

Year 9 – HT1



**Newsome
Academy**
Everyone Exceptional Everyday

Knowledge Organisers

Name:

Team:



Mathematics

Our students will:

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



Year 9 Straight line Graphs

What do I need to be able to do?

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

- Compare gradients
- Compare intercepts
- Understand and use $y = mx + c$
- Find the equation of a line from a graph
- Interpret gradient and intercepts of real-life graphs

Keywords

Gradient: the steepness of a line

Intercept: where two lines cross. The y-intercept: where the line meets the y-axis

Parallel: two lines that never meet with the same gradient

Co-ordinate: a set of values that show an exact position on a graph

Linear: linear graphs (straight line) — linear common difference by addition/ subtraction

Asymptote: a straight line that a graph will never meet

Reciprocal: a pair of numbers that multiply together to give 1

Perpendicular: two lines that meet at a right angle

Career Focus - Where could this take

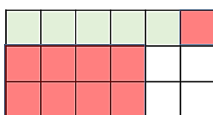


As a data analyst I collect, organize, and study data to provide business insights. I use my skills to uncover patterns, trends, and relationships within the data, helping companies make decisions.

Challenge Activities



Lucy shades in part of a rectangle.



She shades some more squares.

$\frac{7}{9}$ of the rectangle is now shaded.

How many more squares did Lucy shade?

Retrieval Practice

- 1) Does the coordinate (3, 7) lie on the line $y = 7$? How do you know?
- 2) What is the mode of the data? 16, 25, 16, 19, 32
- 3) 60 people voted for their favourite colour. 23 people voted for red. What would the angle in a pie chart be for red?
- 4) What is the area of the circle? Give your answer in terms of π .



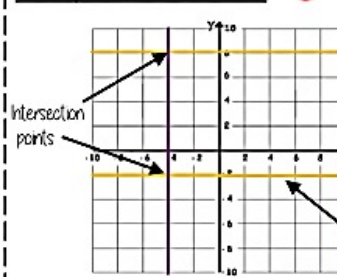
Topic Links

This topic links to:
Substitution, rate of change

Additional Resources

To further practice and develop your knowledge see:
<https://corbettmaths.com/contents/Number:160>

Lines parallel to the axes



All the points on this line have a x coordinate of 10

Lines parallel to the y axis take the form $x = a$ and are vertical

Lines parallel to the x axis take the form $y = a$ and are horizontal

All the points on this line have a y coordinate of -2
eg (3, -2) (7, -2) (-2, -2)
all lay on this line because the y coordinate is -2

'a' can be ANY positive or negative value including 0

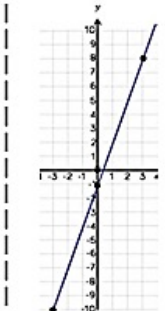
Plotting $y = mx + c$ graphs

$y = 3x - 1$ → 3 x the x coordinate then - 1

x	-3	0	3
y	-10	-1	8

Draw a table to display this information

This represents a coordinate pair (-3, -10)



You only need two points to form a straight line

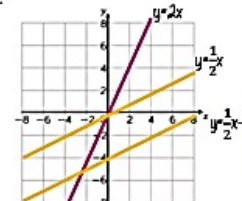
Plotting more points helps you decide if your calculations are correct (if they do make a straight line)

Remember to join the points to make a line

Compare Gradients

$$y = mx + c$$

The coefficient of x (the number in front of x) tells us the gradient of the line

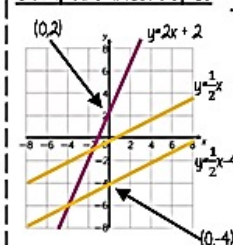


The greater the gradient — the steeper the line

Parallel lines have the same gradient

Positive gradients
Negative gradients

Compare Intercepts



The value of c is the point at which the line crosses the y-axis Y intercept

The coordinate of a y intercept will always be (0,c)

Lines with the same y-intercept cross in the same place

$$y = mx + c$$

The coefficient of x (the number in front of x) tells us the gradient of the line

$y = mx + c$
y and x are coordinates

The value of c is the point at which the line crosses the y-axis Y intercept

The equation of a line can be rearranged: Eg
 $y = c + mx$
 $c = y - mx$
Identify which coefficient you are identifying or comparing

Real life graphs

A plumber charges a £25 callout fee, and then £12.50 for every hour. Complete the table of values to show the cost of hiring the plumber.

Time (h)	0	1	2	3	8
Cost (£)	£25				£125

In real life graphs like this values will always be positive because they measure distances or objects which cannot be negative.

Direct Proportion graphs

To represent direct proportion the graph must start at the origin

When you have 0 pens this has 0 cost. The gradient shows the price per pen

A box of pens costs £2.30. Complete the table of values to show the cost of buying boxes of pens.

Boxes	0	1	2	3	8
Cost (£)		£2.30			

The y-intercept shows the minimum charge. The gradient represents the price per mile



Year 9 Forming and Solving Equations

What do I need to be able to do?

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

- Solve inequalities with negative numbers
- Solve equations with unknowns on both sides
- Solve inequalities with unknowns on both sides
- Substitute into formulae and equations
- Rearrange formulae

Keywords

Inequality: an inequality compares two values showing if one is greater than, less than or equal to another

Variable: a quantity that may change within the context of the problem

Rearrange: Change the order

Inverse operation: the operation that reverses the action

Substitute: replace a variable with a numerical value

Solve: find a numerical value that satisfies an equation

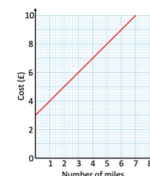
Career Focus - Where could this take



As a data analyst I collect, organize, and study data to provide business insights. I use my skills to uncover patterns, trends, and relationships within the data, helping companies make decisions.

Retrieval Practice

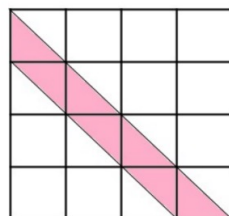
- The graph shows the cost of a taxi for a given number of miles. What does the y-intercept tell you?
- A straight line has equation $y = \frac{1}{2}x + 7$. What is the gradient of the line?
- Write down coordinates of three points that lie on the line $y = 4$
- Work out $\frac{5}{7} \times \frac{14}{15}$. Give your answer in its simplest form.



Challenge Activities



What fraction of this shape is shaded?



Solve equations with brackets

R

$$3(2x + 4) = 30$$

Expand the brackets

$$6x + 12 = 30$$

$$-12 \quad -12$$

$$6x = 18$$

$$\div 6 \quad \div 6$$

$$x = 3$$

Form and solve inequalities

R

Two more than treble my number is greater than 11

Find the possible range of values

$$3x + 2 > 11$$

Solve

$$x > 3$$

Inequalities with negatives

Method 1 Make x positive first

$$2 - 3x > 17$$

$$+ 3x \quad + 3x$$

$$2 > 17 + 3x$$

$$-17 \quad -17$$

$$-15 > 3x$$

$$\div 3 \quad \div 3$$

$$-5 > x$$

x is true for any value smaller than -5

CHECK IT!
 $2 - 3(-6) = 20$
TRUE/ CORRECT

Method 2 Keep the negative x

$$2 - 3x > 17$$

$$-2 \quad -2$$

$$-3x > 15$$

$$\div -3 \quad \div -3$$

$$x > -5$$

x is true for any value bigger than -5

This cannot be true...

When you multiply or divide x by a negative you need to reverse the inequality

Equations with unknown on both sides

$$4x + 5 = 3x + 24$$

$$-3x \quad -3x$$

$$x + 5 = 24$$

$$-5 \quad -5$$

$$x = 19$$

Inequalities with unknown on both sides

Solving inequalities has the same method as equations

$$5(x + 4) < 3(x + 2)$$

Check it!

$$5x + 20 < 3x + 6$$

$$2x + 20 < 6$$

$$2x < -14$$

$$x < -7$$

$5(-8 + 4) < 3(-8 + 2)$
 $5(-4) < 3(-6)$
 $-20 < -18$
✓ -20 IS smaller than -18

Formulae and Equations

Formulae – all expressed in symbols

Substitute in values

Equations – include numbers and can be solved

Rearranging Formulae (one step)

$$x = y + z$$

Rearrange to make y the subject

$$y = x - z$$

Using inverse operations or fact families will guide you through rearranging formulae

Rearranging can also be checked by substitution

Language of rearranging...

Make XXX the subject

Change the subject

Rearrange

Rearranging Formulae (two step)

In an equation (find x)

$$4x - 3 = 9$$

$$+3 \quad +3$$

$$4x = 12$$

$$\div 4 \quad \div 4$$

$$x = 3$$

In a formula (make x the subject)

$$xy - s = a$$

$$+s \quad +s$$

$$xy = a + s$$

$$\div y \quad \div y$$

$$x = \frac{a + s}{y}$$

The steps are the same for solving and rearranging

Rearranging is often needed when using $y = mx + c$

e.g Find the gradient of the line $2y - 4x = 9$

Make y the subject first

$$y = \frac{4x + 9}{2}$$

Gradient = $\frac{4}{2} = 2$

What do I need to be able to do?

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

- Use factors, multiples and primes
- Reason True or False
- Reason Always, sometimes never true
- Show that reasoning
- Make conjectures about number
- Expand binomials
- Make conjectures with algebra
- Explore the 100 grid

Keywords

Multiples: found by multiplying any number by positive integers

Factor: integers that multiply together to get another number.

Prime: an integer with only 2 factors.

HCF: highest common factor (biggest factor two or more numbers share)

LCM: lowest common multiple (the first time the times table of two or more numbers match)

Verify: the process of making sure a solution is correct

Proof: logical mathematical arguments used to show the truth of a statement

Binomial: a polynomial with two terms

Quadratic: a polynomial with four terms (often simplified to three terms)

Career Focus - Where could this take



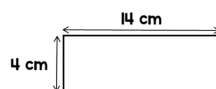
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Challenge Activities



Annie has a 1 metre piece of wire. She cuts the wire into two pieces. She uses the smaller piece to make this rectangle.

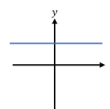


She uses the other piece of wire to make a square.

What is the length of one side of the square?

Retrieval Practice

- 1) Make b the subject of the formula. $a = 2b + c$
- 2) Solve $5x + 2 = x - 10$
- 3) The straight line passes through the point (3, 4). What is the equation of the line?
- 4) Share £700 in the ratio 9 : 5



Topic Links

This topic links to:

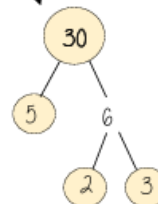
- Primes and factors. Expanding brackets

Additional Resources

To further practice and develop your knowledge see:
<https://corbettmaths.com/contents/>
Number: 218-219

Factors, Multiples and Primes

Multiplication part-whole models



All three prime factor trees represent the same decomposition

HCF – Highest common factor

HCF of 18 and 30

18: 1, 2, 3, 6, 9, 18

30: 1, 2, 3, 5, 6, 10, 15, 30

Common factors are factors two or more numbers share

LCM – Lowest common multiple

LCM of 9 and 12

9: 9, 18, 27, 36, 45, 54

12: 12, 24, 36, 48, 60

Common multiples are multiples two or more numbers share

Show that

Numerical verification

Show the stages to a solution with numerical values

Algebraic verification

Show algebraic properties of the solution

You may want to use pictorial images to support this

Proof

Simple proofs using algebra

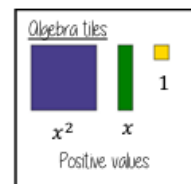
Compare the left hand side of an equation with the right hand side – are they the same or different?

Expanding binomials

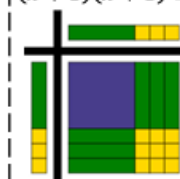
$$2(x + 2) \equiv 2x + 4$$



Algebra tiles can represent a binomial expansion. Has two terms



$$(x + 3)(x + 3) \equiv x^2 + 6x + 9$$



This is a quadratic. It has four terms which simplified to three terms

The order of the binomial has no impact on the outcome.
eg $(x + 3)(3 + x)$

True or False?

Conjecture

A pattern that is noticed for many cases

1, 2, 4, ...
The numbers in the sequence are doubling each time.

Counterexamples

This sequence isn't doubling it is adding 2 each time

Only **one** counterexample is needed to disprove a conjecture

Always, Sometimes, Never true

Always Every value always supports the statement

Sometimes Examples show the statement being true and counter examples to show when it is false

Never No example supports the statement

Examples to try

- 0 and 1
- Fractions
- Negative numbers

Conjectures

Even $(2n)$
Multiple of 2

Odd $(2n + 1)$
One more than any even

Use numerical verification first
Use pictorial verification – the representations of numbers of odd and even

Exploring the 100 square

In terms of 'n' is used to make generalisations about relationships between numbers

Positions of numbers in relation to n form expressions
Eg one space to the right of n
 $n + 1$

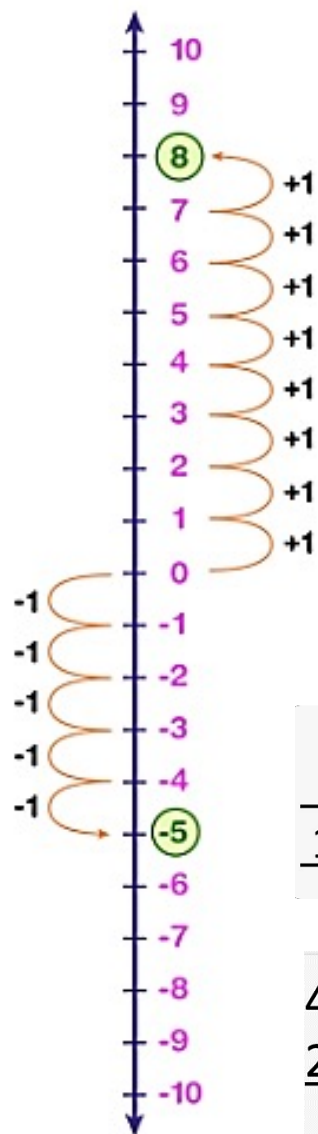
Eg One row below n
 $n + 10$

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

The size of the grid for generalisation changes the relationship statements



Maths: Quick Reference: Number Skills



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

addition

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

subtraction

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

multiplication

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

division

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

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

1% of
 $\div 100$
 $\frac{1}{100}$ of
 $\times \frac{1}{100}$
 $\times 0.01$

5% of
 $\div 10, \div 2$
 $\frac{1}{20}$ of
 $\times \frac{1}{20}$
 $\times 0.05$

10% of
 $\div 10$
 $\frac{1}{10}$ of
 $\times \frac{1}{10}$
 $\times 0.1$

20% of
 $\div 5$
 $\frac{1}{5}$ of
 $\times \frac{1}{5}$
 $\times 0.2$

25% of
 $\div 4$
 $\frac{1}{4}$ of
 $\times \frac{1}{4}$
 $\times 0.25$

50% of
 $\div 2$
 $\frac{1}{2}$ of
 $\times \frac{1}{2}$
 $\times 0.5$

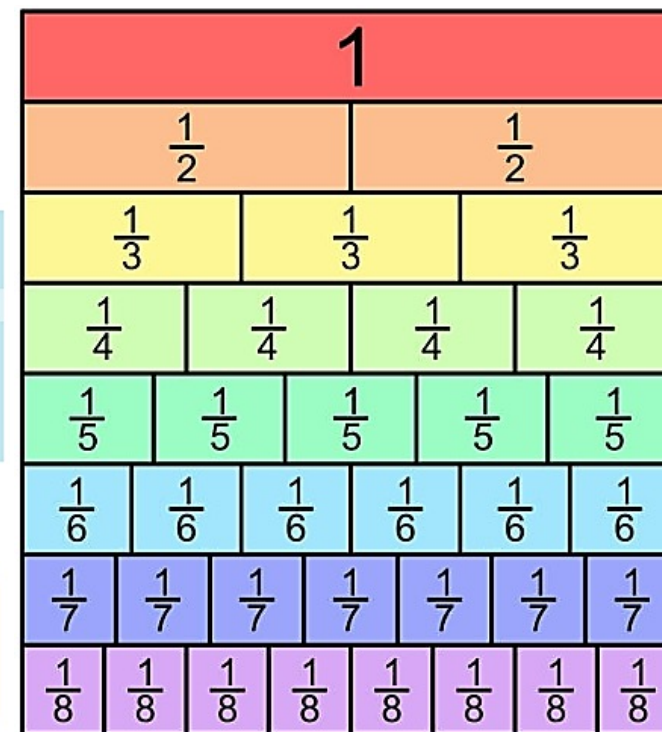
75% of
 $\div 4, \times 3$
 $\frac{3}{4}$ of
 $\times \frac{3}{4}$
 $\times 0.75$

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

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

$$\begin{array}{r} 045 \\ 8 \overline{) 360} \end{array}$$

1	2	3	4		
P	E	M	D	A	S
Parentheses	Exponents	Multiply	Divide	Add	Subtract
()	e^2	(\times)	(\div)	($+$)	($-$)
		Left to Right (whichever comes first)		Left to Right (whichever comes first)	



$156000. = 1.56 \times 10^5$
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



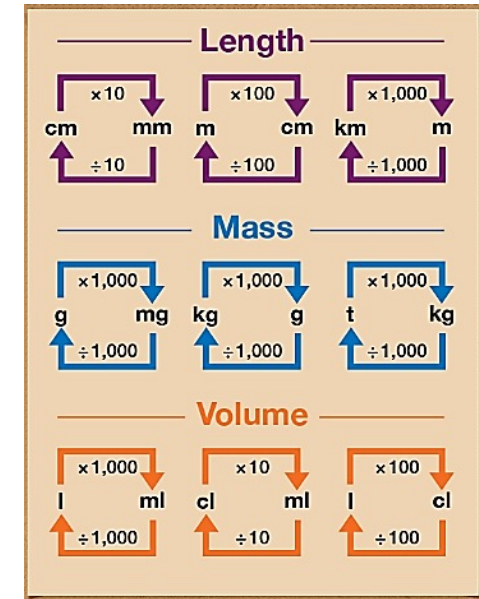
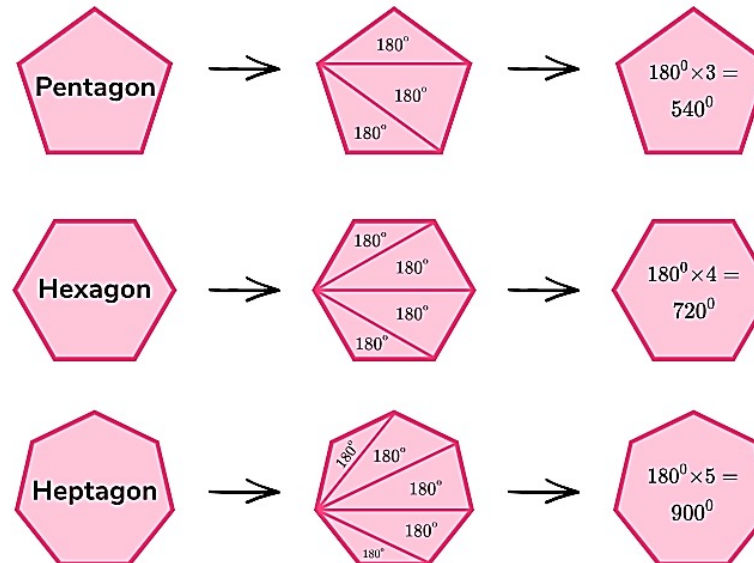
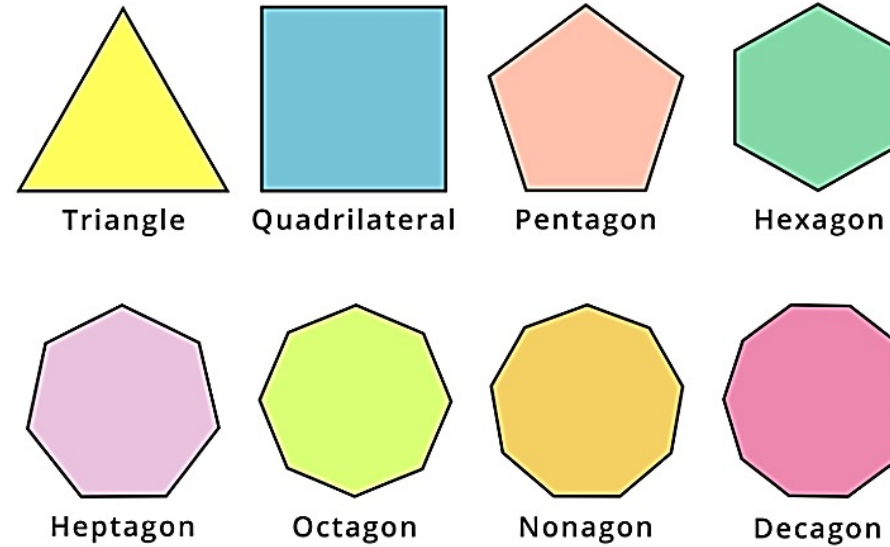
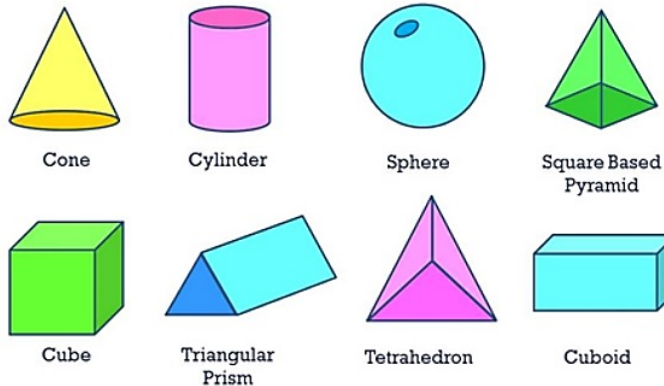
Maths: Quick Reference: Geometry & Measures

Quadrilaterals

Square	Rectangle	Parallelogram	Rhombus
Four sides of equal length, four internal right angles.	Four internal right angles, opposite sides of equal length.	Opposite sides are parallel and equal in length, opposite angles are equal.	All four sides are the same length, like a square that has been squashed sideways.

Trapezium (or trapezoid)	Isosceles Trapezium (or trapezoid)	Kite	Irregular Quadrilateral
Two sides are parallel. Side lengths and angles are not equal.	Two sides are parallel and base angles are equal, non-parallel sides are equal length.	Two pairs of adjacent sides are of equal length; the shape has an axis of symmetry.	No sides are equal in length and no internal angles are the same.

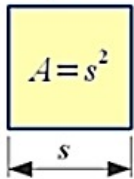
3D shapes



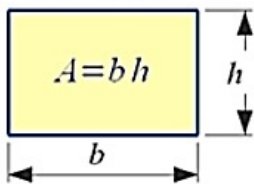


Maths: Quick Reference: Geometry (Areas & Volumes)

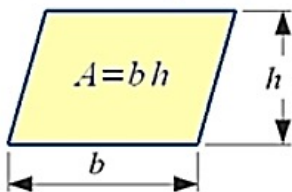
Square



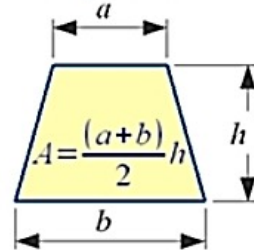
Rectangle



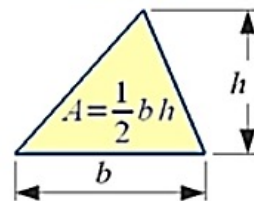
Parallelogram



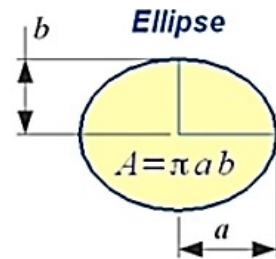
Trapezoid



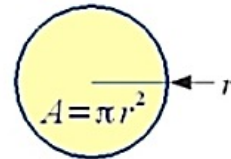
Triangle



Ellipse



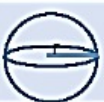



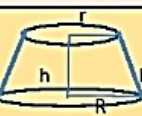


Circle



electronics-micros.com

Area and volume of 3d figures

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

Maths: Quick Reference: Algebra Skills

Simplifying Expressions

Like terms

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

Like terms

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

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

Expanding Brackets

multiply

$$7(x + 2)$$

$$7x + 14$$

multiply

$$5a(b - 4)$$

$$5ab - 20a$$

Expand & Simplify...

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

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

$$11x - 9$$

FOIL Method

F O

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

I L

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

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

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

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

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

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

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

Grid Method

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

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

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

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

An Expression

$$4a + 7b$$

An Equation

$$4a + 12 = 60$$

A Formula

$$A = \pi r^2$$

An Identity

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

Factorising Brackets

Common factor?

$$7x + 14$$

$$7(x + 2)$$

Common factor?

$$5ab - 20a$$

$$5a(b - 4)$$

Substitution

b = 9

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

Solving Equations

$$6x - 5 = 7$$

$$+ 5 \quad + 5$$

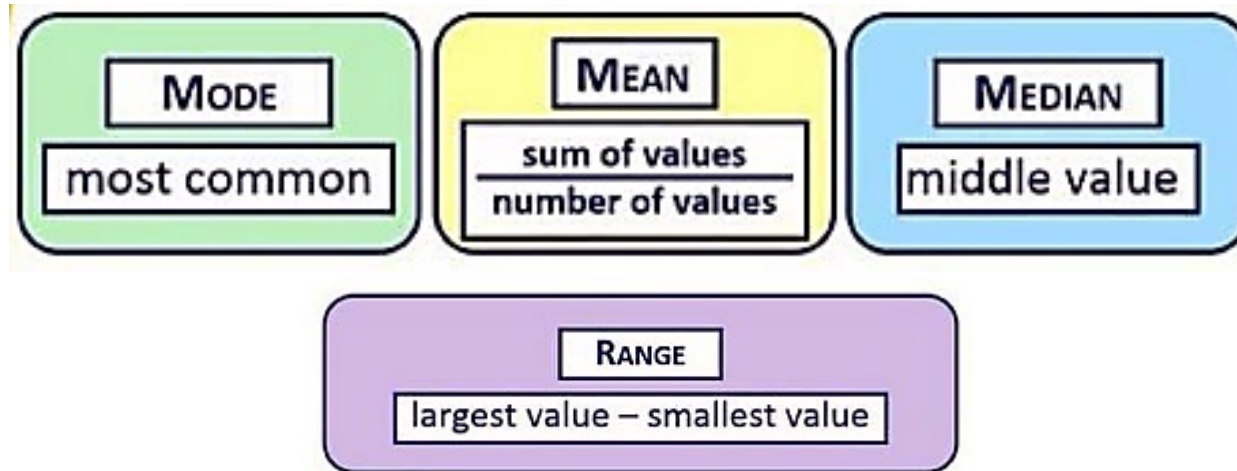
$$6x = 12$$

$$\div 6 \quad \div 6$$

$$x = 2$$



Maths: Quick Reference: Statistics



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

Mean from the Frequency Table

Discrete Data Frequency Table

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

Grouped Data Frequency Table

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

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

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



Maths: Quick Reference: Probability

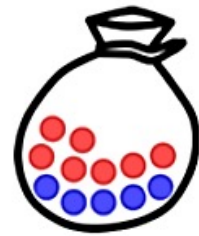
Simple Probability

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

Example:













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

$P(\text{blue}) = \frac{5}{12}$ ← Number of blue marbles
← Total number of marbles (sample space)



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

Sample Space Diagrams

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



Our students will:

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



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

- Learn about heroes and villains across literature and in real life.
- Write a persuasive speech using the DAFOREST technique.
- Learn how to identify 3-strand arguments in different texts.
- Link heroes & villains to other topics this year.



Knowledge



Rhetoric

Rhetoric is the art of persuasive speaking or writing, using linguistic methods (see the **Key Skill** box on the next page for more information). It is the language used by politicians to win votes and by advertisements to sell us products. Learning how to recognise and use rhetoric will help us to become more effective communicators and to make informed life choices.

This term, you will be building up your skill in identifying and using rhetoric to enable you to create a 3-strand argument and write a persuasive speech that you will have the opportunity to perform to your class

Can you identify what persuasive devices are being used in these adverts?



Heroes and Villains

'The battle line between good and evil runs through the heart of everyone'

What makes a hero, a hero? What makes a villain bad? Is it possible to be both?

By exploring a range of literary texts (some of which you will study at greater depth in Year 10 and 11) and a range of real-life examples of heroism and villainy in society, we will think about how we define characters and learn how to use language in a more powerful and effective way.





- Explore how heroes and villains are portrayed across texts
- Identify and use persuasive methods
- Plan an effective line of argument



Skills

Key Skill- Persuasive Methods

There are many tricks we can use to make our writing have a bigger impact on their audience or reader and make them agree with you. For some key persuasive methods, just remember 'DA FOREST':

- D**- Direct address- Use pronouns address your audience directly (you/ we)
- A**- Anecdote- A short personal
- F**- Facts- Things that are true
- O**- Opinion- Your own ideas and views
- R**- Rhetorical question- A question that doesn't need an answer
- E**- Emotive language- Vocabulary that will encourage the reader to feel something
- S**- Superlatives-
- T**- Tripling- A list of three

Career Focus: Copywriter



Copywriters write words for advertisements, websites, and other marketing materials. With an English qualification, you'll learn how to write persuasively, engagingly and clearly. You'll also develop a strong understanding of language, grammar, and communication, which are important skills for crafting compelling messages that capture people's attention.

Skills Practice

Can you identify the persuasive methods in this paragraph?

Want to be persuasive? It is so simple to make small changes that will make you sound convincing and capable. There are lots of persuasive methods to choose from (I think metaphors are particularly effective) and you must not forget to pull at the heart strings of your audience with the best, most well-chosen vocabulary. So turn your confidence up to 100% and get persuading!

Challenge Activities



Task 1 – Create a job advert for a new superhero. You will need to describe the kind of skills and qualities your town (real or imaginary) requires its new hero to have in order to keep maintain a safe, just and fair society.

Task 2: - Down with superheroes! Can you write a newspaper article that will persuade your readers that superheroes are a danger to society? Remember to use methods from the **Key Skill** box.



Topic Links



This topic links to:

PHSE- Morals and ethics

RE- Exploring ideas about faith

Additional Resources



To further practise and develop your knowledge see:

<https://www.bbc.co.uk/bitesize/guides/z84sk7h/revision/2>
<https://www.grammarly.com/blog/how-to-write-a-speech/>



Vocabulary

You will be tested on five words per week.



Keyword	Definition
Non-fiction	Writing about real facts and events.
Autobiography	A text where someone writes about their own life.
Exile	To send someone away from their
Luddite	A mill worker who destroyed new machinery.
Manifesto	A written statement of the beliefs and policies of an organization.
Assassination	To murder someone, often for political reasons.
Court deposition	A written statement by a witness.
Infamous	Having a bad or evil reputation.
Gallows	A wooden structure used to hang criminals.
Acclaimed	Acknowledged as being excellent.
Enterprise	A project or an undertaking to carry out an ambitious plan.
Altruism	Concern for the well-being of other people.
Malevolent	Having a wish to do evil to other people.

Keyword	Definition
Perpetrator	Someone who carries out a harmful act.
Cryptography	Breaking secret codes.
Evasion	To escape capture.
Posthumous	After death.
Internment	To be held prisoner.
Venerated	Regarded with great respect.
Creed	A set of beliefs or principles.
Tyranny	Cruel and oppressive rules.
Synonymous	Having the same meaning.
Macho	To be masculine in an overly aggressive way.
Creed	A set of beliefs or principles.
Ruse	An action intended to trick someone.



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 9 Organisation – Breathing & Health

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

- Explain how gas exchange occurs in humans and plants
- Describe the impact exercise, asthma and smoking have on our health

Keyword	Definition
Organ	A group of tissues carrying out a particular function.
Organ System	Organs working together as a system.
Organism	Organ systems all working together to form a living organism.
Breathing system	Network of organs and tissues that help you breathe including airways, lungs and blood vessels.
Ventilation	The movement of air into and out of the lungs.
Gas exchange	The exchange of gases (oxygen and carbon dioxide) in the lungs or leaves.
Alveoli	Tiny sacs in the lungs where gas exchange occurs.
Asthma	A medical condition where the airways become irritated and swell up.
Bronchitis	Bronchiole tubes become inflamed and leads to excess mucus and coughing.
COPD	Chronic obstructive pulmonary disease. Damage caused to lungs that prevents gas exchange.
Carcinogen	A substance that can cause cancer.
Photosynthesis	A process that occurs in plants that turns carbon dioxide and water into glucose and oxygen.
Stomata	Tiny holes on the bottom of leaves that allow gases in and out. Can open and close.

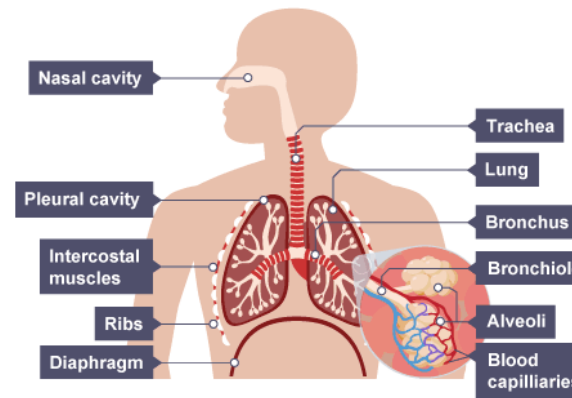
Key Concepts

The Lungs and Gas Exchange

The human lungs provide an **exchange surface** adapted for:

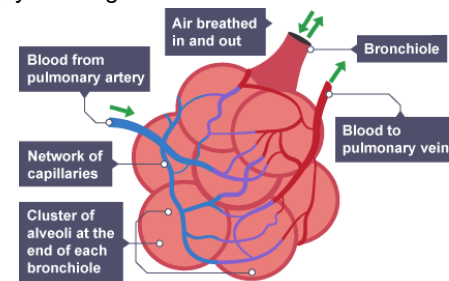
- absorbing **oxygen** – needed for respiration – into the blood from the air
- transferring **carbon dioxide** – produced by respiration – from the blood into the lungs then the air

The lungs are organs enclosed within the chest or **thorax**. Air needs to be breathed in to be brought into contact with the exchange surfaces within the lungs. This process is called **ventilation**.



The exchange of gases occurs between the alveoli and blood in the **capillaries** that supply the lungs.

Capillaries cover 70% of the outside of alveoli, providing a large surface area for gases to diffuse across.



Exercise, Asthma and Smoking

Regular exercise strengthens the intercostal muscles and diaphragm which make breathing more efficient.

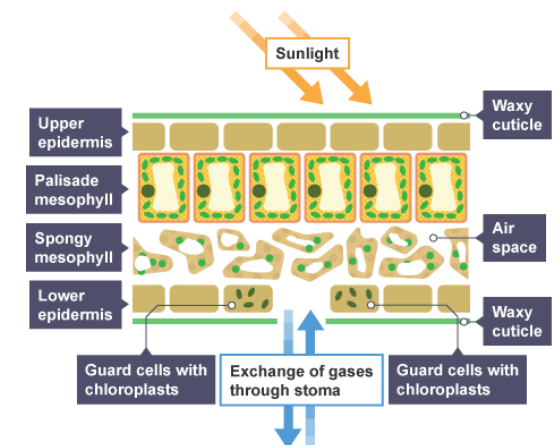
Asthma is a medical condition in which the lining of the airways from the mouth to the lungs become irritated and swell up. This reduces the air that can move in and out from the lungs. It is often treated by inhaling medication from an inhaler.

Smoking damages the tiny hairs that line the gas exchange system; these hairs are called ciliated cells. These move mucus up that has trapped dust and pathogens out of the airways. This can result in smokers developing a cough to remove this mucus. Smoking also irritates the bronchi which can lead to bronchitis. Smoking also breaks down the lining of the alveoli, which means less gas exchange can occur and can lead to chronic obstructive pulmonary disease (COPD). Cigarette smoke also contains carcinogen chemicals like tar, which can cause mouth, throat and lung cancer.

Plants and Gas Exchange

Plant leaves are adapted for **photosynthesis**, and the exchange of gases required for the process. The structure of the tissues is related to their functions in the plant.

When the plant is photosynthesising during the day, these features allow carbon dioxide to diffuse into the spongy mesophyll cells, and oxygen to diffuse out of them. To enter the leaf, gases diffuse through small pores called stomata.





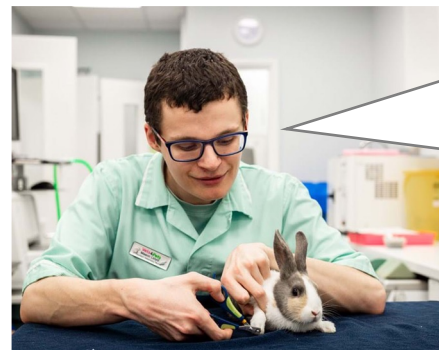
- Explain how gas exchange occurs in humans and plants
- Describe the impact exercise, asthma and smoking have on our health

Retrieval Practice



Questions	Answers
What is an organ?	A group of tissues that work together to perform a function.
What is an organ system?	A group of organs working together to perform a function.
Name the parts of the breathing system	Nasal cavity, Lungs, Trachea, Bronchus, Bronchioles, Alveoli, Diaphragm, Intercostal muscles, Rib cage
What controls ventilation?	The diaphragm and intercostal muscles.
How are the alveoli adapted for gas exchange?	Many alveoli = large surface area Thin walls (one cell thick) = short diffusion pathway Good blood supply (many capillaries) = a concentration gradient
What is diffusion?	The movement of substances from a high concentration to a low concentration. Down a concentration gradient.
How does exercise impact the breathing system?	This can strengthen the muscles of the breathing system (diaphragm and intercostal muscles) and make it more efficient.
How does smoking impact the breathing system?	Tobacco contains harmful substances that damage cilia (small hairs), the alveoli and bronchioles and can lead to serious diseases such as cancer and COPD.
How does asthma impact the breathing system?	Can cause constriction of muscles and swelling of airways making it difficult to breathe.
What gases are exchanged in leaves?	Carbon dioxide and oxygen.
Why do plants need to carry out gas exchange?	For photosynthesis: plants need carbon dioxide to make their food (glucose) and oxygen is a waste product they need to remove.
What controls the movement of gases in and out of leaves?	Stomata on the bottom of leaves open and close to allow gases to enter and leave the leaf.

Career Focus - Where could this take you?



I am a veterinary assistant. I work in a veterinary practice assisting in the care and treatment of animals. This can be a physically and emotionally demanding job where I have a variety of day-to-day tasks such as preparing animals for treatments, giving injections and medicines, taking x-rays, keeping the practice and equipment clean and assisting pet owners.

The skills I need for this job include knowledge of animal health, customer service, keeping calm in stressful situations and excellent communication skills.

Challenge Activities



1. Make flashcards for the definitions and retrieval practice questions.
2. Make a mind map for this topic. Remember to include keywords and the links between information.
3. Research the possible treatments for lung cancer, the risks and benefits of the treatments and turn the information into a leaflet.
4. Research how different lifestyle factors influence the breathing system.
5. Find out more about veterinary assistants and what they do. What qualifications would you need for this career? What current research is being done? What is the salary?
6. Construct a fact file about a famous historical scientist that helped us to understand more about plants and gas exchange.

Topic Links



This topic links to:

- Cells
- Respiration
- Photosynthesis
- Transport systems

We will also be practising how to

- Calculate lung capacity
- Write an evaluation to compare treatments

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/zvrrd2p/articles/zbhcg7h#zvp4r2p4>
<https://www.bbc.co.uk/bitesize/guides/z9kx8mn/revisi-on/2>
 YouTube Cognito – <https://www.youtube.com/watch?v=B44n2SMLv-s>



- Calculate pressure
- Explain why pressure changes at different heights (atmosphere) and depths (ocean)

Keyword	Definition
Pressure	How much force is exerted on an object.
Force	A push or pull that acts on an object due to interaction with another object.
Area	A measurement of a surface.
Newton	A unit of force. How forces are measured. Symbol = N
Pascal	A unit of pressure. How pressure is measured. Symbol = Pa
Fluid	Both liquids and gases are fluids. Their particles are free to move so they can flow or be poured.
Particles	Tiny things that all matter are made from.
Collision	When one object runs into another.
Volume	The amount of space that a 3D object takes up.
Liquid pressure	The force exerted on an object when it is in a liquid.
Gas pressure	The force exerted on the sides of a container by particles of gas.
Atmosphere	The layer of gases that surrounds the Earth. Made up mainly of nitrogen 78% and oxygen 21%.
Atmospheric pressure	The weight of the atmosphere pushing down on the Earth.
Altitude	How high something is compared to sea level.

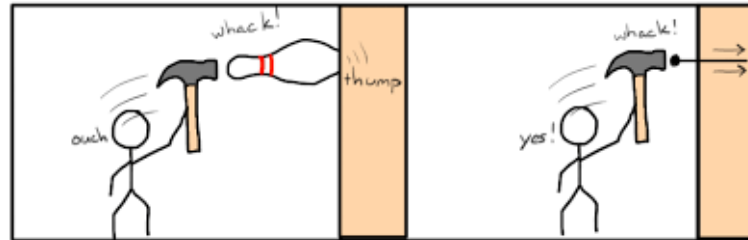
Key Concepts

Pressure in solids

Pressure is a measure of how concentrated (or spread out) a force is. The amount of pressure exerted on an object depends on the force applied and the surface area it is spread over. We can calculate the amount of pressure on an object using a simple formula:

$$\text{Pressure} = \text{force} \div \text{area}$$

A rock resting on a soft surface, like sand or mud, will create an indentation. The depth of this indentation depends on the pressure exerted on the ground. The larger the pressure the deeper the indentation it will create. The greater the weight of the rock, the higher the pressure it exerts on the ground. The smaller the surface area resting on the ground, the higher the pressure it exerts on the ground.



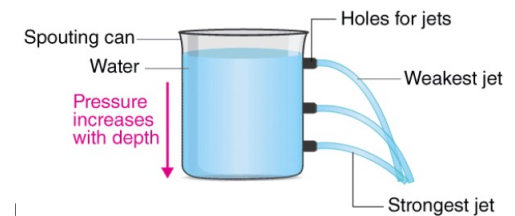
Pressure can be measured in many different units, but scientists usually use units called pascals (Pa). Other units commonly used to measure pressure include newtons per square centimetre (N/cm²), bars and pounds per square inch (P.S.I.) One pascal is the pressure exerted when a force of one newton is spread over an area of 1 square metre, so one pascal (1 Pa) is the same as **one newton per square metre (1 N/m²)**. Understanding the connection between force, pressure and area can help scientists and engineers design and make more effective machines and devices.

Pressure in Liquids

Just like gases, liquids exert pressure on objects due to collisions between the liquid particles and the object. The amount of pressure exerted depends on both the density of the liquid and the depth of the liquid.

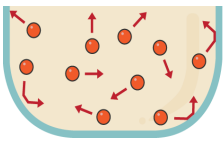
The deeper you go:

- the greater the weight of liquid above the object
- the greater the liquid pressure.



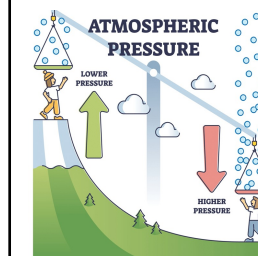
Pressure in Gases

The particles in a gas move quickly in random directions. Therefore, the particles regularly bump into each other and the walls of their container. These collisions exert pressure on the walls of the container and any objects surrounded by the gas.



If the temperature of a gas is increased, the particles move faster, so they hit the walls of the container more often. This causes the pressure to increase.

Decreasing the volume of the container also increases the pressure. This is because the rate at which the particles collide with the surfaces increases because there are more particles in a smaller space.



Atmospheric pressure decreases as the height of a surface above ground level increases.

This is because, as the altitude increases:

- the number of air molecules decreases
- the **weight** of the air decreases
- there is less air above a surface



- Calculate pressure
- Explain why pressure changes at different heights (atmosphere) and depths (ocean)

Retrieval Practice



Questions	Answers
What is pressure?	The amount of force exerted on an object.
How is pressure calculated?	Pressure = Force ÷ Area
What are the units for pressure?	Pascals (Pa) which is the same as 1 Newton per square metre (N/m ²)
Which objects exert the most pressure?	Objects with the greatest weight being exerted on the smallest area.
How can we decrease pressure?	Either by decreasing the weight of the object or increasing the surface area it is exerting its force on.
What causes pressure in liquids?	The pressure caused by liquid particles colliding with an object.
How does pressure change with depth in a liquid?	The pressure increases as the depth of a liquid increases.
Why does pressure increase as you increase the depth of a liquid?	The weight of the liquid above the object increases as you increase the depth.
What causes pressure in gases?	The pressure is caused by gas particles colliding with the sides of a container.
What increases pressure in gases?	Pressure increases when gas particles collide more often which can occur when temperature increases or volume decreases.
What is atmospheric pressure?	The pressure caused by the weight of the atmosphere pushing down on the Earth.
How does pressure change with altitude?	As altitude increases pressure decreases.
Why does pressure change with increasing altitude?	The number of air particles decreases and the weight of the atmosphere decreases.

Career Focus - Where could this take you?



I am a scuba diving instructor. My job is an awesome way for me to share my love of diving with other people. I can work almost anywhere – my local PADI dive shop, a resort on a far-flung island or even on a superyacht!

To become an instructor, you'll need to have a number of scuba-diving qualifications. These include the PADI Open Water Diver, PADI Advanced Open Water Diver, PADI Rescue Diver, PADI Divemaster and emergency first response certifications. You'll also need to successfully log 100 open water dives, complete an instructor development course and complete an instructor evaluation.

Challenge Activities



1. Make flashcards for the definitions and retrieval practice questions.
2. Make a mind map for this topic. Remember to include keywords and the links between information.
3. Research the effects of pressure on the human body. How do we manage when people need to go to high altitudes or deep under the ocean?
4. Research how different lifestyle factors influence the breathing system.
5. Find out more about scuba diving instructors and what they do. What qualifications would you need for this career? What is the salary?
6. Construct a fact file about a famous historical scientist that helped us to understand more about pressure.

Topic Links



This topic links to:

- Forces
- Chemistry and the Atmosphere
- Blood pressure and the heart

We will also be practising how to

- Calculate pressure
- Research the ways pressure is used in machines

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/z4brd2p/articles/zvdpf82>
 YouTube Cognito – <https://www.youtube.com/watch?v=0P3b8bWqAkc>
<https://www.youtube.com/watch?v=s8C2RktZtbM>



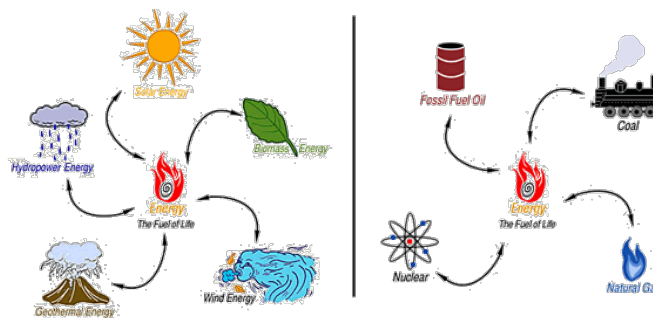
- Describe how the Earth has limited resources and the importance of recycling
- Explain how the reactivity series is used to displace metals from their ores

Keyword	Definition
Finite	Resources which will run out soon. There is a limited supply.
Renewable	Resources which will not run out in the foreseeable future.
Resource	A resource is a physical material that humans need and value such as land, air, and water.
Reserves	Deposits of natural deposits that are known to exist.
Sustainability	Sustainability is the idea that humans must interact with the environment in a way that ensures there will be enough resources left for future generations.
Metals	Substances that have high melting/boiling points, conduct electricity/heat, are shiny and are malleable.
Chemical Bonds	Forces holding atoms together in a molecule. Require energy to break.
Reactivity Series	How well a metal can react will affect its order in the reactivity series.
Displacement	A more reactive element can displace a less reactive element out of its compound during a chemical reaction.
Electrolysis	Electrolysis is a process which uses electrical energy to break a compound and collect pure metals.
Reduce	Producing less waste.
Reuse	Using items as much as you can before replacing them.
Recycle	Converting waste materials that would be thrown away into new materials and/or objects.

Key Concepts

Finite and Renewable Resources

Many of the Earth's resources are finite. Chemists have a role in estimating the number of reserves remaining and ensuring that the use of resources is sustainable.



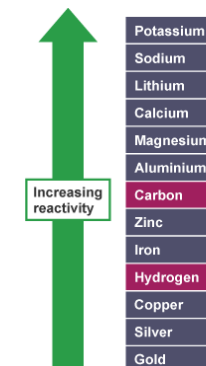
Reduce Reuse and Recycle



Extracting metals

Metals mostly occur as compounds in rocks and minerals and must be extracted before they can be used. The method used to extract the pure metal depends on its position in the reactivity series.

The most **unreactive** metals, silver and gold, are found as **elements** in the rocks. They are not **chemically bonded** to other elements in compounds. Most of the metals found in rocks are combined with other elements in **compounds**. These compounds are called **minerals**. Metals below carbon can be extracted using a displacement reaction but those above carbon must be extracted using electrolysis.



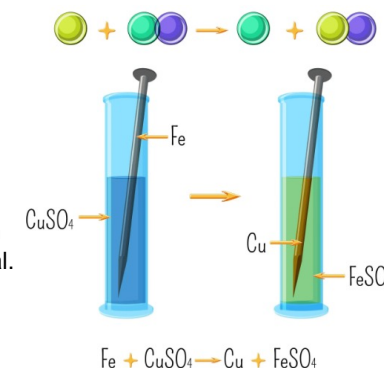
Displacement

Displacement reactions are chemical reactions which involve a metal and a compound containing a different metal.

These compounds containing metals and non-metals are called **salts**. For example, iron (a metal) reacts with copper sulfate (a salt containing copper).


In a displacement reaction, a *less* reactive metal is displaced from its compound by a *more* reactive metal.

When a displacement reaction happens, the temperature rises.



Retrieval Practice	
Questions	Answers
What name is given to resources which may run out one day if not managed carefully?	Finite resources such as crude oil.
What are the 4 main non-renewable energy sources?	Coal, Oil, Natural gas and Uranium.
What is a renewable resource?	A resource that will not run out for the foreseeable future.
Name some renewable resources.	Wind, Solar, Geothermal, Wood, Hydro (water) and Cotton.
Where are metals found?	In their ores, as compounds chemically bonded to other elements.
What is displacement?	When a more reactive substance removes an element from its compound.
Why can't all metals be extracted using carbon?	They are more reactive than carbon so cannot be displaced.
Which metals can be extracted using carbon?	Zinc, iron and copper.
What process is used to extract reactive metals?	Electrolysis
Name the three R's	Reduce, Reuse and Recycle.
What is recycling?	When waste materials are made into new materials and objects.
Why is it important to reduce, reuse and recycle?	So that resources do not run out and so that less waste goes to landfill or for incineration.

Career Focus - Where could this take you?



I am a dental technician. I work with a variety of materials such as polymers and ceramics to help improve or replace lost teeth. I work with the information that dentists provide me to make things like dentures, veneers, bridges, crowns and braces. I need a good understanding of the science of dental materials to ensure the correct material is chosen for the particular job it needs to do. I work mainly in the laboratory with a range of specialised equipment, so my day is very varied and never boring. My qualifications include a BTEC national diploma in dental technology.

Challenge Activities

- Make flashcards for the definitions and retrieval practice questions.
- Make a mind map for this topic. Remember to include keywords and the links between information.
- Research the career dental technician and find out more about what they do. How much is their salary and what routes are there to become one?
- Produce a fact file on renewable resources. What technology is being developed now to help with the energy crisis?
- Construct a fact file about a famous historical scientist that helped us to understand more about extracting metals.

Topic Links	Additional Resources
This topic links to: <ul style="list-style-type: none"> Energy Chemical Reactions Interdependence We will also be practising how to <ul style="list-style-type: none"> Evaluate data Design a leaflet to promote the 3 R's 	To further practise and develop your knowledge see: Educake - https://www.educake.co.uk/ BBC Bitesize - https://www.bbc.co.uk/bitesize/guides/zgqhcj6/revision/2 YouTube Cognito - https://www.youtube.com/watch?v=PDeiRIQvWnM



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 9 River Processes & Features

- Describe how the shape of river valleys changes as rivers flow downstream
- Describe different fluvial processes of erosion, transport and deposition
- Recognise and describe the characteristics and formation of landforms resulting from erosion – interlocking spurs, waterfalls and gorges
- Recognise and describe the characteristics and formation of landforms resulting from erosion and deposition –meanders and oxbow lakes
- Recognise and describe the characteristics and formation of landforms resulting from deposition – levées and flood plains

Keyword	Definition
Erosion	The breakdown and removal of material
Transportation	The processes which move river material down the river.
Bedload	The material carried by a river
Deposition	The dropping of carried material when a river loses energy.
Meander	A bend in a river. Normally found in the middle course.
Waterfall	A step in the long profile of a river. Usually formed when a river crosses over a hard band of rock.
Discharge	The volume of water passing a given point on the river course.
River Channel	The route the water flows through.
Thalweg	The line of fastest flow in a river
Mouth	The end of a river where a rivers meets a sea or lake
Source	Where a river begins
Tributary	stream that feeds into a larger stream, river or other body of water.
Drainage Basin	An area of land drained by a river and its tributaries
Confluence	Where 2 or more rivers/tributaries meet
Watershed	The boundary of a river basin

Key Concepts

Erosional Processes

Hydraulic Action – as the water is forced into the sides of the river channel, air is compressed in the small cracks in the rock. Tiny fragments of rock get broken away as the process is repeated.

Abrasion – the river picks up eroded rocks, pebbles and sand. The material then rubs against the channel, wearing it away.

Attrition – eroded materials in the river bump into each other and eventually wear each other down. Over time, the materials become smaller and more rounded.

Solution – water reacts with minerals in rocks and the structure of the rock is changed.

Transportation processes

Traction – material carried by the river is rolled along the riverbed.

Saltation – material carried by the river is bounced along the riverbed.

Suspension – material is carried by the river water.

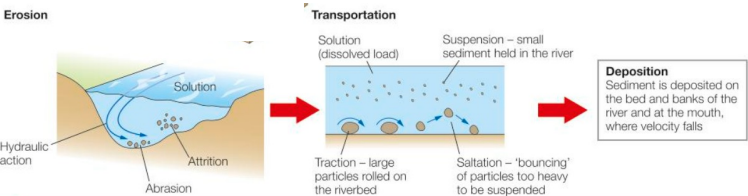
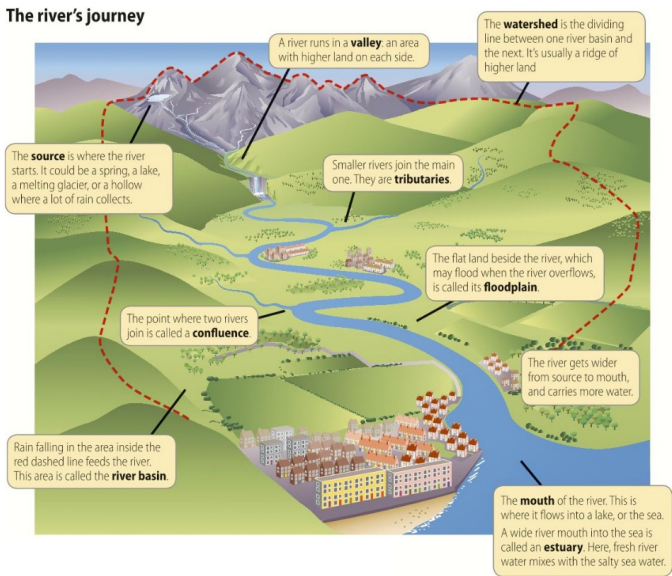
Solution – soluble material is dissolved and carried by the river water.

Deposition

River's deposit eroded material as they lose energy (velocity) this happens when:

- The river becomes shallower.
- The discharge (volume of water) is reduced. The amount of transported material increases;
- The river reaches the mouth.

The river's journey



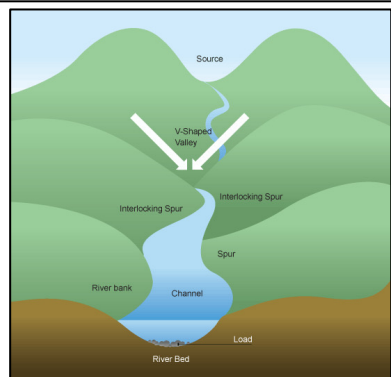
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Key Concepts

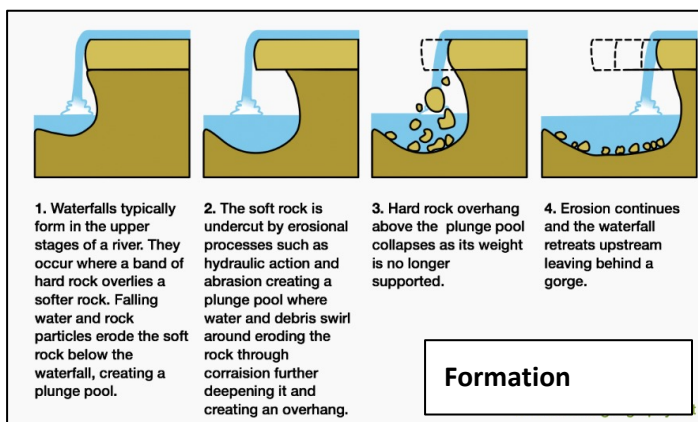
Interlocking spurs

Form in the upper course of a river where vertical erosion creates steep-sided V-shaped valleys. The river winds and bends to avoid areas of hard rock creating interlocking spurs of land.



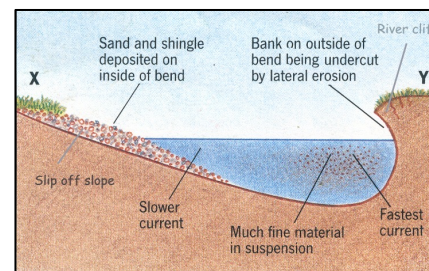
Waterfalls

Waterfalls are found in the upper course of a river and are created when the riverbed is comprised of alternating hard and soft rock.



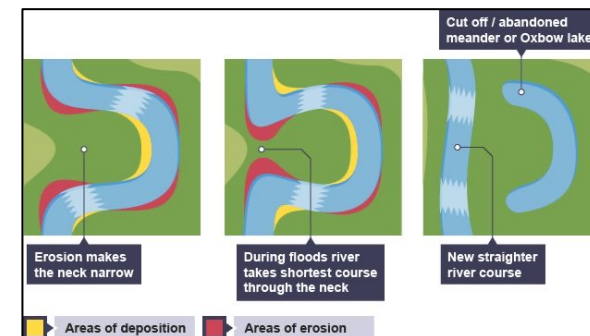
Meanders

Form in the middle and lower course where lateral erosion causes the river to widen. The outside of a river bend erodes more quickly as the water is forced to the outside of the bend as it turns.



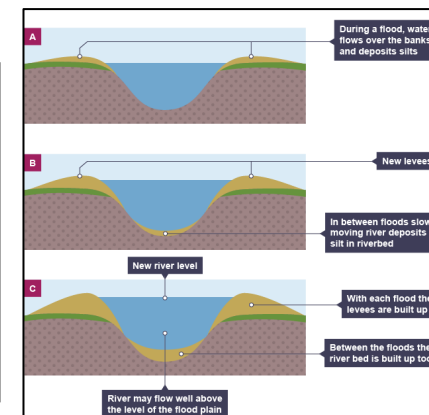
Ox-bow lakes

Form where meanders have become so enlarged that the river breaks through the neck of the meander and cuts off the bend.



Levees

Form in the lower course along the riverbanks due to repeated flooding. As water overflows the main channel, it loses energy, depositing material on the banks. This creates natural embankments.



Year 9 River Processes & Features

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Retrieval Practice



Questions

What are four erosional processes active in a river?

Hydraulic Action, Abrasion, Attrition and Solution

What are four transportational processes in a river.

Traction, Saltation, Suspension and Solution

What landforms are found in the upper course of a river?

Waterfalls and gorges

What landforms are found in the middle course of a river?

Meanders and oxbow lakes

What landforms are found in the lower course of the river?

Levees and estuaries

Name a waterfall on the River Tees

High Force

What is the load of a river?

The material carried in the river

What is deposition?

Where a river drops (deposits) it's load

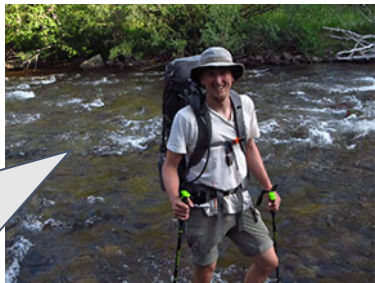
What is the area of land drained by a river called?

A drainage basin

Career Focus - Where could this take you?



Geomorphologists study how the earth's surface is formed and changed by rivers, mountains, oceans, air and ice. This topic will help you understand how Rivers shape the surface of the planet and how processes create those shapes. The skills from this topic will help in any part of geomorphology and aren't limited to focusing on rivers.



Challenge Activities



1. Make a crossword using the key terms from this sheet. Don't forget to write detailed clues
2. Create a collage using images, words and photographs to show the features of a river
3. Create a full colour storyboard and script to depict the key information in the formation of at least 2 river features.

Topic Links



This topic links to other subjects such as:
RE and science

We will also be practising how to:

- Analyse data from maps
- Develop locational knowledge and physical geography skills

Additional Resources



BBC Bitesize:



Oak National Academy:









Key Concepts:



World – Countries and Oceans



Keyword	Definition	Key Concepts			
Suffrage	The right to vote in political elections.	<div>Expectations of Women from the 17th to 19th Century:</div> <p>At the start of the Twentieth Century, women had a very stereotypical role in British society. If married, they stayed at home to look after the children while their husband worked and brought in a weekly wage. If single, they did work which usually involved some form of service such as working as a waitress, cooking etc. Many young women were simply expected to get married and have children. The term “spinster”, though not a term of outright abuse, was still seen as having some form of stigma attached to it... That you were not good enough to get a husband!</p> <p>For decades women’s progress in British society was haunted by the words of Queen Victoria:</p> <p><i>“Let women be what God intended, a helpmate for man, but with totally different duties and vocations.”</i></p> <div></div>			
Suffragette	A campaigner for women's suffrage willing to undertake militant action or to break the law.				
Suffragist	A campaigner for women's suffrage who believes in constitutional methods of campaigning.				
NUWSS	The National Union of Women's Suffrage Societies, formed in 1897 and brought together many smaller suffrage organisations. The NUWSS's method was non-confrontational and constitutional.				
WSPU	Women’s Social and Political Union was formed when Emmeline Pankhurst found disillusionment with the progress of NUWSS. ‘Deeds not Words’ was their slogan.				
Petition	A formal written request or application, especially one signed by many people, to a particular individual or group, for example, a government.	<div>Key People:</div> <div></div>			
Pacifist	An individual who disagrees with war on principle.				
Militant	Aggressive, violent behaviour in pursuit of a political cause, favouring extreme or confrontational campaign methods.				
Arson	The act of deliberately setting fire to property with a view to causing extensive damage.				
Constitutional	A peaceful, legal way of campaigning, often using recognised 'political' methods such as petitions.				
Hunger Strike	Some imprisoned suffragettes went on hunger strikes to further raise awareness for their cause.	<div>Emmeline Pankhurst (WSPU):</div> <p>Led the WSPU from October 1903. Took more militant action such as window smashing, arson and hunger strikes. Arrested numerous times, went on hunger strikes and was force fed. Died in 1928.</p> <div>Christabel Pankhurst (WSPU):</div> <p>Became a speaker for the WSPU in 1905. She trained as a lawyer but could not practice as she was a woman. Arrested with her mother and fled England in 1912 for fear of being arrested again.</p> <div>Emily Wilding Davison (WSPU):</div> <p>Joined WSPU in 1906. 3 years later, left job as a teacher and became a suffragette full time. Frequently arrested for a number of crimes including setting fire to a post box. By 1911, became increasingly militant.</p> <div>Millicent Fawcett (NUWSS):</div> <p>Leading suffragist and led NUWSS from 1897-1919. Played a key role in getting women the vote. Dedicated to using constitutional means, and argued that militancy was counter-productive.</p>			
Force Feeding	Imprisoned suffragettes on hunger strike were sometimes force fed. Being force fed involved a rubber tube being inserted into the throat or nose and liquidised food being poured in.				
Manifesto	A public declaration or proclamation, stating the aims and methods of a campaign group.				
Enfranchisement	To be granted the vote or the state of having the vote.				





Key events	
1897	NUWSS formed. Millicent Fawcett is leader
1903	WSPU is formed by Emmeline Pankhurst and daughters.
1905	Militant campaign begins – Christabel Pankhurst and Annie Kenney arrested.
1908	Mass rally in London – 300,000 to 500,000 activists attend. Window smashing using stones with written pleas on them.
1909	Hunger strike and force feeding starts. Marian Wallace Dunlop becomes the first hunger striker.
1913	Militant bomb and arson campaigns and increasing arrests which results in the passing of the ‘Cat and Mouse Act’ under which hunger strikers are temporarily released then rearrested to prevent them dying in police custody.
1913	Emily Wilding Davison attempts to pin a Suffragette scarf onto the King’s Horse at the Derby. She is struck by the horse and dies four days later.
1914	World War One starts. Suffragette leaders urge women to join the war effort. NUWSS continues to campaign for recognition for their work.
1918	The Representation of the People Act is passed, allowing men over 21 and women over 30 to vote.

To be truly polite, remember you must be polite at all times, and under all circumstances.

Never, when at the home table, leave it until the other members of the family are also ready to rise.

Never make a noise in eating. To munch or smack the lips are vulgar faults.

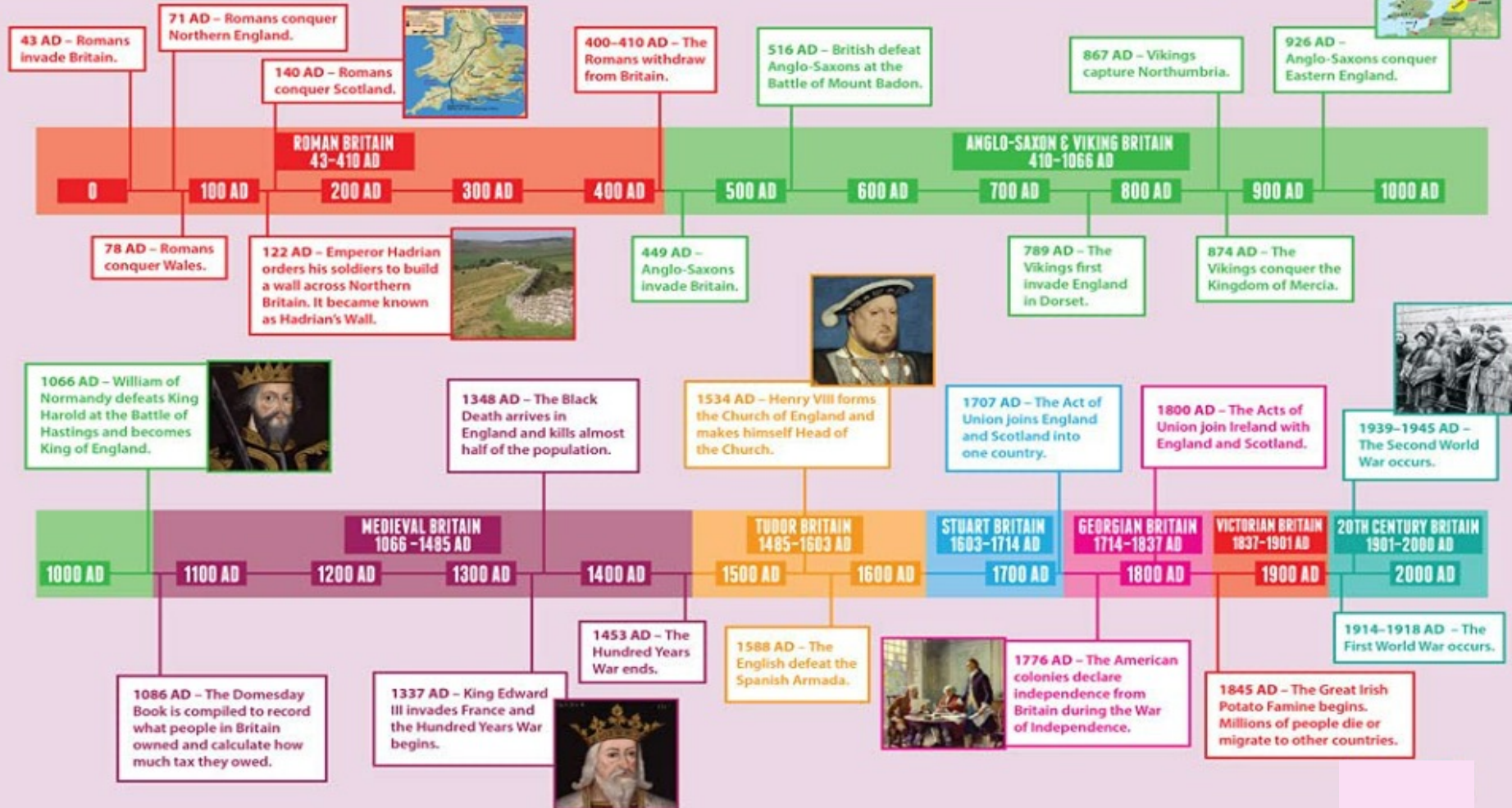
Retrieval Practice	
Questions	Answers
What ‘stereotypical’ role did women have at the start of the 20 th Century?	If married, they stayed at home to look after the children while their husband worked and brought in a weekly wage
When was the NUWSS formed and who was its leader?	The NUWSS was formed in 1897 and Millicent Fawcett was its leader until 1919.
When was the WSPU formed and who by?	The WSPU was formed in 1903 by Emmeline Pankhurst and her daughters.
What kind of militant protests did the WSPU carry out?	Campaigns included mass rallies, smashing windows throwing stones with pleas on and arson. All of which resulted in many arrests.
What kind of protests did the NUWSS carry out?	They used more constitutional campaigns like leaflets and petitions as they believed militant campaigns were counter-productive to the cause.
What was a ‘hunger strike’ and what would happen to the women who carried them out?	Hunger strikes were when prisoners would refuse to eat so that they could bring further attention to their cause. Prison officers would use force feeding (through a tube) to ensure the prisoners stayed alive.
Why is Emily Wilding Davison so famous in the Suffragette Movement?	Emily Davison ran out in front of the King’s horse on Derby day to pin a Suffragette scarf to it. She was badly injured and died shortly after.
What role did women play through World War One?	Women worked in manufacturing and agricultural roles, i.e. in munitions factories and farming land. They also provided support on the front lines as nurses and ambulance drivers etc.
Name one way World War One helped women get the vote in Britain:	Many men were impressed by the contribution made by women and were forced to change their views, this included the views of Politicians.
When was the Representation of the People Act passed and what did it do?	This was passed in 1918 and it allowed men over 21 and women over 30 to vote.

Career Focus - Where could this take you?	
	<p>I am a Prison Officer: My job is to keep prisoners secure and support anyone who is vulnerable. I need to carry out security checks and searches of prisoners and cells, to ensure they are following the rules and that they are safe. Sometimes I have to use authorised physical control and restraint. I require many skills to do my job, including knowledge of public safety and security, the ability to accept criticism and work well under pressure. I need to have patience and be thorough, paying attention to detail, as well as excellent verbal communication skills.</p>
Challenge Activities	
<ol style="list-style-type: none"> Write a newspaper article about one of the key events of the Suffragette Movement. This should include who was involved, what happened and what action was taken against them by the Police. This should be your own work not an actual article from the internet. Write a script to use in a movie or play about the Suffragette Movement and their fight for women to have the vote. Some movies have already been produced on this which use historical fiction (incorporating some historical facts with a fictional storyline), so that’s what you should aim to do. Imagine its 1917... Write a petition to Parliament detailing why it’s important that women have the vote. Include the importance of women in society, their role in World War One and why they should also have the right to make decisions in the country they live in. 	
Topic Links	Additional Resources
<p>This topic links to other humanities topics such as:</p> <ul style="list-style-type: none"> World War One The end of World War Two Britain’s Homefront 	<p>To further practise and develop your knowledge see:</p> <div>    </div>



TIMELINE 0-2000 AD

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





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

- Enquire into Humanist beliefs
- Evaluate beliefs about the origins of the universe
- Explain & interpret Humanist understanding that human beings evolved alongside animals
- Enquire into the Humanist belief about death as tend of personal experience & the absence of anything immaterial, such as the soul

- Evaluate the belief that humans are material & mortal
- Explore what is meant by Atheism & Agnosticism
- Investigate the concept of miracles

Keyword	Definition
Humanist	A follower of the principles of Humanism.
Origin	The point or place where something begins or starts.
Atheist	Someone who doesn't believe in God.
Agnostic	Someone who believes you can never know for sure whether God exists or not.
Democratic	In some circumstances unimportant, something which is irrelevant.
Humane	Having or showing compassion or benevolence. Being kind, understanding and civilised.
Immaterial	Relating to or supporting democracy or its principles.
Secular	Not connected with religious or spiritual matters.
Philosophy	A theory or attitude that acts as a guiding principle for behaviour.
Reason	The power of the mind to think, understand and form judgments logically.
Theist	Someone who believes that there is a creator, God.
Empathy	To understand and share the feelings of others.
Worldview	Ideas about life and the world.

Key Concepts

How do you know what is true?

At the heart of humanism is the belief that reason, and evidence are very important. They therefore believe that science should be used to know what is true and what is false. They do not believe in God as Humanists are atheist, believing there is no scientific evidence or proof that God exists. All truth is discovered by looking at the scientific evidence. Humanism is a world-view that only uses science, evidence, reason and empathy to make sense of the world and to inform how they should act and care for others.

Humanism is the philosophy that you should be a good guest at the dinner table of life.

How do you tell right from wrong?

Humanists do not believe in God or other supernatural beings and so do not believe that our knowledge of right and wrong comes from religious rules such as those found in scriptures like the Bible. They believe in the GOLDEN RULE which is to treat others as you yourself want to be treated. They think that you should always consider your actions will affect other people and you should think about how you would feel in someone else's situation. Imagining how others feel is called empathy. Humanists believe that we should use our human nature to work out how to live and that we should use reason and empathy when deciding what is right and wrong. Humanists therefore try to live a full and a happy life and help others do the same and believe we should use our own human nature as a guide to a good living. Humanists do not have an absolute morality as they do not have a strict set of rules (like the 10 commandments) that they must always follow.

What are Ethics?

Ethics are the rules that direct your conduct and moral judgment.



- **Doing Right and Wrong:** Ethics is about figuring out what's the right thing to do and what's the wrong thing to do in different situations.
- **Being Fair:** It's about treating people fairly and being kind, even when no one is watching.
- **Thinking First:** Ethics reminds us to think before we act and consider how our actions might affect others.
- **Making Good Choices:** It helps us make good choices that make us proud and help us get along with others.



- Enquire into Humanist beliefs
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- Evaluate the belief that humans are material & mortal
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Key Concepts



Overview

- Humanism puts human beings and their interests at the centre of things.
- Rather than focusing on religion, divine or supernatural matters, humanists believe that fulfilment is achieved through human inventiveness and collective effort.
- Humanism Is a broad philosophy and there are many different types of humanist. Most do not believe in a God or deity.
- Humanists believe that people should think freely for themselves, be rational and work together in order to achieve human happiness.

The British Humanist Association

The BHA is recognised as the voice for Humanism in the UK.

The BHA emphasises that Humanism is a positive life-stance' rather than a negative attitude to religion.' The BHA realises that they do not speak for all humanists, as there are many different types.

The Happy Human

The BHA held a competition in the 1960s, to decide on a logo for Humanism.

The winning entry was the 'Happy Human'

- It shows a human figure reaching to achieve its full potential.
- It symbolises the idea that we only have one life and that we should try to make it happy for all.



Humanist beliefs

It is important to remember that there are many kinds of humanists, who all believe in different ideas. Below are some of the common beliefs.

- Humanism is not a religion and most humanists do not believe in God or life after death.
- Humanists believe in a 'Golden rule', which is 'treat other people as you would like them to treat you.' Humanism is all about doing good and making people happy:
- Humanism is all about finding and giving love, making others happy and making the best of the one life that we have together here on earth.
- Humanists are rational. They believe that science and human thought are powerful tools for bettering life and creating a happy existence for all. They believe that science provides the best explanation for our existence for all. They believe that science provides the best explanation for our existence – they do not believe that God created the EARTH.
- Humanists are ethical- they value all human beings, treating everyone equally. They believe in 'common humanity'- even though we have differences, we are all human.

Main Beliefs of Humanism

Non-Existence of Gods

Most Humanists are atheists. They rely on science and have found no evidence that a God exists or ever existed.

No Purpose to the Universe They believe that the universe was created by chance, so there is no purpose to the universe.



Meaning of Life

Humanists give their lives meaning by living good lives. They make good choices and take an interest in the world around them.

Reason

Humanists believe decisions should not be made on emotions, but on reason, rationality and logic.

Science

Scientific investigations gather evidence to find the truth. Humanists also use evidence to see what is true.

Ethical Decisions







To live good lives, decisions must be weighed up for their positive and negative consequences for all. Humanists believe there are no perfect decisions.



Key Concepts



SIX WORLD RELIGIONS (spellings vary)

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

Theist = Someone that believes in God

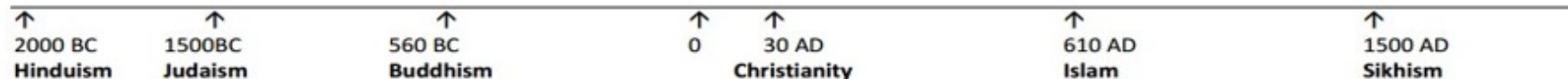
Atheist = Someone that doesn't believe in God

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

Monotheist = Someone that believes in one God

Polytheist = Someone that believes in many gods

Timeline of religions (all dates approximate)






Our students will:

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

Key structures	Translation	Key Concepts						
Samedi dernier	Last Saturday	Qu'est-ce que tu aimes faire le weekend? What do you like to do at the weekend?			Ton ami(e) est comment? What's your friend like? Mon ami(e) s'appelle... My friend is called...			
J'ai fêté le jour de mes treize ans	I celebrated my 13th birthday	Quand je suis seul(e) j'aime ... When I'm alone I like...	lire des BD faire des promenades nager prendre des selfies faire du vélo aller à la pêche aller en ville écouter de la musique tchatter / poster faire de la cuisine faire du footing faire des randonnées jouer au rugby	reading comics going for walks swimming taking selfies going cycling going fishing going to town listening to music chatting/posting cooking jogging going hiking playing rugby	Avoir - to have j'ai tu as il/elle/on a nous avons vous avez ils/elles ont	les yeux eyes	bleus blue gris grey verts green bruns brown marron chestnut noisette hazel	
Normalement pour mon anniversaire...	Normally for my birthday...					les cheveux hair	blonds blonde bruns brown noirs black roux red	courts short longs long mi-longs medium-length raides straight bouclés wavy frisés curly
Je vais au restaurant avec mon ami	I go to a restaurant with my friend						des tâches de rousseur - freckles un bon sens de l'humour - a sense of humour	
Il est toujours rigolo	He is always funny							
et nous jouons au foot ensemble depuis 5 ans	and we have been playing football together for 5 years					Comment as-tu fêté ton anniversaire? How did you celebrate your birthday?		
Cependant, cette année	However, this year	j'ai fêté mon anniversaire le... j'ai invité mes ami(e)s j'ai ouvert mes cadeaux j'ai reçu un tee-shirt j'ai lu mes messages j'ai mangé du gâteau j'ai bu du coca nous avons fait du bowling nous avons dansé nous avons pris des selfies je suis allé(e) en ville	I celebrated my birthday on... I invited my friends I opened my presents I received a tee-shirt I read my messages I ate some cake I drank some cola we did bowling we danced we took selfies I went to town	Être - to be je suis tu es il/elle/on est nous sommes vous êtes ils/elles sont	assez grand(e) quite tall. très petit(e) very short. de taille moyenne medium height			
J'ai invité mes amis chez moi	I invited my friends to my house							
et j'ai reçu beaucoup de tee-shirts comme cadeaux	And I got lots of tee-shirts as presents							
Tout le monde a dansé, c'était génial.	Everyone danced, it was great.							
C'est l'anniversaire de Marc ce samedi	It's Marc's birthday this Saturday.							
Il va avoir une fête chez lui aussi.	He's going to have a party at his house too.				sympa nice drôle funny égoïste selfish impatient(e) impatient bête stupid arrogant(e) arrogant timide shy agaçante annoying têtu stubborn			
Je pense que je vais porter un nouveau tee-shirt!	I think I'm going to wear a new tee-shirt!							



- Describe oneself and family in detail.
- Use adjectives accurately to describe people and relationships.
- Describe a celebration in the past.

Retrieval Practice 	
Questions	Answers
Qu'est-ce que tu aimes faire le weekend ? – What do you like to do at the weekend?	D'habitude j'aime jouer au foot avec mes copains . Je trouve ça chouette . Quelquefois j'aime aller en ville mais je n'aime pas faire du vélo . À mon avis, c'est nul .
Qu'est-ce que tu fais comme activités extrascolaires? - What extra curricular activities do you do?	Après le collège le mardi, je vais au club de danse Le lundi, je chante dans la chorale . J'adore chanter !
Tu es comment? – What are you like?	Je suis assez grand et mince . J'ai les cheveux blonds et longs et les yeux verts . Je suis tres intelligent et je ne suis pas arrogant .
Ton ami(e) est comment? <i>What's your friend like?</i>	Mon ami s'appelle Fred . Il est tres timide . Il as les cheveux noirs et courts et il porte des lunettes. Je m'entends bien avec lui car il est sympa .
Comment as-tu fêté ton anniversaire? <i>How did you celebrate your birthday?</i>	L'année dernière, j'ai invité mes copains chez moi et nous avons pris des selfies. Après, j'ai ouvert mes cadeaux et j'ai mangé du gâteau. Miam miam.
C'était comment? – What was it like?	À mon avis c'était fantastique.
Qu'est-ce que tu vas porter? <i>What are you going to wear ?</i>	Je vais aller chez mes amis et je vais porter un jean avec un tee-shirt rouge . Je vais aussi porter des baskets noires et un sweat bleu .

Career Focus - Where could this take you?



I am a vlogger. I use French and German to make videos. Sometimes these are just for fun and sometimes I use them to teach people how to speak French and German. It is a lot of fun and I need to be creative to keep my audience watching my content.

Challenge Activities

Describe how you get on with some of your friends using the vocabulary below.

Je m'entends bien avec lui/elle. *I get along well with him/her.*

Je me dispute avec lui/elle. *I argue with him/her.*

Je me fâche contre lui/elle. *I get angry with him/her.*

Il/Elle se fâche contre moi. *He/She gets angry with me.*

Topic Links

This topic links to:

- Greetings and introductions.
- The present tense of key verbs.
- The perfect tense. (Holidays)
- The near future tense. (Holidays)
- Future plans (Jobs)

Additional Resources

To further practise and develop your knowledge see:

- Active learn tasks
- www.sentencebuilders.com
- Review the future tense [here](#)



- Meet and greet in German.
- Count to 31
- Give dates in German.
- Pronounce key phonics sounds.
- Ask and answer simple questions in German.
- Give their name age and birthday

Keyword	Definition
Hallo! Guten Tag	Hello!
Wie geht's?	How are you?
Es geht mir gut danke	I'm fine thank you
Wie heißt du?	What are you called?
Ich heiße <u>Clara</u>	I'm called <u>Clara</u>
Wie alt bist du?	How old are you?
Ich bin <u>zwölf</u> Jahre alt	I'm <u>12</u> years old
Wann hast du Geburtstag?	When is your birthday?
Ich habe am vierten Juli Geburtstag.	My birthday is on the 4th July.
Wo wohnst du?	Where do you live?
Ich wohne in Huddersfield.	I live in Huddersfield
Ich bin sehr freundlich und kreativ.	I am very friendly and creative

Key Concepts																																																																			
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Retrieval Practice	
Questions	Answers
Hallo! Guten Tag	Hallo! Guten Tag!
Wie geht's?	Gut, danke ! ✓ Nicht so gut! ✗
Wie heißt du?	Ich heiße Clara .
Wie schreibt man das?	tseh- el-ah-air-ah
Wie alt bist du?	Ich bin zwölf Jahre alt.
Wann hast du Geburtstag?	Mein Geburtstag ist am neunten November . Ich habe am neunten November Geburtstag.
Welchen Tag haben wir?	Heute ist Dienstag .
Was hast du in deiner Tasche?	Ich habe einen Bleistift, einen Radiergummi und ein Lineal
Hast du ein Handy?	Ja, ich habe ein Handy . Nein, Ich habe kein Handy .
Welche Farbe ist das?	Das ist blau .
Auf Wiedersehen.	Tschüss

Career Focus - Where could this take you?



I am a travel agent. I book holidays for my clients. Having language skills means I can get my clients the best deals by communicating directly with tour operators around the world. I also use my excellent communication skills and understanding of how to build relationships with people from all cultures.



Challenge Activities

1. Make flashcards for the questions and answers.
2. Use Sentence builders to practise numbers, days, months and key phonic sounds.
3. Research a famous German person. Make a factfile. What do they do? Where do they live? Why are they famous?
4. What do you know about German? Present your knowledge in a creative way.

Topic Links



This topic links to other German topics such as

- Introducing yourself and family.

This topic also links to :

- Numeracy
- Geography
- Literacy

Additional Resources



To further practise and develop your knowledge see:

- Sprachenut - Use your username and password. www.sentencebuilders.com
- Active Learn - You will be given your username and password by your teacher..

PERFECT TENSE ("has done/did")

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

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

VERBS USING ÊTRE e.g. je suis allé(e)

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

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

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

PRESENT TENSE ("does/is doing")

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

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

ÊTRE

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

AVOIR

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

SIMPLE FUTURE TENSE ("will/shall do")

Add these endings to the infinitive:

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

IRREGULAR STEMS

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

Negatives

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

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

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

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

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

Sequencers (narrative words)

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

Connectives

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

Present vs. imperfect

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

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

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

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

NEAR FUTURE TENSE ("is going to do")

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

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

CONDITIONAL TENSE ("would do")

Begin with the future stem, add imperfect endings:

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

IRREGULAR STEMS

Same as for the simple future

EXTRA MARKS: USE WITH THE IMPERFECT TENSE

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

PLUPERFECT TENSE ("had done")

Very similar to the perfect tense, except you start with the *imperfect* tense of auxiliary verbs *avoir/être*:

e.g. *j'avais joué, il avait fini, nous étions allés, elles s'étaient brossées les dents*

1st step - Description

To start off:

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

2nd step - Opinions

Hypothesis:

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

Locating:

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

Say what you think about the photo

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

Décrire
une
photo

Remember to mention the 4 Ws

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

J'aime
cette
photo

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

Je n'aime
pas cette
photo

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



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 9 Surrealism

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

- Develop knowledge of the characteristics of the surrealism movement.
- Demonstrate accurate drawing skills.

- Experiment with collage showcasing understanding of surrealism.
- Produce a personal response showcasing understanding of surrealism.

Keyword	Definition 
Surrealism	A movement in art and literature. Surrealism aimed at expressing imaginative dreams and visions.
Movement	An art movement is generally defined when a group of artists during a specific time adapt a particular style with a common goal.
Collage	Collage describes both the technique and the resulting work of art in which pieces of paper, photographs and fabric are arranged and stuck down onto a surface.
Observational Drawing	To create a drawing of what you see in front of you as realistically and as true to life as possible.
Juxtaposition	Juxtaposition is when you place two concepts or objects next to or near each other, thereby highlighting their differences and similarities.

Key Concepts

During this project you will:

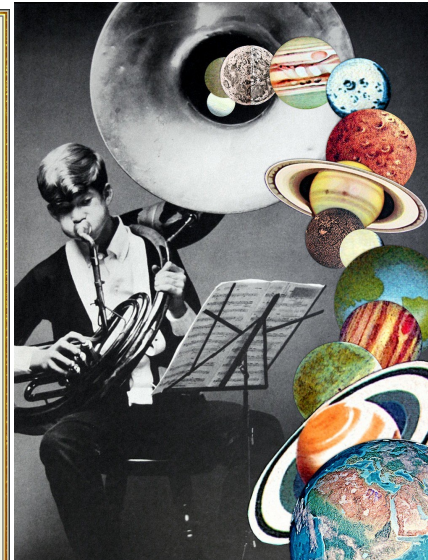
- Explore the Surrealist art movement
- Experiment with collage techniques
- Develop observational drawing skills.
- Create your own surreal artwork showcasing an understanding of the movement style.

sur·re·al·ism

/səˈrēəˌlɪzəm/ 

noun

1. a 20th-century avant-garde movement in art and literature which sought to release the creative potential of the unconscious mind, for example by the irrational juxtaposition of images.





Year 9 Surrealism

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Retrieval Practice



Questions	Answers
What is a movement in art?	An art movement is generally defined when a group of artists during a specific time adapt a particular style with a common goal.
What does the word surreal mean?	Strange, not seeming real, dreamlike.
When did the Surrealism movement start?	1920. After the first world war.
What are some of the key features of Surrealist Art?	Key features of surreal painting: Wrong Place, wrong Scale, juxtaposition of imagery, merging of objects, playful, strange, bizarre placement/arrangement/juxtaposition of objects/imagery.
What is a collage?	Collage describes both the technique and the resulting work of art in which pieces of paper, photographs, fabric are arranged and stuck down onto a surface.
What is an observational drawing?	An observational drawing means to create a drawing of what you see in front of you as realistically and as true to life as possible.

Career Focus - Where could this take you?



I am a Wedding Photographer. My Job includes liaising with clients, promoting my business, capturing the happiest moments of a couple's day on camera, editing

and retouching images.



Challenge Activities



Scan the QR code to watch Peter Capaldi explain the surrealism movement.



Scan the QR code to go to the Tate Gallery website to learn more about Surrealism.

Topic Links

History – understanding of historical events that have influenced art.

English - Understanding terminology.

Science – accurate observation skills

Additional Resources



Scan the QR code to watch an artist use the collaging technique to



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

- Demonstrate knowledge of planning techniques and financial literacy by developing a plan for a music festival and calculating the estimated profit for the event
- Demonstrate knowledge of event planning by developing a logical site-plan for the music festival

- Demonstrate knowledge of using Adobe Express by developing a range of professional looking promotional material for the music festival
- Apply knowledge from this unit to accurately describe some keywords

Keyword	Definition
Target Audience	The primary group of people that something is aimed at appealing to
Income	The amount of money received for providing goods or services
Expenditure	The amount of money spent to purchase goods or services
Profit	The remaining balance after subtracting the total expenditure from the total income
Site Plan	A detailed Plan showing the proposed placement of structures, parking areas and open space
Digital Project	Products that are both developed and delivered digitally using a computer
Theme	The elements used that create a consistent look and feel for a product
Promotional Material	Graphical products created to promote and increase the awareness of an event or business
Professional Design	A design that aims to replicate the design of something that has been created by a professional


Key Concepts

Students will be expected to plan a brand new music festival by following project planning and marketing strategies inspired by industry experts.

The tasks include developing a site plan for the festival, managing the finances and creating a range of social media posts to advertise the music festival.


Start a New Graphic


Select the blue plus button at the top of the screen.



Working with Images


Image/Photo- Images can be added by clicking the 'Photo' button. *Upload from your device*, or use the *Search option within Spark* for copyright free images. Click '*Icons*' to search for simple black & white clip art.

To change an image, select it and click  Replace

To crop an image to a Shape, select it and click Shape Crop 

Save your Graphic

Once your graphic is finished you can export it two different ways. You can download your graphic to your computer as an image file or pdf.

 Download

☒ PNG
☐ JPG
☐ PDF *beta*

[Start download](#)

Styles Tabs

The Style Tabs on the right hand side of the Post Editor allow you to change the look and feel of your entire graphic project. These tabs are broken up into; the **"Design"** Tab, the **"Colors"** Tab, the **"Layout"** Tab, and the **"Resize"** Tab.






DESIGN Edit the entire visual style of your graphic all at once. Once you select a style all the visual and typographical elements will be based on the template style chosen.

LAYOUT The "Layout" Tab allows you to change the layout of every picture box within a graphic design all at once. This is also where you go to add more picture boxes to your design if needed.

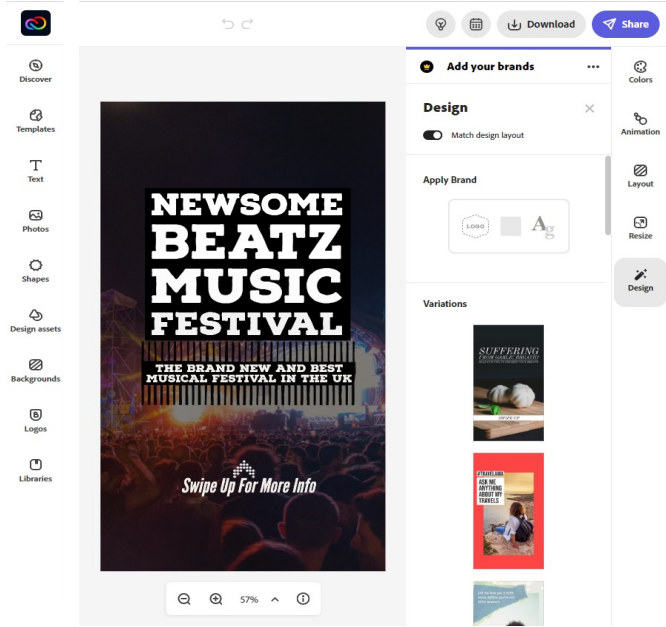
RESIZE Allows you to change the size of your canvas at anytime during the design process.


Add Content

You can add text, photos, icons, etc..to build your graphic by clicking the **'Add'** button

 Text  Photo  Icon  Logo  Add

Text- You can start from a template, or from scratch. Set the font, color, style, shape and effect.







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

- Demonstrate knowledge of planning techniques and financial literacy by developing a plan for a music festival and calculating the estimated profit for the event
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- Apply knowledge from this unit to accurately describe some keywords



Retrieval Practice	
Questions	Answers
Why is it important to calculate your expected income and costs before beginning a project?	Without this information it becomes difficult to calculate how much profit your project is likely to make.
What is the purpose of developing a site plan for this musical festival?	Every event has to plan how their site will be setup. It is important to understand how much space you have and where things can be placed before you do it in real life.
Why is it important to make sure that you understand who the target audience is for the music festival?	You need to know who you are aiming the music festival at e.g. age group, gender, musical interests etc... Everything you do should be based on meeting the requirements and expectations of your target audience. Different categories of people tend to prefer things to done in a particular way that is most suited to their preferences.
Why do you think companies spend so much money on advertising or promoting their events and products?	Companies need to create an awareness, hype and buzz about something to make people to want to attend or purchase something. An increase in sales usually means an increase in profits.
Why do you think it is important to make sure that you create professional looking and eye-catching digital content to advertise and promote the music festival?	<p>The first impression counts for a lot. If your digital content does not look eye catching and professional then people may choose not to click on it, develop a negative view of the company or just not take things seriously enough.</p> <p>The time and money spent on creating and promoting the digital content would have been a complete waste of time, and may actually have the opposite effect.</p>
Why do you think it would help to promote your music festival on a lot of different social media platforms?	<p>People use a range of social media platforms. Posting your digital content to promote or advertise on multiple platforms will increase the likelihood of somebody within your target audience seeing it.</p> <p>With the use of cookies and other tracking tools, your content could follow a user on each linked platform that they use.</p>

Career Focus - Where could this take you?



In my role as a **project manager** I ensure my team work to deliver any project on time and to a high standard. I need to lead my team, plan the project, deal with any issues that arise and report regularly to my clients.

Challenge Activities



1. Create a logo and slogan for the musical festival. Explain the reasons behind the design decisions you have made.
2. Design an app for your music festival - include a launch screen, menu screen and at least three other pages. Explain the design, the reasons you have designed the app the way that you have and how you would expect to benefit from creating the app.
3. Do some research on the internet to find out what other things a real music festival would need to plan/do before it can go ahead. Rank each task/activity from most important to least important. Explain your rankings.

Topic Links



This topic links to:
Computing Curriculum:

- Undertake creative projects that involve combining multiple applications to achieve challenging goals
- Create and re-purpose digital artefacts for a given audience, with attention to trustworthiness and usability
- Art and design (creating advertisements and images)
- English (planning thoroughly)


Additional Resources



To further practise and develop your knowledge see:

- Adobe Express Tutorial: youtu.be/24rM8v2hAAo
- MS PowerPoint Tutorial: youtu.be/TZfcVbKJs1E



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

Key Concepts

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

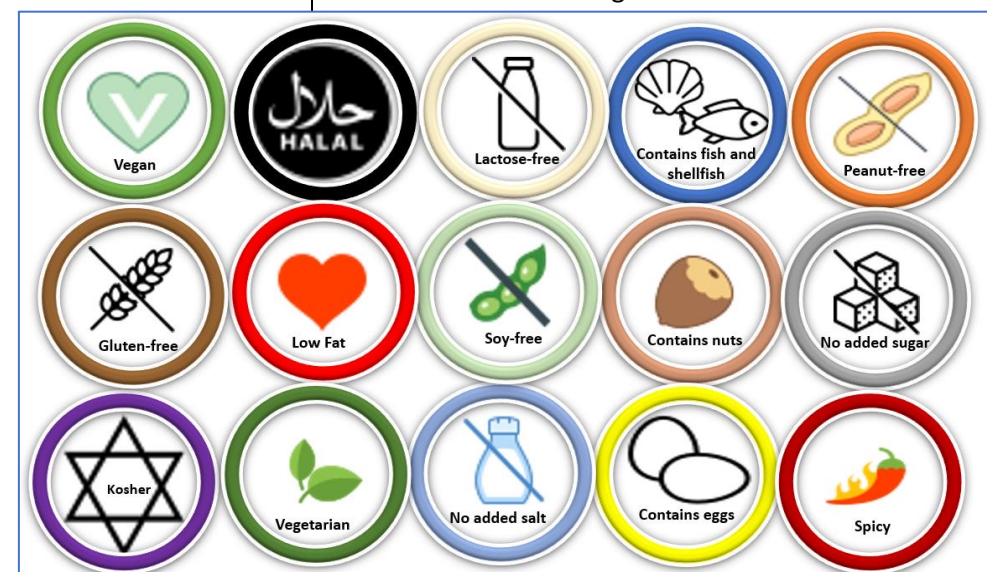
[Food Standards Act 1999](#)

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

[Food Safety Act 1990](#)

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

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





- 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

Shortbread



Ingredients:

- 200 g plain flour , plus extra for dusting
- 50 g caster sugar , plus extra for sprinkling over
- 125 g unsalted butter

Equipment:
Mixing bowl
Wooden spoon
Greased baking tray
Cookie cutter

Method:

1. Preheat the oven to 170°C/325°F/gas 3.
2. Mix the flour and sugar together in a mixing bowl.
3. Rub in the butter with your thumb and forefinger. Don't knead it, you just want to pat it down flat.
4. Push or roll it out until it's 1cm thick on a floured surface – cut out your shapes and then put onto your baking sheet
5. If it splits or tears, just press it back together – but remember, the less you work the dough, the shorter and better these biscuits will be.
6. Put into the middle of your preheated oven for 20-25 minutes until golden brown.
7. Allow to cool.

At home:

Dip them into melted chocolate or add toppings and icing onto the top

Skills:

Meanings

1. **General Practical Skills:** Weighing ingredients, measuring, preparing ingredients and equipment, correct cooking times, testing for readiness and sensory testing.
2. **Rubbing in method:** rubbing in butter with sugar and flour to create a workable dough
3. **Cutting out:** Using the cookie cutters to create biscuits
4. **Use of the cooker (and Skills 6: Cooking Methods):** Using the cooker including: the hob, grill and oven.
5. **Cooking Methods:** Using the cooker including: the hob, grill and oven.
6. **Preparing, combine and shape:** Techniques to prepare, cook and combine different ingredients.

KITCHEN CONVERSIONS

SPOONS & CUPS

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


TABLESPOON
15 ML


DESSERT SPOON
10 ML


TEASPOON
5 ML

MILLILITERS

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

GRAMS

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


1/4 CUP

FLOUR 32g
SUGAR 50g
BUTTER 55g


1/3 CUP

FLOUR 64g
SUGAR 100g
BUTTER 112g


1 CUP

FLOUR 125g
SUGAR 200g
BUTTER 225g



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

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

Lemon or vanilla tart



Equipment:

- Large bowl
- Rolling pin
- Table knife
- Measuring jug
- Grater
- Whisk
- Shallow oven proof pie dish

Pastry Ingredients:

- 150g plain flour
- 75g butter

Filling ingredients:

- 50g sugar
- 150 – 200ml single cream
- 2 eggs
- 2 lemons or add a couple of drops of vanilla
- 2 tbsp. lemon juice

Skills:

Meaning

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

KITCHEN CONVERSIONS

SPOONS & CUPS

TSP	TBSP	FLOZ	CUP	PINT	QUART	GALLON
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24	8	4	1/2	1/4	1/8	1/32
36	12	6	3/4	-	-	-
48	16	8	1	1/2	1/4	1/16
96	32	16	1	1	1/2	1/8
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1/4 CUP
FLOUR 32g
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BUTTER 55g



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BUTTER 112g



1 CUP
FLOUR 125g
SUGAR 200g
BUTTER 225g



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

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

Vegetable Samosas

Ingredients

- 1/2 potato
- 1/2 carrot
- 1/2 onion
- 1x15ml spoon fresh coriander
- ½ red chilli
- Spray oil
- 1x5ml spoon garam masala
- ½ 5ml spoon turmeric
- 2-3x15ml spoons water
- 25g peas (frozen)
- 1 pack filo pastry
- 25g butter or soft spread



Equipment:

- Chopping board
- Knife
- Vegetable peeler
- Saucepan
- Frying pan
- Colander
- Wooden spoon
- Small bowl
- Pastry brush
- Baking tray.

Method:

1. Preheat oven to 200°C or gas mark 6.
2. Prepare the filling:
 - peel and finely dice the potato;
 - peel and finely dice the carrot;
 - peel and finely dice the onion;
 - deseed and finely dice the chilli;
 - chop the coriander.
3. Par-boil the potatoes for 5-8 minutes.
4. Fry the onion in the oil for 4-5 minutes.
5. Add the chilli and spices and cook for a further 1 minute.
6. Drain the potatoes and carrots in a colander.
7. Add the potatoes, carrots and water to the onion mixture, fry gently for 5 minutes.
8. Add the peas and coriander.
9. Remove from the heat and allow to cool.
10. Lay 2-3 sheets of filo pastry on the work surface.
11. Cut into 10 cm wide strips.
12. Place 1x15ml spoon of filling in the bottom left-hand corner. Fold over to make a triangle. Repeat this process.
13. Place on a baking sheet and repeat the process.
14. Lightly spray the samosas with oil, or brush with the fat, and bake for 10 minutes.

Skills:

Meanings

1. **General Practical Skills:** Weighing ingredients, measuring, preparing ingredients and equipment, correct cooking times, testing for readiness and sensory testing.
2. **Knife and chopping skills**
3. **Use of the cooker (and Skills 6: Cooking Methods):** Using the cooker including: the hob, grill and oven.
4. **Cooking Methods:** Using the cooker including: the hob, grill and oven.
5. **Preparing, combine and shape:** Techniques to prepare, cook and combine different ingredients.

KITCHEN CONVERSIONS

SPOONS & CUPS

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15 ML



DESSERTSPOON
10 ML



TEASPOON
5 ML

MILLILITERS

OZ	ML	CUP	ML	OZ	G	LB
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8	230	2/4	180	8	226	1/2
10	285	1	240	12	340	-
12	340	2	480	16	454	1



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



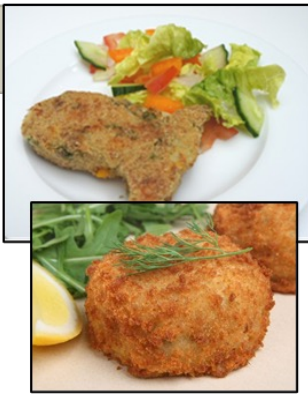
1/2 CUP
FLOUR 64g
SUGAR 100g
BUTTER 112g



1 CUP
FLOUR 125g
SUGAR 200g
BUTTER 225g



Fish Cakes



Ingredients:

4 oatcakes or large cream crackers
200g potatoes - peeled
100g fish (cod/salmon/smoked haddock) – no bones or skin
60g frozen mixed vegetables
Small handful of parsley leaves

*****Bring tub with a lid*****

Equipment:

- Baking tray
- Bowl
- Plate
- Foil,
- Small bowl
- Wooden spoon
- Chopping board
- Oven gloves
- Fish slice.

Method:

1. Preheat oven to 220° C or gas mark 7.
2. Peel and chop your potatoes and boil for 15 minutes until soft.
3. Meanwhile, wrap your fish in a small piece of foil, season and bake in the oven for 10 minutes.
4. Grease or line a baking tray.
5. Crush the oat cakes/crackers in a bowl and tip onto the plate.
6. Drain the potatoes and leave to cool for 5 minutes
7. Take the fish out of the oven and leave to cool for 5 minutes
8. Tear the parsley leaves in to small pieces.
9. Mix everything together in the bowl
10. Divide the mixture into four.
11. Shape each portion into a cake (or a fish).
12. Press each side of the cake into the crushed oatcakes.
13. Place on the baking tray.
14. Bake for 20-25 minutes

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

Career Focus - Where could this take you?



I am a food critic and I analyse the food and restaurants around the country and write about them in newspapers, magazines and blogs.

Challenge Activities

Try some of these recipes at home
Follow the links

[Swiss Roll](#)

[Lasagna](#)

[Breakfast Muffins](#)

Food skills are
acquired, developed
and secured over time

Bridge hold

Claw grip





Year 9 Vocal Harmony

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

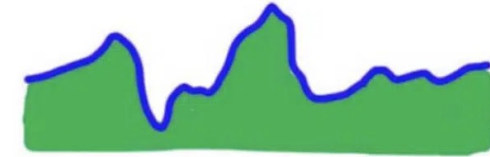
- Understand the creative use and emotional impact of harmony in a variety of genres
- Be able to sing harmonies and perform them on the keyboard/piano

Keyword	Definition
Harmony	The combination of simultaneously sounded musical notes to produce a pleasing effect.
Vocals	The part of a song that is sung using the human voice. The words in a song are called lyrics.
Texture	Musical Texture refers to how different layers of a piece of music are combined to produce the overall sound.
Consonance	Consonance: A combination of two (or more) tones of different frequencies that results in a musically pleasing sound. A harmony that sounds good.
Dissonance	Dissonance: A combination of two (or more) tones of different frequencies that results in a musically displeasing sound. A harmony that sounds bad.
Monophony	When only one melody is playing.
Homophony	Multiple melodies or chords that work together and sound similar playing at the same time.
Polyphony	Multiple independent melodies that each sound unique playing at the same time.
Heterophony	When two slightly different versions of the same melody play at the same time.

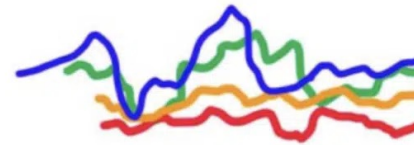
Key Concepts



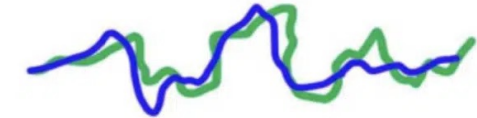
Monophonic



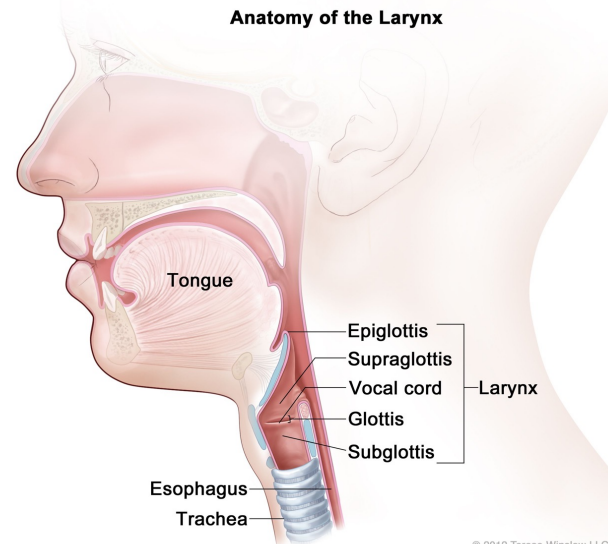
Homophonic



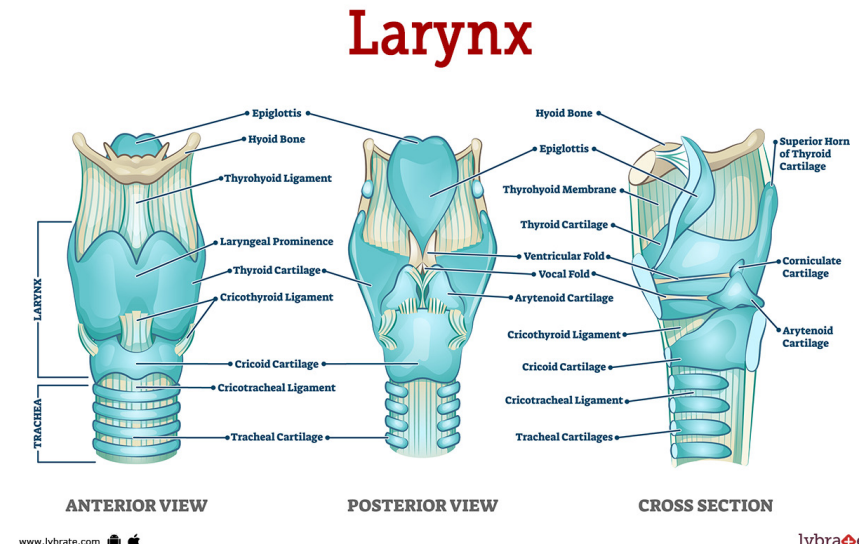
Polyphonic



Heterophonic



Anatomy of the Larynx



ANTERIOR VIEW


POSTERIOR VIEW

CROSS SECTION



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

- Understand the creative use and emotional impact of harmony in a variety of genres
- Be able to sing harmonies and perform them on the keyboard/piano

Retrieval Practice 	
Questions	Answers
What is the musical term for the parts of a song that are sung?	The vocals.
What is the difference between consonance and dissonance?	Consonance is when the notes in a melody work well together. Dissonance is when the notes clash and don't sound good together
Why are vocal warmups important?	They help to prepare your voice for a performance and help reduce the risk of damaging your vocal
What is the correct, biological name for a voice box?	The Larynx.
What is the definition of harmony?	The combination of simultaneously sounded musical notes to produce a pleasing effect.
What are the words in a song called?	The Lyrics.
What does texture mean?	Musical Texture refers to how different layers of a piece of music are combined to produce the overall sound.

Career Focus - Where could this take you?



I'm a vocal coach, and my job is to help people improve their singing and speaking skills. I teach them how to use their voice in the best way, whether they're singing songs or talking to others. I also show them how to breathe correctly, which can help them feel more confident and sing or speak with the right volume and tone. I even work with public speakers like politicians and lecturers to help them speak effectively to a large crowd. So, I help people find their voice and express themselves better!

Challenge Activities

Singing at the correct pitch

Play a note on a piano or keyboard. Using your voice, try to hum the same note. Listen carefully; you will know you are humming the correct note when the two notes sound like they are starting to blend together. Once you have done this, move onto another piano note.

Vocal Warmup

Make a buzzing sound with your lips (like an old telephone ringing). Slowly increase the pitch as high as you can go, then decrease the pitch as low as you can go. If done right this should sound like a police siren. Scan the QR code below for more vocal warmups.

Topic Links

This topic links to:

- Drama – Vocal projection, performance for an audience
- Dance – Polyphony is similar to 'juxtaposition'
- Languages– Prefixes such as 'poly' and 'homo'
- Science – The anatomy of the larynx and the physics of sound/vibrations

Additional Resources

Musical Texture:



9 Best Vocal Warmups:





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

- Can identify at least six core skills required for invasion games and explain how they are used in a game to ensure a successful performance
- Demonstrate basic core skills such as a footwork in isolation with accuracy

- Demonstrate core skills in a game situation with competence
- Lead a group of peers with confidence in a drill which focusses on multiple skills

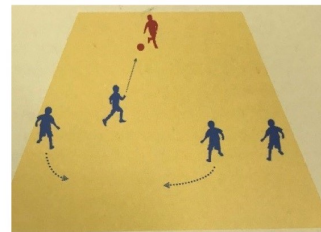
Keyword	Definition
Pass	keep possession of the ball by maneuvering it between different players with the objective of advancing it up the playing field
Catch	to receive the ball from another player and keep possession
Defend	to resist the attack of the opposing team
Attack	the action of attacking or engaging an opposing team with the objective of scoring points or goals
Tackle	trying to take the ball from an opponent
Intercept	Obstruct someone/something from getting to their desired position/destination
Tactics	A strategy planned and implemented to achieve a set goal

Key Concepts

Defending

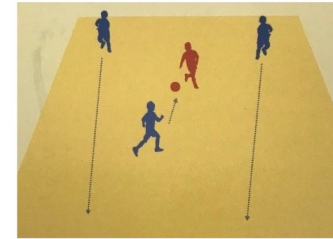
Cover

When a defender puts pressure on the attacker — the other defenders **cover the space the defender left**.



Delay

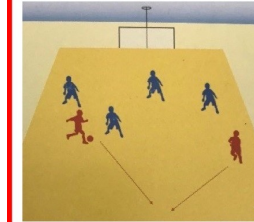
If possession is lost quickly—a defender should **try to slow the attacker down** so other players can get back in position (**goal side**).



Attacking

Depth

Sometimes passes need to go away from the goal to draw the defenders away from the goal—**creating space for a future forward pass**.



Support

To give the player in possession as **many options as possible** team-mates move into different positions to receive the ball. This could be to the side / behind / in front of the ball.



You should already know:

- The aim of invasion games
- The name of at least 3 invasion games
- The core principles of invasion games
- The core skills core to be successful in invasion games
- Tactics to achieve success in invasion games

You will be assessed on:

- Understanding
- Technique in isolation
- Technique in game
- Leadership
- Attitude to learning

Athletes to research further: Josh Koroma



Laura Malcolm



Maro Itoje






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

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- Demonstrate basic core skills such as a footwork in isolation with accuracy

- Demonstrate core skills in a game situation with competence
- Lead a group of peers with confidence in a drill which focusses on multiple skills

Retrieval Practice 	
Questions	Answers
What are the core Netball skills?	Chest pass, Bounce pass, Shoulder pass, Overhead pass, Two-footed landing, One-footed landing, Shooting, Pivot, Man Marking, Marking the space , Dodging and Spinning
What are the Netball positions?	Goalkeeper, Goal defence, Wind defence, Centre, Wing attack, Goal attack and Goal shooter
What are the core football skills?	Dribbling close to feet, Dribbling changing direction with speed, Passing side foot (close distance), Passing on laces (long distance), Defending (man to man), Defending (line defending), Offside trap/rule , Attacking (two versus one), Attacking (channels) and Throw ins
What are the core Rugby skills?	Target with hands out, Push pass, Spin pass , Catch and pass, Protecting, Holding, Contact tackling , Side-stepping, Spinning , Attacking (line speed), Attacking (creating an overlap), Defending (line and movement) and Defending (moving 10 yards)

Career Focus - Where could this take you?



As a team nutritionist, my role involves creating personalized meal and dietary plans that match the specific goals, performance needs, and body types of athletes. I work closely with the team to ensure that each player receives the right nutrition to help them perform at their best and stay healthy.

Challenge Activities

1. Create a mind map of the differences between netball, football and rugby components of fitness an invasion games player needs.

2. Answer the following question: What component of fitness is most important to an invasion games player and why?

Topic Links

This topic links to:

- Science – movement of the body and muscles; the physics of sports
- English – understanding and defining key terminology
- Mathematics – problem solving, recording figures and analysing performance
- Voice 21 – coaching peers

Additional Resources

To further practise and develop you knowledge see:

- <https://web.uvic.ca/~thopper/WEB/Cahperd/Space in InvasionGames.pdf>
- <https://www.theukrules.co.uk/rules/sport/netball/index.html>



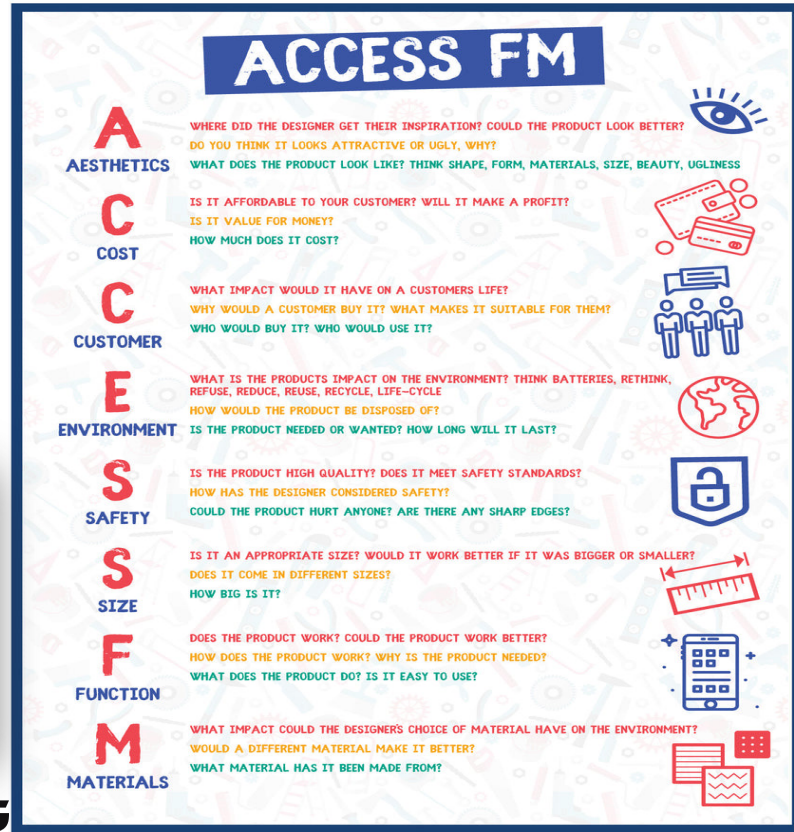
- Demonstrate safe use of tools and equipment.
- Explain a range of Decorative Techniques
- Rank Smart Fibres in order of environmental impact.

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



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

Key Concepts



Antimicrobial Nano Silver	Micro Encapsulated	Thermochromic	Kevlar	Photochromic

Retrieval Practice



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

Question	Quick Corrections (bridge learning gaps & misconceptions)

Career Focus - Where could this take you?



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

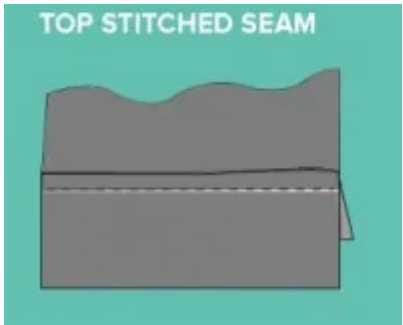
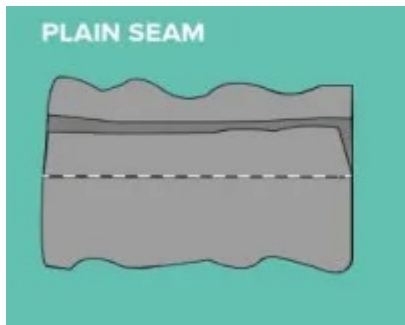
Huddersfield University offer an BA Hons degree in Graphics Design, and you will need 5 GCSE grades 5 and above and a higher-level certificate in the subject.

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

Challenge Activities



Can you create the seams Opposite? If you have a Sewing machine, it will Make it easy for you. If Not you can sew it by Hand,



Topic Links



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

Additional Resources



To further practise and develop your knowledge see:
[What is Smart Textiles – YouTube](#)

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

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

Username and Passwords
