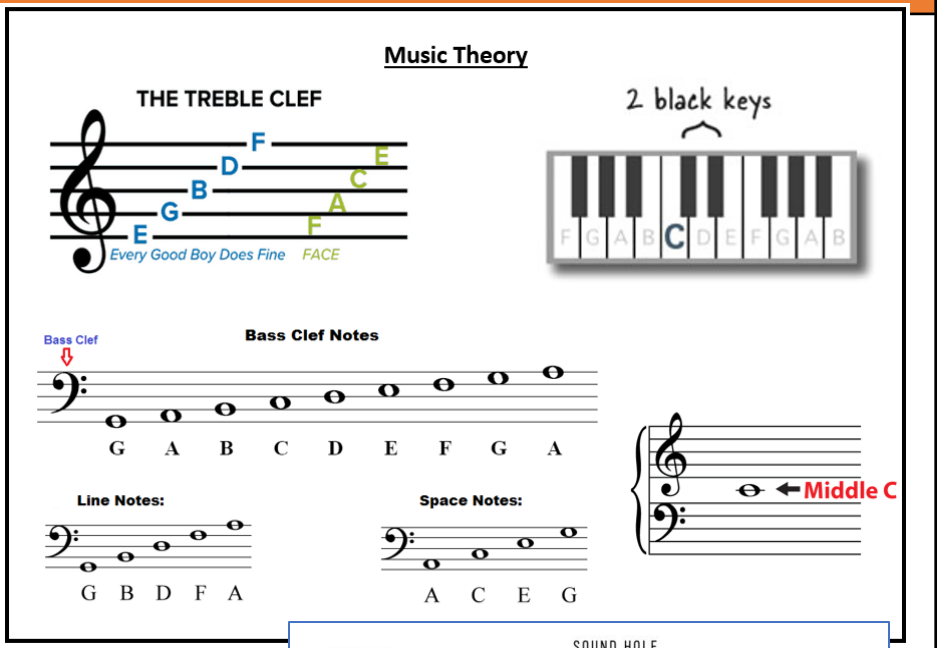
Year 7 Riptide

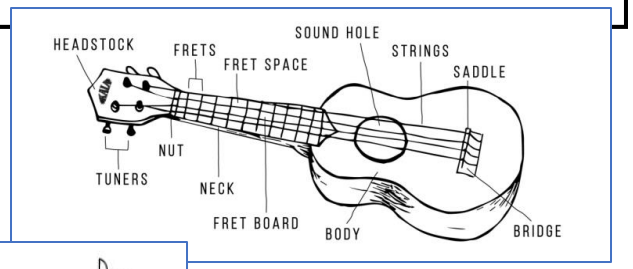
The aims of the sequence of learning are to ensure that all students:
To develop appropriate instrumental techniques on the ukulele.
To be able to perform Riptide on the ukulele.
To develop appropriate musical vocabulary through the MAD TSHIRT mnemonic.
To be able to identify musical features of Riptide, applying appropriate musical vocabulary.

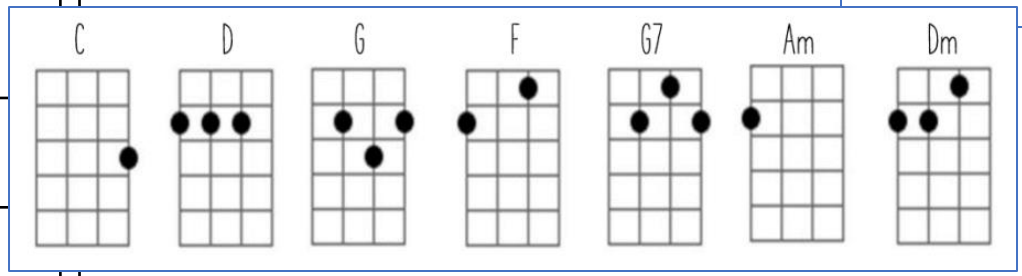
Keyword	Definition
Melody	The main layer or tune of a piece. Melodies can move by **step** or in **leaps.**
Articulation	The way the notes are played: *long and smooth* or short and choppy. **Legato** = Long and smooth **Staccato** = Short and choppy.
Dynamics	How loud or quiet the sound is.
Texture	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**. *Beginning – Middle – End*
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









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Year 7 Athletics

The aims of the sequence of learning are to ensure that all students:
Students shall understand how to apply basic safety elements to track and field events. Students can demonstrate the safety elements in practice situations. Students can perform the basic skills to track and field events in a practice situation. Students can record and measure their performance so they can compare themselves to others.

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.
Reaction Time	The time taken for a person to respond and movement to the starter.
Balance	The ability to maintain your centre of mass and control of sports performance when moving.
Speed	The rate at which a person moves as fast as possible to cover a distance over a time period. Speed=distance/time.
Muscular strength	This is the maximum force that can be applied from muscles in order to overcome resistance so that movement can take place.
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	10.9s	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	2.40m	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

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Year 7 Athletics

The aims of the sequence of learning are to ensure that all students:
Pupils will further develop their running, jumping and throwing skills and learn specific techniques for events in order to further improve performance. In all athletic activities, pupils will engage in performing and improving their skills and personal best in relation to speed, height and distance. Pupils will also develop their ability to officiate and set up athletics events.

Retrieval Practice:
Memory recall the world records set by professional athletes:-

Use the data bellow so you have an understanding on the world records currently set. Compare how you have performed to the professional athletes.

	Women				
	Time	Date	Age (yrs)	In days	Last 4 yrs vs WR
100	10.49	16-Jul-88	25.47	9303	1.43%
Short Hurdles	12.21	20-Aug-88	25.37	9268	0.57%
200	21.34	29-Sep-88	25.26	9228	1.87%
400	47.6	06-Oct-85	28.25	10317	2.58%
400H	52.34	08-Aug-03	10.41	3802	0.15%
800	1:53.28	26-Jul-83	30.44	11120	0.64%
1,500	3:50.46	11-Sep-93	20.31	7420	2.64%
5,000	14:11.15	06-Jun-08	5.58	2038	0.00%
10,000	29:31.78	08-Sep-93	20.32	7423	1.24%
Marathon	2:15.25	13-Apr-03	10.73	3919	3.21%
Shot put	22.63	07-Jun-87	26.58	9708	6.89%
Discus	76.8	09-Jul-88	25.49	9310	11.60%
Long jump	7.52	11-Jun-88	25.57	9338	5.19%
High jump	2.09	30-Aug-87	26.35	9624	0.48%

	Men				
	Time	Date	Age (yrs)	In days	Last 4 yrs vs WR
100	9.58	16-Aug-09	4.39	1602	0%
Short Hurdles	12.8	07-Sep-12	1.33	484	0%
200	19.19	20-Aug-09	4.38	1598	0%
400	43.18	26-Aug-99	14.36	5245	1.32%
400H	46.78	06-Aug-92	21.41	7821	1.00%
800	01:40.9	09-Aug-12	1.40	513	0%
1,500	03:26.0	14-Jul-98	15.48	5653	1.59%
5,000	12:37.35	31-May-04	9.60	3505	1.69%
10,000	26:17.53	26-Aug-05	8.36	3053	0.54%
Marathon	2:03:23	29-Sep-13	0.27	97	0%
Shot put	23.12	20-May-90	23.63	8630	3.07%
Discus	74.08	06-Jun-86	27.58	10074	2.97%
Long jump	8.95	30-Aug-91	22.35	8163	2.35%
High jump	2.45	27-Jul-93	20.44	7466	2.86%

Career Focus - Where could this take you?

My career in athletics is a performance analysis coach. My job involves using video evidence to identify strengths and weaknesses in an athletes performance. I then set goals for the performer to improve from this and as a result their performance improves and they become faster and stronger.

Challenge Activities

Design a world record standards table :-
Can you create a table that shows between three to five world records and research and include a picture of the people that have set them. This can be then placed onto the PE notice board and compared to data set by students in the school.

Create an Olympics Poster :-
Use the additional resources section hyperlink at the bottom of the page. Can you link the CORE values to The schools RITA values.

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://www.britannica.com/story/what-do-the-olympic-rings-and-flame-represent

Year 7 Trampolining

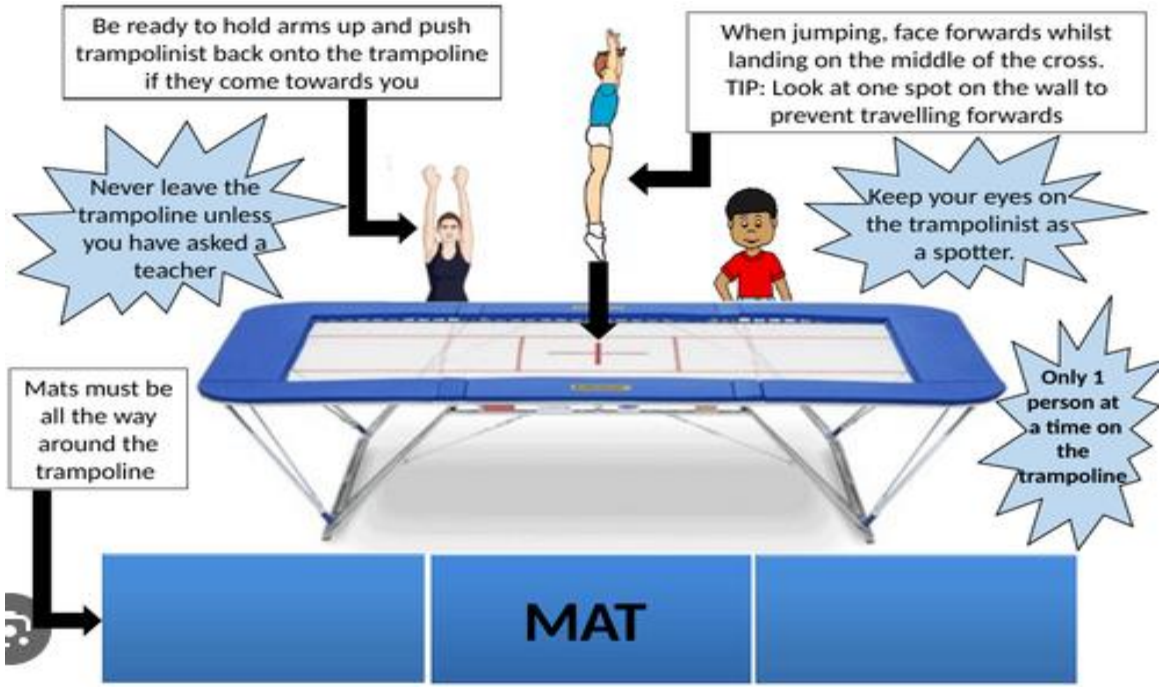
The aims of the sequence of learning are to ensure that all students:

- Identify at least 4 core trampolining skills.
- Demonstrate basic core skills such as a straight jump.
- Demonstrate a 5 bounce routine.
- Lead a small group of peers in a warm up.

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.

Key Concepts

Plantar-flexion occurs at the ankle to allow you to point your toes. Make sure your toes are pointed when performing a core skill such as a **straight jump.** This makes your performance **aesthetic.**



Sentence starters for feedback
I enjoyed...
I can now work on...

Above are the basic jump shapes you will achieve by the end of the block. Take note of how the legs and feet are used to make the move aesthetic.

Use the **feedback** sentence starters above to provide **feedback** to a **peer.**

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Retrieval Practice. Recall routines for your performance.

Routine #1:
Tuck jump
Straddle jump
Pike jump
Seat landing
To feet

Routine #2:
½ twist Jump
Tuck jump
Seat landing
To feet
Straddle jump

Routine #3:
Full twist jump
Tuck jump
Seat landing
To feet
Straddle jump

Depending on your progress levels in trampolining:-
If you are unable to complete a seat landing, then you can replace with a pike jump.
If you are unable to complete the routine, then have two bounces between each skill.

Questions	Answers
What are the most important components of fitness for a trampolining athlete?	Flexibility, balance, coordination.
Why is it important that a trampolining move is done in an aesthetic way?	To ensure that the audience can see the full extent of the performance.
What is the difference between a straight bounce and a tuck jump?	On a straight jump the legs are straight and the toes pointed. On a tuck jump, the knees are flexed with the toes pointed.
Why is it important that you can stop safely on the trampoline?	To reduce the risk of injury when finishing a move.

Career Focus - Where could this take you?

Performance coaches watch and analyse the performances of athletes to help them improve.

Challenge Activities

Create:

- **Create a 5 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.**
- **Create a mind map containing all of the basic core skills you have learnt about – draw a diagram showing how each is completed. Label key components e.g. pointed toes.**

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.youtube.com/watch?v=M_h9dmJ3NmM**

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