

# Year 7 – Term 1



## Knowledge Organiser

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 7 - Operations and Place value - Algebraic Thinking

Keyword 	Definition
Approximate	To estimate an amount using rounding of numbers to make calculations easier.
Integer	A whole number that is positive or negative.
Range	The difference between the largest and smallest numbers in a set.
Median	A measure of central tendency (middle, average) found by putting the data values in order and finding the middle value.
Place value	The value of a digit depending on its place in a number.
Significant Figure	A digit that gives meaning to a number. The most significant digit (figure) in an integer is the number on the left.
Coefficient	A multiplicative factor in front of a variable e.g. $5x$ (5 is the coefficient)
Function	A relationship that instructs how to get from an input to an output.
Operation	A mathematical process.
Inverse	An operation that undoes that was done by a previous operation (opposite operation).
Expression	A maths sentence with a minimum of two numbers and at least one math operation (no equals sign).
Equation	A mathematical statement that two things are equal.

Sparx Maths	
Topic	Video Numbers
Place Value	M763, M704, M522
Adding	M928, M429
Subtracting	M347, M152
Multiplying	M113, M911, M187, M803
Dividing	M462, M354, M873, M262, M491
Rounding	M111, M431, M994, M131, M878, M730
Algebraic Notation	M813, M830
Negative Numbers	M527, M106, M288
Roots and Powers	M135
Order of Operations	M521

## Topic Links

This topic links to:

- Place value, rounding, inequalities
- Adding, subtracting, multiplication, and division
- Function machines
- Sequences

## Career Focus - Where could this take you?



As an auditor, I have to make sure I understand lots of number skills and Identify patterns to make sure accounts make sense and comply with the law

## Challenge Activities



**What are the missing numbers?**

$$6.4 = 1 + \boxed{\phantom{00}}$$

$$3\frac{2}{5} = 1 + \frac{\boxed{\phantom{00}}}{5}$$

Key Concepts

## What is place value?

**Place value** is the value of each digit within a number.

A number is made up of digits, for example the two-digit number 54 (fifty four), has two digits, 5 and 4. We need to be able to say the value of each digit within the number as this can help with understanding how large or small the number is and can help us to order numbers.

## Decimal place value

For small numbers that contain a lot of zeros such as 0.003, we would pronounce this number as zero point zero zero three.

0	0	0	0	0	0	0
0	t	h	th	tth	hth	m
Ones	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1,000}$	$\frac{1}{10,000}$	$\frac{1}{100,000}$	$\frac{1}{1,000,000}$

To determine the value of a digit within a number we use a place value chart.

M	HTh	TTh	T	H	T	O	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
0	0	0	0	0	0	0	0	0	0
Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones	Tenths	Hundredths	Thousandths

For example, the number 54 would look like this, where the 4 is in the ones column, and the 5 is in the tens column.

This means the number 54 is equivalent to 5 tens and 4 ones. 5 tens is the same as  $5 \times 10 = 50$  and 4 ones is the same as  $4 \times 1 = 4$ . Adding the two values of 50 and 4 gives us the number 54.





- think algebraically and use algebra rules

## Key Concepts

### What is algebraic thinking?

Algebraic thinking refers to the ability to recognise, analyse, and manipulate mathematical pattern and relationships. It involves understanding and using variables, symbols and equations to represent real world situations.

Solve 1-step equation

$$\begin{array}{ccc} & 3x = 12 & \\ \div 3 \swarrow & & \searrow \div 3 \\ & x = 4 & \end{array}$$

**Collect like terms**

$$3(a + 4) + 4(a + 2)$$

$$3a + 12 + 4a + 8$$

$$= 7a + 20$$

Solving 2-step equations

$$\begin{array}{ccc} & 4x + 7 = 31 & \\ -7 \swarrow & & \searrow -7 \\ & 4x = 24 & \\ \div 4 \swarrow & & \searrow \div 4 \\ & x = 6 & \end{array}$$

How can we check?

$$(4 \times 6) + 7 = 31 \quad \checkmark$$

$$2x + 9 = 15$$

This is...

a variable.

$$2x + 3 = 7$$

This is...

an equation.

$$3x + 2y - 4z$$

This is...

an expression.

$$4x + 7$$

This is...

an expression.

$$13 = 4x + 5$$

This is...

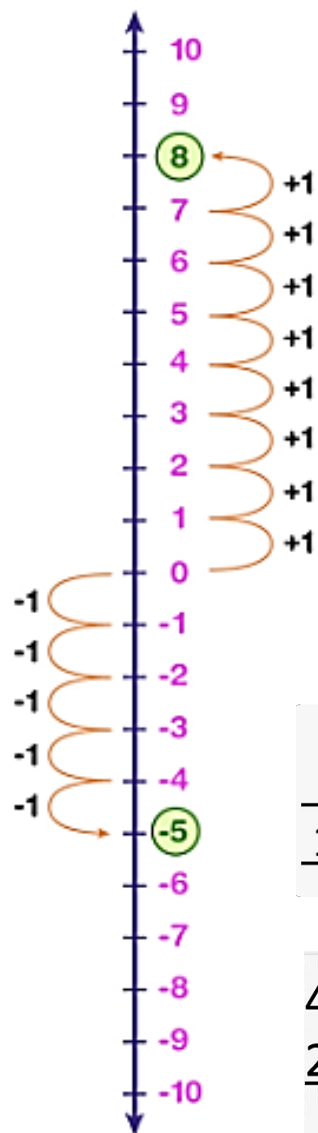
a term.

$$2a \equiv a + a$$

This is...

an identity.

# 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  
 $\times \frac{3}{4}$   
 $\times 0.75$

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

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

$$\begin{array}{r} 045 \\ 8 \overline{) 3360} \end{array}$$

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

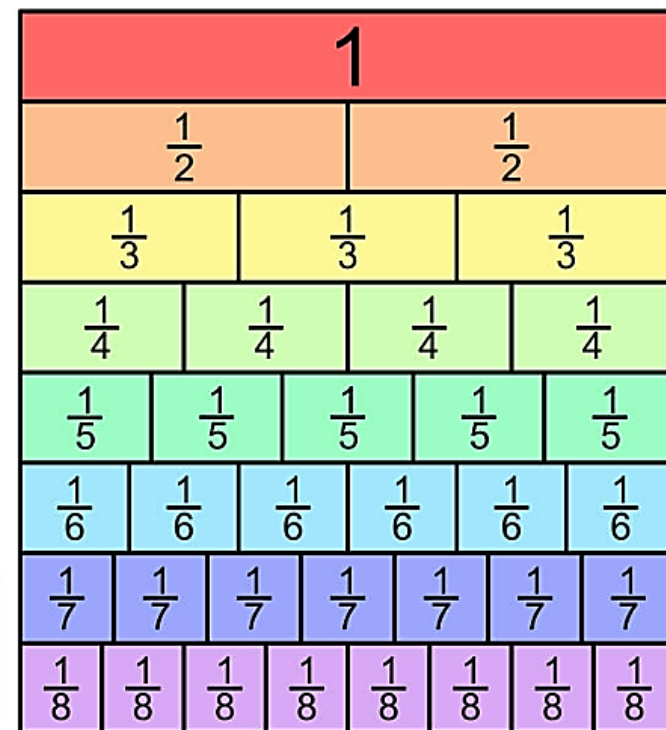
$156000. = 1.56 \times 10^5$   
Move decimal point 5 places left,  
exponent goes up by 5

## BIDMAS

( )  $x^y$   $\div$  or  $\times$  + or -  
Brackets Indices Divide & Multiply Add & Subtract

Order of Operations

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



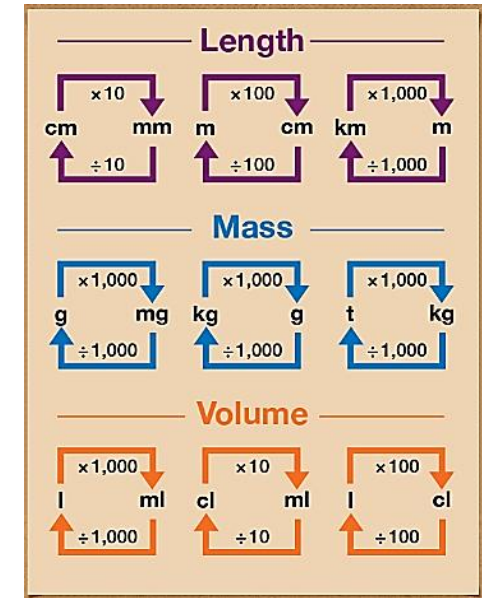
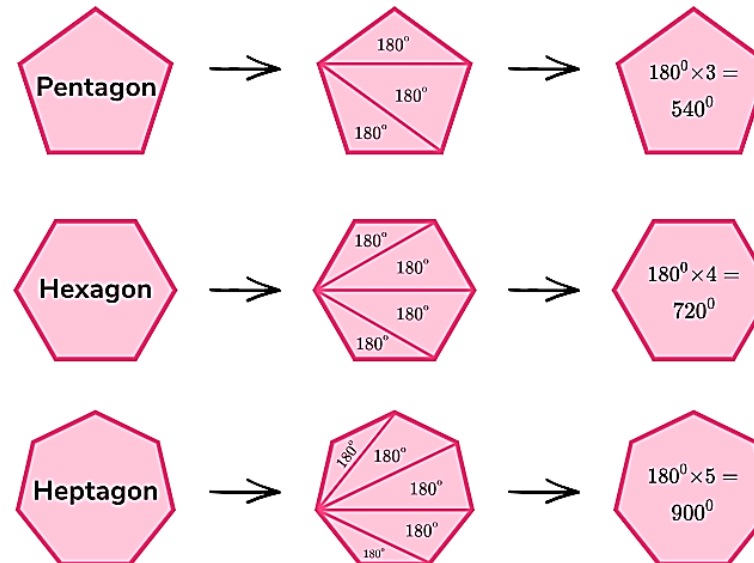
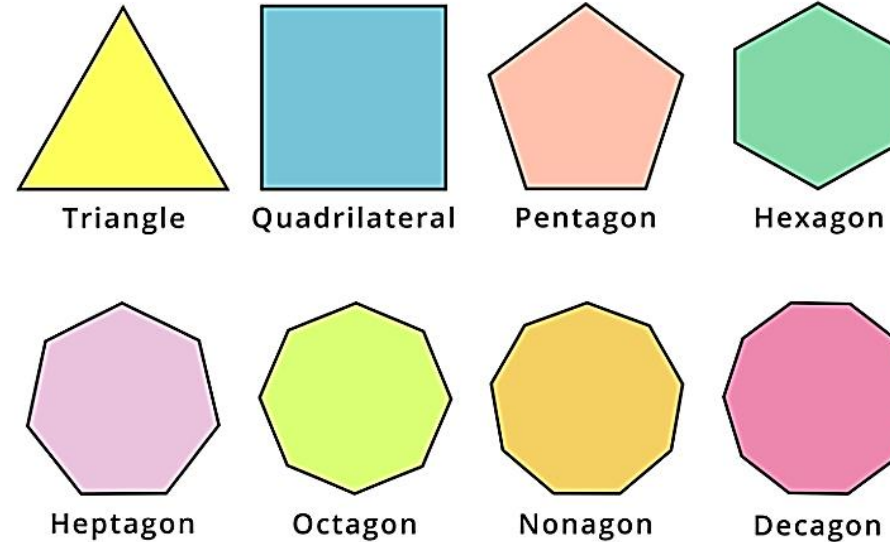
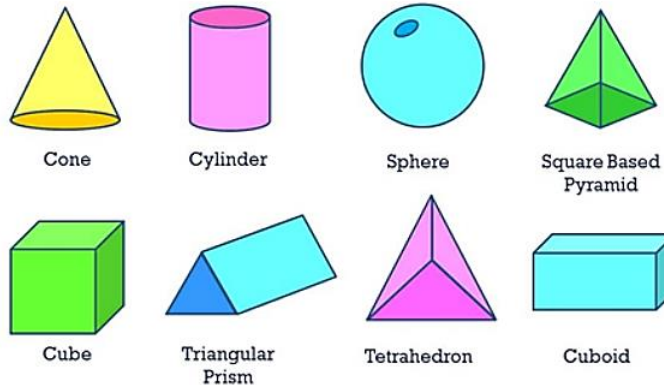


# Maths Quick Reference: Geometry & Measures

## Quadrilaterals

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

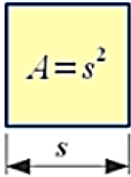
## 3D shapes



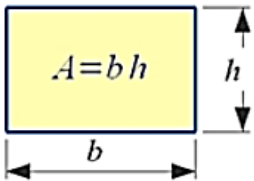


# Maths Quick Reference: Geometry (Areas & Volumes)

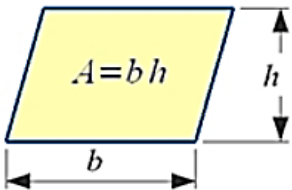
**Square**



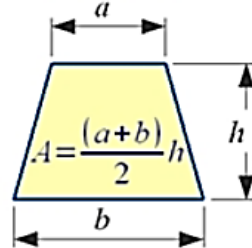
**Rectangle**



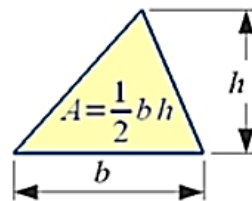
**Parallelogram**



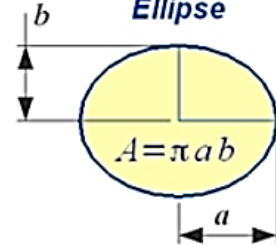
**Trapezoid**



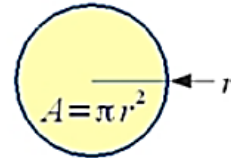
**Triangle**



**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

$$4a + 7b$$

### A Formula

$$A = \pi r^2$$

### An Equation

$$4a + 12 = 60$$

### An Identity

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

## Factorising Brackets

Common factor?

$$7x + 14$$

$$7(x + 2)$$

Common factor?

$$5ab - 20a$$

$$5a(b - 4)$$

## Substitution

**b = 9**

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

## Solving Equations

$$6x - 5 = 7$$

$$+ 5 \quad + 5$$

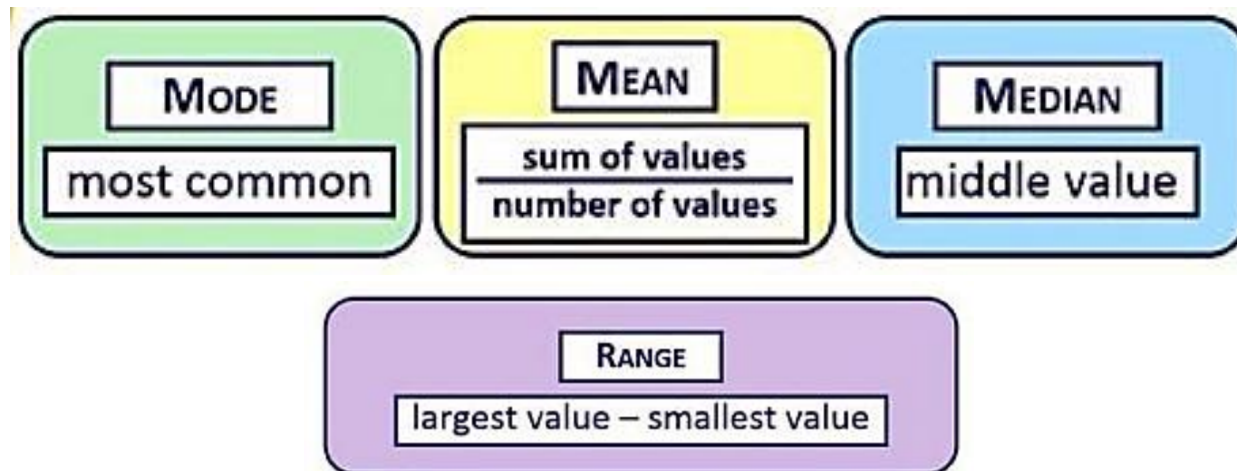
$$6x = 12$$

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

$$x = 2$$



# Maths Quick Reference: Statistics



<p><b>Mean</b></p> <p>7, 3, 4, 1, 7, 6</p> <p>Sum of numbers divided by the total numbers</p> <p>Mean = <math>(7+3+4+1+7+6)/6</math> = <math>28/6 = 4.66</math></p>	<p><b>Median</b></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 = <math>(4+6)/2 = 5</math></p>
<p><b>Mode</b></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><b>Range</b></p> <p>7, 3, 4, 1, 7, 6</p> <p>Difference between highest and lowest</p> <p>Range = <math>7 - 1 = 6</math></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
	<b>25</b>		<b>485</b>

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.



## Writing about texts

**P**oint = The idea you are starting.

**E**vidence = The part of the text which proves your idea.

**T**echnique = Identify a key word or phrase from your evidence.

**E**ffect = Explain what this means and how it impacts the characters/reader in the text.



The idea of .... is seen.....

because the text says ‘.....’

The technique x suggests...

This makes the reader / audience think that...

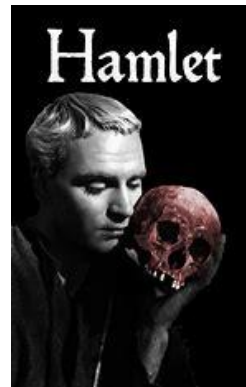
## Knowledge

### Shakespeare's 'Hamlet' – The original 'Lion King' story

'The Lion King' is an adaptation of Shakespeare's longest play; the tragedy, 'Hamlet'. The story has been adapted into a Disney animated film, a live action film and a stage musical.

'Hamlet' is the story of a Danish prince, who is mourning the death of his father who was secretly murdered by Hamlet's uncle so he could marry Hamlet's mother. Hamlet is visited by the ghost of his father who persuades him to kill his traitorous uncle, Claudius. Hamlet then pretends to be mad, struggles with his doubts and moral dilemmas and eventually confronts Claudius in a bloody finale.

Watch the short animation of the story of 'Hamlet' on the Link below in the resources box. Can you make links between 'Hamlet' and 'The Lion King'? Which characters in 'Hamlet' are represented in 'The Lion King'?



### Challenge Activities

**Task 1 –** Create some character profiles for Hamlet and Simba. Track their development. After – consider: how are they similar and/or where are they different?

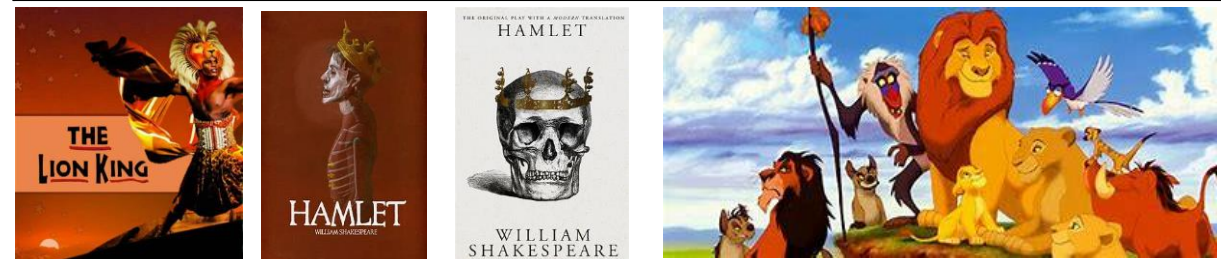
**Task 2 -** What happens next? Write the beginning of your sequel to 'The Lion King'. What happens to Nala and Simba? Do they have lots of cubs? Is Pride Rock still a safe place for them? You decide!



### Career Focus - Teacher



I am a teacher. The skills and knowledge I have learnt through are essential for developing strong communication and critical thinking skills. It helps me express ideas clearly, analyse texts, and create engaging lessons. These skills ensure I can effectively teach and inspire students, helping them understand and succeed.



Topic Links	Additional Resources
<p>This topic links to:</p> <p><b>Bildungsroman</b> – 'a coming of age story' and ideas of maturity in childhood development.</p> <p><b>Drama</b>- stage adaptations, character archetypes like a Machiavellian villain, dramatic tension and action which we will study in Macbeth and other Shakespeare texts.</p> <p><b>PSHE</b>- Personality traits and empathy skills, problem solving.</p>	<p>To further practise and develop your knowledge see:</p> <p>London Musical productions:  <a href="https://thelionking.co.uk/about-the-show">https://thelionking.co.uk/about-the-show</a></p> <p>BBC Bitesize  <a href="https://www.bbc.co.uk/teach/class-clips-video/shakespeare-in-shorts-animation-hamlet/z66kjhv">https://www.bbc.co.uk/teach/class-clips-video/shakespeare-in-shorts-animation-hamlet/z66kjhv</a></p> <p>Royal Shakespeare Company  <a href="https://www.rsc.org.uk/hamlet">https://www.rsc.org.uk/hamlet</a></p>



- Identify and interpret explicit and implicit information and ideas.
- Explain and analyse how writer's use language to achieve effects and influence readers
- Use relevant subject techniques to support their views.

## Skills



### Retrieval Practice



#### Questions

#### Answers

What is the **exposition** of a story/narrative?

the introduction to a story, including the primary characters' names, setting, mood, and time.

What is the **rising action** of a story/narrative?

A series of problems arise, building tension.

What is the **climax** of a story/narrative?

The highest point of the action when the story is most tense.

What is the **falling action** of a story/narrative?

The problems that arose are solved.

What is the **denouement** of a story/narrative?

The end of the story when all the 'loose ends' are tied up.

What is a **tragic hero** like?

A tragic hero will start as being moral. However, their fatal flaw will lead to their downfall.

Who is **the tragic hero** of Hamlet? Why?

Hamlet because he is the main character of the tragedy. Hamlet has a fatal flaw and uses bad judgement, which ends in his death.

What is the climactic point in the Lion King?

When Simba corners Scar for the final fight over Pride Rock.

### Key Skill: Freytag's Narrative Arc

All stories have a narrative arc- the events are structured in such a way as to make the story interesting and enjoyable. We use the following diagram to understand what each part of this structure is and how it affects the narrative.

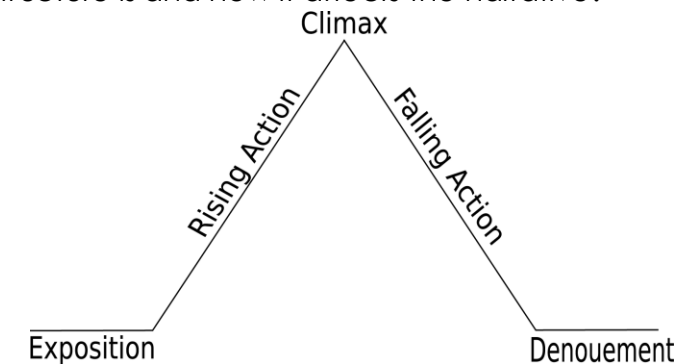
For example: Red Riding Hood-

**Exposition**- Little girl finds house in wood

**Rising Action**- She breaks in and eats porridge

**Climax**- She breaks chairs and beds and goes to sleep

**Falling Action**- Bears come home  
**Denouement**- She wakes up and runs away



### Skills Practice

Using the Freytag structure in the **Key skill** box above, draw and label the narrative arc for 'The Lion King'.

Remember to include details about what happens at each of the stages of the narrative arc.

- How is the setting established in the **exposition** at the start?
- What problems arise in the **rising action**?
- What happens at the highest point of tension- the **climax**?
- How are those problems resolved in the falling action?
- What happens during the denouement to end the story?

### Super challenge:

Can you map the narrative arc for the Shakespeare play 'Hamlet'?



## Vocabulary - You will be tested on five words per week as part of your home learning.



Keyword	Definition
<b>Narrative</b>	A story
<b>Exposition</b>	The start of a story, where the story's setting and characters are established.
<b>Rising action</b>	A series of problems arise, building tension.
<b>Climax</b>	The highest point of the action when the story is most tense.
<b>Falling action</b>	The problems that arose are solved.
<b>Denouement</b>	The end of the story when all the 'loose ends' are tied up.
<b>Character</b>	A person in a novel, play or film.
<b>Protagonist</b>	The lead character in a novel, play or film.
<b>Antagonist</b>	A character who is opposite to the main character- usually the 'villain' of the story.
<b>Juxtaposition</b>	The placement of two contrasting characters, settings or ideas next to each other to create an effect.

Keyword	Definition
<b>Metaphor</b>	Comparing two things for effect by saying one is the other, e.g. - That woman is a machine.
<b>Simile</b>	Comparing something to another using 'like' or 'as', e.g. - It's like a freezer in here!
<b>Personification</b>	Giving human characteristics to non-human things or objects.
<b>Onomatopoeia</b>	Words that represent sounds
<b>Repetition</b>	Repeating words or phrases for effect.
<b>Alliteration</b>	Repetition of initial letters of successive words ( <b>R</b> ound and <b>r</b> ound the <b>r</b> ugged <b>r</b> ock).
<b>Hero</b>	A person who is admired for their courage, outstanding achievements, or noble qualities.
<b>Villain</b>	In a film, novel, or play) a character whose evil actions or motives are important to the plot.
<b>Setting</b>	The place or type of surroundings where something is positioned or where an event takes place.





## Knowledge



### World War 2: Evacuees



Fear that German bombing would cause civilian deaths prompted the government to evacuate children, mothers with infants and the infirm from British towns and cities during the Second World War. Evacuation was voluntary, but the fear of bombing, the closure of many urban schools and the organised transportation of school groups helped persuade families to send their children away to live with strangers. Evacuees and their hosts were often astonished to see how each other lived. Some evacuees flourished in their new surroundings. Others endured a miserable time away from home. Many evacuees from inner-city areas had never seen farm animals before or eaten vegetables.

At this time, the writer, C.S.Lewis was living in Oxford, in a large country cottage called 'The Kilns' with his wife. The couple opened their home to some of these young refugees, one of whom had been fascinated by a wardrobe there, imagining that there was another way out of it through the other side.

Topic Links	Additional Resources
<p>This topic links to:</p> <p>Historical knowledge of WW2 which we will use when we study War Poetry later in the year.</p> <p>Allegory – to understand that sometimes stories have subtexts which we will see later in KS3 with Animal Farm.</p>	<p>To further practise and develop your knowledge see:</p> <ul style="list-style-type: none"><li>• <a href="https://www.sparknotes.com/lit/lion/">https://www.sparknotes.com/lit/lion/</a></li><li>• 1988 TV version of the novel can be watched here: • <a href="https://www.youtube.com/watch?v=6Fft9DLlpZF">https://www.youtube.com/watch?v=6Fft9DLlpZF</a></li><li>• <a href="http://www.iwm.org.uk">The Evacuated Children Of The Second World War   Imperial War Museums (iwm.org.uk)</a></li></ul>

### The Chronicles of Narnia

Siblings Peter, Susan, Edmund, and Lucy have been sent away from London during the air-raids at the height of World War II. They arrive at the countryside house of a kind but eccentric Professor, and as the children explore the house, Lucy winds up in a room which is empty except for a large wardrobe. She opens it to see what's inside, and, after finding a row of fur coats, climbs up into it to rub her face into the furs. The wardrobe goes back farther than she thought, and as she climbs deeper and deeper into it, she soon finds herself walking on freshly fallen snow; when she looks up, she is deep in a snowy wood, and in front of her there is an old lamp-post...

'The Lion, The Witch and The Wardrobe' is the second book in a series of seven books about the magical land of Narnia and the extraordinary creatures and humans who live, visit or adventure there.

### Career Focus - The Army



I am a soldier who uses English skills daily. Clear communication is vital in the army for giving and understanding orders. GCSE English also helps with writing reports and analysing information. These skills ensure everyone stays safe and works well as a team, which is essential in the military.



- Identify and interpret explicit and implicit information and ideas.
- Explain and analyse how writer's use language to achieve effects and influence readers
- Use relevant subject techniques to support their views.



## Skills

### Retrieval Practice



#### Questions

#### Answers

What is an **allegory**?

A story, poem or picture that has a hidden meaning or a moral lesson.

What does Mr Tumnus call Lucy a Child of?

Son of Adam

What is camphor? Why might it smell of camphor in the Wardrobe?

Camphor is a chemical used in mothballs. It would smell of this in the wardrobe because it will contain mothballs.

What does the archaic phrase: "Make it Pax" mean?

To make peace with something or someone.

What might Turkish Delight symbolize?

Sin, temptation and greed.

Who might Edmund represent according to the biblical allegory?

Judas – the one disciple who betrayed Jesus. This is similar how Edmund betrayed Aslan.

What might the Stone Table be symbolic of?

The Stone Table is symbolic of the end of law and the beginning of freedom, as well as Moses' stone tablets that held the Ten Commandments.

### Key Skill: Discussion and Argument

An important skill toward forming an interpretation and argument is to discuss our ideas. As we read the novel, consider the following discussion points:

- Would you forgive Edmund?
- Why does Aslan sacrifice himself?
- Who is the bravest character in the story? Why?
- How can this text be seen as an allegorical novel for the sacrifice of Jesus Christ?
- How would this story have been received during war time?
- Why has C.S. Lewis produced this text?

### Skills Practice - Writing



Task 1 - Write a diary entry as one of the Pevensie children about having to leave London and evacuate.

Task 2 - Write a letter in which you explain to your mother, what it is like to be evacuated from London only to find yourself in an exquisite mansion in the countryside.

Task 3 – Write a battle sequence from the perspective of the White Witch or Aslan.

Task 4 – Re-write and draft a different ending to The Lion, The Witch and the Wardrobe. Either a.) more adventures in Narnia, b.) a sad farewell c.) a sequel to the novel in which you return to Narnia and re-group with Aslan.



- Identify and interpret explicit and implicit information and ideas.
- Explain and analyse how writer's use language to achieve effects and influence readers
- Use relevant subject techniques to support their views.



**Vocabulary:** You will be tested on five words per week as part of your home learning.



Keyword	Definition
<b>Evacuee</b>	A person evacuated or moved from a place of danger to somewhere safe.
<b>Chronicles</b>	A written account of an important or historical events in the order of their occurrence.
<b>Inquisitive</b>	Curious or inquiring.
<b>Faun</b>	A half-human, half-goat mythical creature.
<b>Nymphs</b>	Mythical spirits on nature believed to live in the woods.
<b>Hoax</b>	A trick or prank.
<b>Anthropomorphism</b>	Giving an animal or object human characteristics.
<b>Prophecy</b>	A prediction.
<b>Emblem</b>	A symbolic object or representation.
<b>Allegory</b>	A story, poem or picture that has a hidden meaning or a moral lesson.
<b>Semantic field</b>	A set of words that link to a specific category.
<b>Taunting</b>	Intended to provoke someone into an insulting or annoying way.

Keyword	Definition
<b>Oppressed</b>	Subject to harsh, cruel and unjust treatment.
<b>Righteous</b>	Morally right, good and virtuous.
<b>Malicious</b>	Intending or intended to do harm.
<b>Resurrection</b>	Rising from the dead, being restored to life.
<b>Treason</b>	The crime of betraying one's country by attempting to overthrow the monarchy or government.
<b>Brute</b>	A savagely violent person or animal.
<b>Incantation</b>	A series of words said as a magic spell or charm.
<b>Consort</b>	A partner or companion of a reigning king or queen
<b>Magnificent</b>	Impressively beautiful, elaborate or extravagant; striking.
<b>Just</b>	Fair or morally correct.
<b>Valiant</b>	Possessing or showing courage or determination.
<b>Stag</b>	A male deer.
<b>Legend</b>	A very old story, or set of stories, from ancient times.



# Science

Our students will:

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





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

- Recall scientific knowledge from year 5 /6
- Understand how to carry out investigations safely
- Confidently use the scientific method to get valid results
- Creatively apply skills and knowledge to solve a problem

Keyword	Definition
Prediction	What you think will happen and why.
Hypothesis	An idea that can be tested using experiments.
Independent Variable	The variable that you change.
Dependent Variable	The variable that you measure (your results)
Control Variables	The variables that could influence the results so are kept the same.
Hazard	Is something that can cause harm to someone.
Risk Assessment	Identifies hazards, the harm they can do and how to minimise the risks.
Method	Step by step instructions how to carry out practical.
Conclusion	An explanation of what you found out
Evaluation	When you consider the quality of the data and how the investigation could be improved.
Accurate	When the data is close to the true value.
Precise	When the repeated data is similar (close to the mean).
Reproducible	Same results obtained by different people.
Anomaly	A result that doesn't fit the pattern.
Prediction	What you think will happen and why.

## Key Concepts

### Laboratory Safety Rules

Safety is the number 1 priority when you are carrying out practical work in the science labs so there are some important safety rules to follow:

- Always wear eye protection during a practical.
- Carry out a practical while standing up.
- Do not eat or drink in the laboratory.
- Tie long hair back and tuck loose clothing in during practicals.
- If something is spilled or broken, tell the teacher.
- Ensure that the floor and work space is clear of obstacles.
- Light bunsen with splint on a safety flame.
- Stop immediately when asked to by the teacher.



### What is STEM learning?

This year you will be carrying out project based learning that focuses on solving real life problems using Science, Technology, Engineering & Mathematics. You will develop important skills such as problem solving, creativity, team work, innovation, communication and digital literacy.

STEM is expected to be one of the largest employers in the near future so this will help prepare you to be successful global citizens.

### The Scientific Method

#### Step 1 - Observe and ask questions

When you ask a question about something that you observe: How, What, When, Who, Why, or Where?

#### Step 2 - Research

To help you find the best way to do things and ensure that you don't repeat mistakes from the past.

#### Step 3 - Construct a hypothesis

This a statement that you can test. Your evidence will allow you to either accept or reject the hypothesis.

#### Step 4 - Test the hypothesis

Plan experiments making sure you have clear independent, dependent and control variables. Then carry out experiment(s) to test the hypothesis and record data.

#### Step 5 - Analyse data and make conclusions

Organise data in ways to make it easier to understand (e.g. graphs) and check against hypothesis.

#### Step 6 - Share results

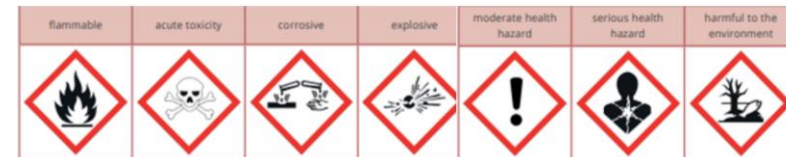
Results from experiments are shared with other scientists so they can evaluate the findings themselves.

### Using a Bunsen Burner

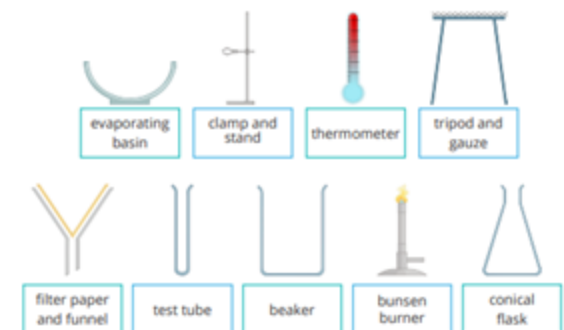
The safety flame is used when the Bunsen burner is not in use. The flame is easier to see when it is the yellow flame. To produce this flame, the air hole is fully shut. Less oxygen will get into the Bunsen burner, hence the yellow flame.



The roaring flame is used to heat things quickly. To produce this flame, the air hole must be fully open. More oxygen will get into the Bunsen burner, hence the blue flame.



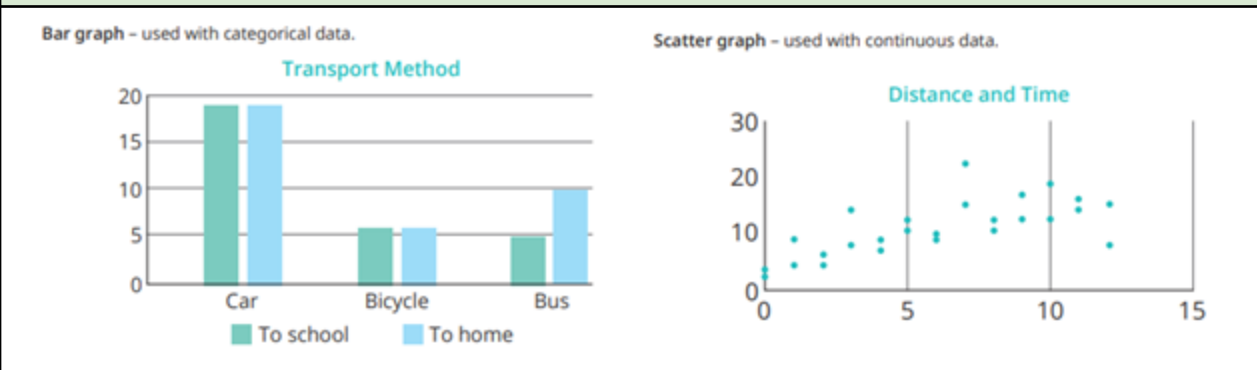
### Scientific Equipment



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

- Recall scientific knowledge from year 5 /6
- Understand how to carry out investigations safely
- Confidently use the scientific method to get valid results
- Creatively apply skills and knowledge to solve a problem

## Displaying Data - Graphs



## Retrieval Practice

Questions	Answers
What is a hypothesis?	A idea that can be tested using experiments.
Which variable do you change?	The independent variable
Which variable do you measure?	The dependent variable
Which variables do you keep the same?	The control variables
How is data usually displayed?	In tables and graphs (bar graph or scatter graph)
What is an anomalous result?	A result that doesn't fit the pattern of the other results
How is the mean calculated?	Repeat values added together then divided by number of repeats
What should a conclusion include?	A summary of whether your results do or do not support the hypothesis
What should an evaluation include?	An assessment of how the experiment went and how to improve it
What does STEM stand for?	Science, Technology, Engineering & Maths

## Career Focus - Where could this take you?



I am a research scientist (life science). My job is mainly to plan experiments, conduct experiments and analyse results.

My main workplace is a laboratory where I can be part of a team researching a variety of areas such as genetics, microbiology, stem cells, biotechnology, neuroscience, physiology, plant science and much more.

To do a good job as a research scientist you need to have an inquisitive mind and enjoy planning and working on experiments.

## Challenge Activities

- Make flashcards for the definitions and retrieval practice questions.
- Make a safety poster that shows other students how to stay safe in the science lab.
- Research the different types of research that different research scientists carry out. Which fields do you find the most interesting?
- Learn the different hazard symbols and what they mean.
- Find out more about research scientists and what they do. What qualifications would you need for this career? What is the average salary?
- Construct a fact file about the scientific method.
- Plan an experiment. Remember to include the hypothesis, variables, method and results table.

## Topic Links

This topic links to all scientific topics such as

- Substances and particles
- Energy

We will also be practising how to

- Carry out practical work safely
- Collect data
- Engineer solutions for real life problems using STEM

## Additional Resources

Educake - <https://www.educake.co.uk/>  
BBC Bitesize - <https://www.bbc.co.uk/bitesize/topics/zsg6m39>  
<https://www.bbc.co.uk/bitesize/topics/zsg6m39/articles/z4pjd3>  
YouTube - <https://www.youtube.com/watch?v=yi0hwFDQTSQ>

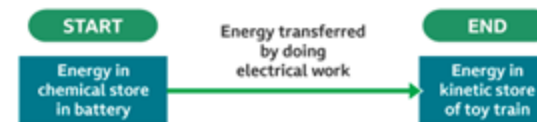


- Describe energy stores and transfers
- Calculate the cost and efficiency of energy transfers

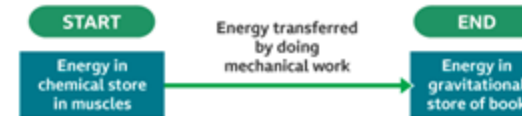
Keyword	Definition
Energy store	Type of energy. Energy is measured in Joules (J).
Kinetic energy	Anything moving has energy in its kinetic store (faster = more energy).
Gravitational potential energy	Anything that has mass and is in a gravitational field (higher up = more energy).
Chemical energy	Anything that can release energy by a chemical reaction (examples include food and fuels).
Elastic potential energy	Anything that can be stretched or compressed.
Thermal energy	Every object has thermal energy (higher temperature = more energy).
Energy transfer	When energy moves from one store to another.
Heat transfer	Energy transfer between hot and cold objects.
Electrical transfer	Energy transfer when a charge (current) moves.
Radiation transfer	Energy transfer through light/sound.
Mechanical transfer	Energy transfer when an object moves due to a force.
Renewable	Naturally replenished (will not run out), for example solar panels and wind turbines.
Non-renewable	Not naturally replenished (will run out), for example fossil fuels.

## Energy transfers

### Example 1: Battery powered train



### Example 2: Person moving a book to a high shelf



## Law of Conservation of Energy

The law of conservation of energy states that energy **cannot** be **created** or **destroyed**, it can **only** be **transferred** from one store to another.

When energy is transferred, it can be **dissipated**. This is where energy is **‘wasted’** by being transferred to the **surroundings**. Energy becomes stored in less useful ways, e.g. as thermal energy.

## Energy efficiency

How good a device is at transferring energy input to useful energy output is called **efficiency**. The more efficient a device is, the less energy it will waste.

$$\text{EFFICIENCY} = \frac{\text{USEFUL POWER OUTPUT}}{\text{TOTAL POWER INPUT}} \times 100$$

## Energy resources

### FOSSIL FUELS (NON-RENEWABLE)

Coal, oil and gas are all fossil fuels. They are formed from dead remains over millions of years. They are burnt which produces thermal energy used to turn a generator and make electricity.



- + Reliable
- + Releases energy quickly
- + Can be used in vehicles as fuel

- Will run out
- Releases carbon dioxide
- Extraction can run landscapes

### SOLAR PANELS (RENEWABLE)

They use the sunlight to produce an electrical current.



- + No pollution
- + No fuel costs
- + Can be used in remote locations

- Unreliable
- Expensive to set up
- Can only be used in daytime

### WIND TURBINES (RENEWABLE)

Wind turns the blades which turns a generator, this produces electricity.



- + No pollution
- + No fuel costs
- + Minimal running costs

- Unreliable
- Spoils the view
- Can only be used when it is windy



- Describe energy stores and transfers
- Calculate the cost and efficiency of energy transfers

## Retrieval Practice



Questions	Answers
What is kinetic energy?	Anything moving has energy in its kinetic store (faster = more energy).
What is thermal energy?	Every object has thermal energy (higher temperature = more energy).
What is elastic potential energy?	Anything that can be stretched or compressed.
What is gravitational potential energy?	Anything that has mass and is in a gravitational field (higher up = more energy).
What is chemical energy?	Anything that can release energy by a chemical reaction (examples include food and fuels).
What are the 4 methods of energy transfer?	Heat, electrical, radiation, mechanical.
What is unit of measurement for energy?	Joules (J).
What is the law of conservation of energy?	Energy cannot be created or destroyed; it can only be transferred from one store to another.
What does the efficiency tell you about a device?	How much of the input energy is transferred usefully and how much is wasted.
What does renewable mean?	It is naturally replenished (will not run out).
What does non-renewable mean?	It is not naturally replenished (will run out).
What are the disadvantages of using fossil fuels?	It is non-renewable so will run out, it releases carbon dioxide and extraction can ruin landscapes.
What are the advantages of solar panels?	It is renewable so will not run out, there is no pollution or fuel costs and has minimal running costs.

## Career Focus - Where could this take you?



I am a welder. My job is to use high heat to fuse materials, creating strong, durable bonds between them. I must decide the best techniques to use on different materials to quickly create strong and safe joins. Welders are required in most sectors so my workplace could be in a workshop, in a factory, on a construction site, on a demolition site or even on an oil rig. Welding combines the mental satisfaction of exacting technical standards with the physical rewards of precise handcrafting.

## 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 latest innovations in renewable energy. What is currently being developed and how does it work?
4. Make a poster about energy transfers.
5. Find out more about welders and what they do. What qualifications would you need for this career? What is the average salary?
6. Research the famous scientist Thomas Edison (1847-1931) and how he influenced and improved our understanding of energy. What contributions to society did he make?

## Topic Links



This topic links to other science topics such as:

- Digestive system
- Types of pollution

We will also be learning how to create a sustainable future and economy.

## Additional Resources



Educake - <https://www.educake.co.uk/>

BBC Bitesize –  
<https://www.bbc.co.uk/bitesize/topics/z89ddxs>

YouTube Cognito -  
<https://www.youtube.com/watch?v=IGwcDCeYRYo&list=PLldqqlGKox7UVC-8WC9djoeBzwxPeXph7>

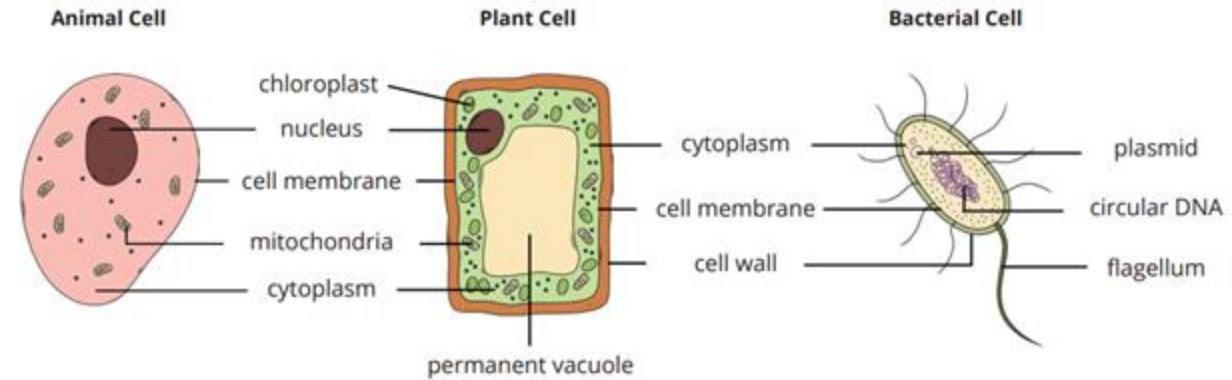




- Recall the function of the organelles
- Describe and compare animal, plant and bacterial cells

Keywords	Definition
Cell	Basic unit of life.
Cell membrane	Controls the movement of substances in and out of the cell.
Nucleus	Contains genetic information.
Circular DNA	The genetic information found inside bacteria (without nucleus).
Cell wall	Provides support to plant and bacterial cells.
Cytoplasm	Jelly-like substance where chemical reactions take place.
Mitochondria	Where respirations takes place. Releases energy.
Chloroplasts	Contains the green pigment chlorophyll, the site of photosynthesis.
Vacuole	Contains cell sap.
Flagella	Hairlike structure that allows bacteria to move.
Plasmid	Small circular ring of DNA.
Specialised cell	Cells designed to carry out a particular role in the body.
Function	The purpose for which something exists, its role.
Adaptation	Features of living organisms that help them survive

## Key Concepts



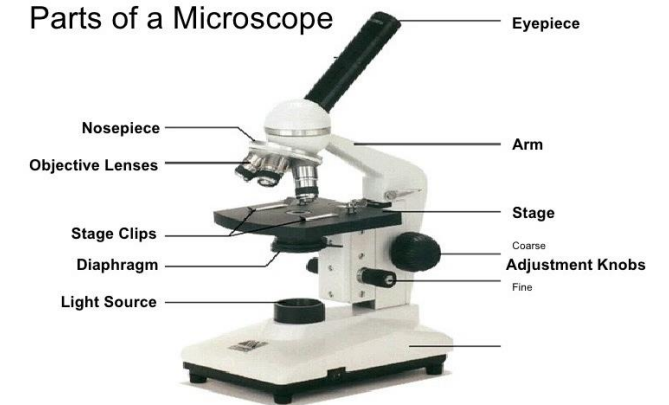
## Specialised Cells

Humans are multicellular. That means we are made of lots of cells, not just one cell. The cells in many multicellular animals and plants are specialised, so that they can share out the processes of life. They work together like a team to support the different processes in an organism.

Image	Type of animal cell	Function	Special features
	Red blood cells	To carry oxygen	<ul style="list-style-type: none"><li>• Large surface area, for oxygen to pass through</li><li>• Contains haemoglobin, which joins with oxygen</li><li>• Contains no nucleus</li></ul>
	Nerve cells	To carry nerve impulses to different parts of the body	<ul style="list-style-type: none"><li>• Long</li><li>• Connections at each end</li><li>• Can carry electrical signals</li></ul>

## Parts of a light microscope

### Parts of a Microscope



### Using a Light microscope

- Prepare a slide.
- Plug in microscope and turn on light.
- Place slide on stage and hold with clips.
- Use lowest magnification objective lens to focus image.
- Then turn up the magnification by turning to a higher power objective lens.



- Recall the function of the organelles
- Describe and compare animal, plant and bacterial cells

## Retrieval Practice



Questions	Answers
What is a cell?	Cells are the basic building blocks of all living organisms.
What is an organelle?	Specialised structures that perform various jobs inside cells.
What is the function of the nucleus?	Contains genetic information (DNA) that controls cell activities.
What is the function of the cell membrane?	To control what enters and leaves the cell.
What is the function of the cytoplasm?	Where chemical reactions take place.
What is the function of mitochondria?	The site of respiration - where energy is released.
What is the function of the cell wall?	To strengthen and support plant and bacterial cells.
What is the function of chloroplasts?	Contains chlorophyll to absorb light energy for photosynthesis.
Which organelles are present in both animal and plant cells?	Nucleus, Cell membrane, Cytoplasm, Mitochondria,
Which organelles are present in plant cells but not in animal cells?	Chloroplasts, Cell wall, Vacuole.
Name the parts of a microscope	Eye piece, objective lens, stage, lamp, focusing wheel.
What does focus mean and how do you focus an image?	Making an image clear enough to be viewed under the microscope by using the focussing wheel.
What is a specialised cell?	Specialised cells are cells designed to carry out roles in the body.

## Career Focus - Where could this take you?



I am a biochemist. My job is to investigate the chemical processes that take place in all living things such as bacteria, plants and people.  
My workplace is a laboratory at a University where I get to plan and carrying out scientific experiments, use lab equipment and publish my findings.  
Biochemistry has hugely benefited society, for example it has provided explanations for many diseases, helped with food production and improved human health!

## Challenge Activities



1. Make flashcards for the definitions and retrieval practice questions.
2. Make a mindmap for this topic. Remember to include keywords and the links between information.
3. Research specialised cells found in both animals and plants and turn the information into a leaflet.
4. Make a 3D model of a cell - you can use recycled materials or even bake!
5. Find out more about Biochemists and what they do. What qualifications would you need for this career? What current research is being done?
6. Construct a fact file about a famous historical scientist that helped us to understand more about cells

## Topic Links



This topic links to other science topics such as

- Scientific Skills
- Organisation
- Energy

We will also be practising how to

- Calculate area and volume
- Write descriptively to compare cells

## Additional Resources






Educake - <https://www.educake.co.uk/>  
BBC Bitesize - <https://www.bbc.co.uk/bitesize/guides/z9hywcw/revision/3>  
YouTube Cognito - [https://www.youtube.com/watch?v=qHkUOIC8Nbo&list=P\\_LidqqIGKox7X5UFT-expKluR-i-BN3O1g&index=2](https://www.youtube.com/watch?v=qHkUOIC8Nbo&list=P_LidqqIGKox7X5UFT-expKluR-i-BN3O1g&index=2)

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

- Describe the structure and properties of solids, liquids and gases
- Explain how substances change state and gases diffuse

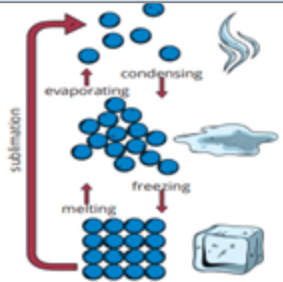
Keyword	Definition
Solid	Solid objects can hold their shape.
Liquid	Liquids can flow but cannot be compressed (squashed).
Gas	Gases can flow and expand to fill a container.
State of Matter	The states at which substances can exist, either solid, liquid or gas.
Particles	A small portion of matter usually drawn as a circle.
Properties	The characteristics of a substance.
Flow	When fluids (gases or liquids) move in a steady stream
Compressed	When something is squashed to make it smaller.
Density	The amount of space (volume) something takes up in relation to its mass.
Melt	When a substance changes from a solid to a liquid.
Freeze	When a substance changes from a liquid to a solid.
Condense	When a substance changes from a gas to a liquid.
Evaporate	When a substance changes from a liquid to a gas.
Sublimation	When a substance changes from a solid to a gas.
Diffuse	When particles of a substance spread out.

## Key Concepts

	Solid	Liquid	Gas
particle model diagram			
particle arrangement	regular structure no space between particles	irregular structure very little space between particles	irregular structure large space between particles
volume and shape	fixed volume fixed shape	fixed volume shape changes to fill bottom of container	volume increases to fill capacity shape changes to fill capacity
able to flow	no (forces between particles are very strong and hold them in fixed positions)	yes (forces between particles are weak and particles slide over one another)	yes (forces between particles are very weak and particles move randomly and rapidly)
density	high cannot be compressed (particles are already tightly packed)	high cannot be compressed (particles are already tightly packed)	low can be compressed (particles are forced closer together)
particle energy levels	low (particles vibrate around a fixed point only)	moderate (particles can move and flow but slowly)	high (particles moving rapidly and freely)

## Changes of State

Substances can change state; from a solid to a liquid (melting) liquid to a gas (evaporating) gas to liquid (condensing) and liquid to solid (freezing). Sublimation is when a substance changes from a solid directly to a gas.

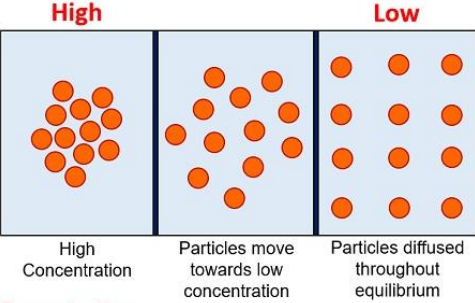


The arrangement of particles changes when the substance changes state.

## Diffusion

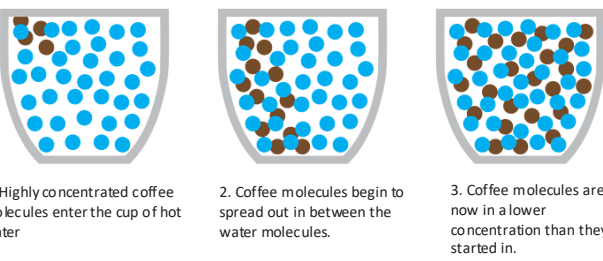
Diffusion is the movement of a substance from an area of high concentration to an area of lower concentration. Diffusion occurs in liquids and gases when their particles collide randomly and spread out.

Diffusion is an important process for living things - it is how substances move in and out of cells.



Diffusion occurs in gases like air and liquids like water because their particles can move around and collide with each other randomly.

For example, if you mix two drinks, the liquids diffuse into each other. Blackcurrant squash has a high concentration level. When the squash is mixed with water, it becomes less concentrated and is diluted.



- Describe the structure and properties of solids, liquids and gases
- Explain how substances change state and gases diffuse

## Retrieval Practice

Questions	Answers
How are particles arranged in solids?	A regular structure with no space between particles
How are particles arranged in liquids?	An irregular structure with little space between particles
How are particles arranged in gases?	An irregular structure with large spaces between particles
What are the properties of a solid?	Fixed volume and shape that cannot flow or be compressed
What are the properties of a liquid?	Fixed volume, can flow/change shape, can't be compressed
What are the properties of a gas?	No fixed volume or shape, can be compressed
Which state is the most dense and why?	Solid because the particles are tightly packed
Which state is the least dense and why?	Gas because the particles are spread apart
What is happening when a substance melts?	The particles gain energy and change from solid to liquid
What is happening when a substance freezes?	The particles lose energy and change from liquid to solid
What is happening when a substance evaporates?	The particles gain energy and change from liquid to gas
What is happening when a substance condenses?	The particles lose energy and change from gas to liquid
What is sublimation?	When a substances changes from a solid to a gas
What is diffusion?	The movement of fluids (gas or liquid) from an area of high concentration to an area of low concentration
How does temperature affect the rate of diffusion?	The particles move faster so diffusion happens quicker
What happens to water density when it freezes?	It becomes less dense! Which is unusual for a solid.

## Career Focus - Where could this take you?



I am a barista. I work in a café making and serving speciality coffees and teas, as well as occasionally helping with food orders.

You can become a barista through experience of working in a coffee shop or you can go to college to complete an apprenticeship. The best baristas understand how to use the process of diffusion to make an outstanding cup of coffee.

The skills needed for this job involve having good customer service skills and being good with you hands.

## Challenge Activities

- Make flashcards for the definitions and retrieval practice questions.
- Make a mindmap for this topic. Remember to include keywords and the links between information.
- Research how the particle model was first developed and the important findings that helped scientists understand states of matter.
- Make a 3D model of the different states of matter - solid, liquid and gas.
- Find out more about baristas and what they do. What qualifications would you need for this career? What is the average salary?
- Construct a fact file about a famous historical scientist that helped us to understand more about substances and particles.

## Topic Links

This topic links to other science topics such as

- Scientific Skills
- Chemical reactions
- Energy

We will also be practising how to

- Use numerical data to identify states of matter
- Present information using V21 skills

## Additional Resources

Educake - <https://www.educake.co.uk/>

BBC Bitesize -

[https://www.bbc.co.uk/bitesize/topics/zkr4jxs/articles/z3qy\\_ydm](https://www.bbc.co.uk/bitesize/topics/zkr4jxs/articles/z3qy_ydm)

YouTube Cognito -

[https://www.youtube.com/watch?v=vi\\_SlBnxmHo&list=PLIdqqIGKox7WeOKVGHxcd69kKqtwrKl8W&index=5](https://www.youtube.com/watch?v=vi_SlBnxmHo&list=PLIdqqIGKox7WeOKVGHxcd69kKqtwrKl8W&index=5)





# Humanities

Our students will:

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



# Year 7 How do historians discover the past?

- To explore the concept of chronology with a focus on change and continuity.
- To explain how a Historian uses different types of evidence
- To identify some key terminology used by Historians.
- To conduct an enquiry to answer the Question – How do historians discover the past?

Keyword	Definition
History	A study of the past including people and events.
Historian	Someone who writes about or studies History.
Chronology	Arranging events or dates in the order they took place.
Timeline	Represents dates and events in chronological order.
Change	How something changes over a length of time and as a result of an event or action.
Continuity	How something stays the same over a length of time.
Sources	<b>Primary Source</b> – document or object created during the time period of study. <b>Secondary Source</b> – an account or interpretation of events not written during the time period.
Evidence	Various sources relating to an event, person or period of time to help understand what happened in the past.
Interpretation	A viewpoint of the past/an event.
Analysis	A close study of separate parts of something; examine and explain.
Reliability	Extent we can trust or believe source to tell the truth.
Judgement	To make a decision carefully, after studying and comparing all evidence that is available.
Isotope Analysis	This uses the bones of the skeleton to discover more about the person. This might include, what they last ate, how their diet was.

## Key Concepts

History: Greek 'historia' – learning or knowing by inquiry;  
Latin – narrative, story of past events

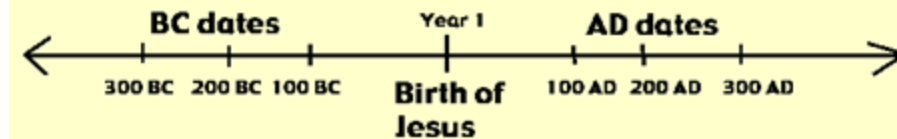


### How do we measure time?

Second, minute, hour, day, week, month, year, decade, century, millennium, BC, AD, period, era:

E.g. Prehistory, Iron Age, Romans, Anglo-Saxons, Normans, Middle Ages.

**CHRONOLOGY** – arrangement of anything into time/date order



100 - 199	2nd century
200 - 299	3rd century
300 - 399	4th century

Have you spotted the pattern yet? Have a close look at the numbers that are underlined - what do you notice?

REMEMBER! Look at the first number(s) of the year and ADD ONE to get the century (c)

e.g.

2018 = 21<sup>st</sup> c   968 = 10<sup>th</sup> c   1815 = 19<sup>th</sup> c   1905 = 20<sup>th</sup> c   56 = 1<sup>st</sup> c

### How do Historians use sources?

What are the limitations of source? - What does the source not tell us?

Can we trust it? - Is it reliable?

Is it useful? - Does it help us understand a topic more?

What is the provenance?

- P – Purpose – Why was the source made?
- A – Audience – Who was the intended audience?
- N – Nature – What type of source is it (newspaper, diary etc.)?
- D – Date – When was the source created?
- A – Author – Who wrote the source?

### Types of source can include:

Oral (spoken) Written Pictures Artefacts

Prehistory



Iron Age



Romans



Anglo-Saxons



Vikings



Normans



Middle Ages





# Year 7 How do historians discover the past?

- To explore the concept of chronology with a focus on change and continuity.
- To explain how a Historian uses different types of evidence
- To identify some key terminology used by Historians.
- To conduct an enquiry to answer the Question – How do historians discover the past?

## Retrieval Practice



Questions:	Answers:
What is a timeline and why is it useful to a Historian?	A graphical representation of a period of time, on which important events are marked.
Name <b>three</b> types of sources that Historians can use:	Written, pictures and Oral (spoken).
What does Mary Beard discover in Pompeii?	Discovers bones which allow us to see there were differences in wealth in the city of Pompeii.
Which historian focuses mostly on black English history?	David Olusoga.
How does Cat Jarman use bones to discover the past?	Isotope Analysis.
What was the name of the Black Tudor?	John Blanke.
What part of history does Malcolm Gaskill study?	17 <sup>th</sup> Century witches.
What is an interpretation?	A viewpoint of an event/the past.
What was the concept that Max Adams was trying to disprove?	That women in the Medieval period were either queens, nuns or invisible.
Which period was Marc Morris studying?	The Middle Ages (Medieval period).

## Career Focus - Where could this take you?



**I am a Detective:** My job is to collect intelligence and evidence from a range of sources, including crime reports, victims, witnesses and suspects. I am responsible for recording and retaining evidence in a way that makes it useful in places like court, so that it helps bring offenders to justice. I often deal with serious and complex investigations and crimes, uncovering the truth and analysing evidence on cases.



## Challenge Activities



1. Create a timeline of your life: You may include pictures and photographs. The timeline **MUST** be in CHRONOLOGICAL order. Remember, it is your personal history so include events that are important to you.
2. Create a personal history fact-file detailing important events within your past. Try and complete it in CHRONOLOGICAL order.
3. Design the front cover of your own interpretation on one of the time periods/events that we have studied. You can challenge the historians you have been looking at. This might include a front page, a blurb, your judgement.

## Topic Links



This topic links to other humanities topics such as:

- The Romans
- The Tudors

We will also be practising how to

- Make inferences from sources
- Extended writing
- Creating judgements and challenging interpretations.

## Additional Resources



Personal Timeline Example:



History:





- The aims of the sequence of learning are to ensure that all students:
 
  - Explore the claimants to the English throne in 1066.
  - Establish why the Battle of Stamford Bridge might be of benefit to William Duke of Normandy
- Explain why William won the Battle of Hastings in 1066 using evidence of ‘preparation’, ‘leadership’ and ‘luck’ to support.
  - Evaluate William’s methods of control in England, including: Fear, The Feudal System and Castles.

Keyword	Definition
Anglo-Saxon	A group of people from Germany and Denmark who settled in England in the 5 <sup>th</sup> Century. They ruled until 1066.
Claimant	A person who claims they have a right to the throne.
Normans	A group of people from Normandy in France. They invaded England in 1066.
Fyrd	Men who fight in an Anglo-Saxon army to protect the King.
Housecarls	A group of elite soldiers in the Anglo-Saxon army.
Shield Wall	A military formation whereby all the shields interlock and form a strong barrier.
Feigned Retreat	Where the soldiers in an army pretend to retreat in order to break the formation of the opposing side.
Archers	Soldiers with a bow and arrow.
Feudal system	A Norman system which gave people land and protection by those of a higher rank and worked and fought for them in return.
Villeins	A Villein is a class of peasant who was tied to the land that was owned by their master. Their main role was farming.
Domesday book	Created in 1086, it was a record of what each person in England owned, in terms of land and wealth.
Taxes	A compulsory contribution to the King, Queen or government. Usually based on a person's wealth and income.
Consolidate	To make something stronger or more solid.
Motte and Bailey Castle	A type of castle which has a motte (small mound of earth) and a bailey (open area / village) inside an outer wall.
Palisade	A protective fence that surrounds the Bailey and the Keep in a Motte and Bailey Castle.

## Key Concepts

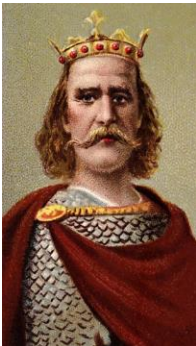


**Life in Anglo Saxon England-** The Anglo-Saxon period lasted from the year 410AD, when Historians think the Romans left England, until 1066 when the Normans invaded. Most people in Anglo-Saxon England lived in villages. Their homes were made of wood, wattle and daub, and thatched roofs. Most Anglo-Saxons were farmers and lived off the land.

**Claimants to the Throne**  
Edward the Confessor died on the 5th of January 1066, leaving no Heir to the English throne. There were three men who claimed they should be the next King...


**Harold Godwinson, Earl of Wessex:**  
Edward's brother-in-law, England's leading nobleman and The Witan's first choice. He was crowned on the 6th January the day after Edward died.

**Harald Hardrada:**  
King of Norway, he claimed Harthacnut, King of England in 1042, promised the crown to his family. He was supported by Harold's brother, Tostig. Harold defeated Hardrada and Tostig at the Battle of Stamford Bridge on 25th September 1066.


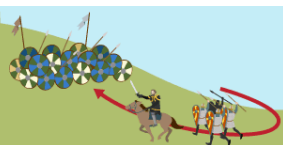

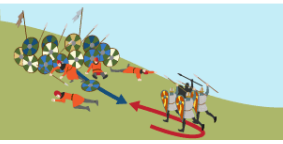

**William, Duke of Normandy:**  
Claim: Edward had promised him the crown. In 1063 Edward gave William, who was a great friend, and whom he had already named heir in 1051, a more serious pledge. He sent Harold to William to confirm his promise by oath. However, Harold said that the oath had been made under pressure and feared he would have been kept prisoner if he had not taken the oath.


**The Battle of Stamford Bridge:** In two days, King Harold assembled an army of 15,000 men, which included roughly 3,000 of his elite troops - the Housecarls. King Harold led his army, most of whom were on foot, across 185 miles in just four days. The English army marched with such speed that they surprised Hardrada's Army and won a decisive victory.




**The Battle of Hastings:** Having delayed his invasion due to the weather, William finally set sail for England. When they reached Sussex on the 28<sup>th</sup> of September, Harold was forced to march his already exhausted army back down south to defend England against its second invasion. William of Normandy emerged victorious from the Battle of Hastings and became King of England - William the Conqueror.

## The Feudal System



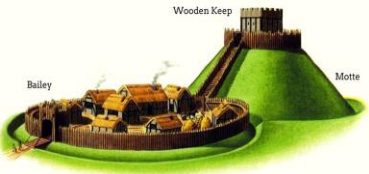
## The Harrying of the North:



There was opposition to William's rule, especially in the North of England. To prevent any challenge to his crown, William used terror to stop people from revolting. In 1069 his forces carried out the Harrying of the North which saw villages burned and caused the death of 100,000 people from starvation.


## Motte and Bailey castles:

To ensure that people across England were loyal to him, William built castles across the country to act as fortresses. These castles intimidated Anglo-Saxon opponents and helped William keep power.



Retrieval Practice	
Questions	Answers
Describe two features of life in Anglo Saxon England:	Most people were farmers and lived in wooden huts. Children generally didn't go to school. They made lots of things from wood, e.g. boats, and they made beautiful items of jewellery.
Who was the King who died in 1066?	Edward the Confessor.
Name two claimants to the throne in 1066:	Harold Godwinson, Harold Hardrada and William Duke of Normandy.
Describe one feature of the battle of Stamford Bridge:	It was King Harold Godwinson vs Harald Hardrada. King Harold marched his army 185 miles in 4 days to reach Stamford Bridge. King Harold had surprised Hardrada's army which gave him an advantage.
Why was the weather lucky for William Duke of Normandy?	The wind meant that William could not sail to England on the day he intended, delaying his invasion. In this time King Harold marched his army north to beat Hardrada, meaning King Harold's army were weakened in the Battle of Hastings.
Name one of Williams tactics that enabled him to win the Battle of Hastings:	The Feigned Retreat. He had a 2000 - 3000 strong cavalry force. William had waited for Harold's army to come to him, making them even more exhausted. William bravely rode in front of his army in the battle to prove he was still alive, preventing panic amongst his soldiers.
Describe the events of the Harrying of the North:	The Harrying of the North refers to the brutal slaughter and pillaging of villages in Northumbria in 1069-1070 by the army of William the Conqueror. It is thought that 100,000 people starved to death.
Name four ways that William consolidated his power over England:	The Domesday book. The Feudal System. Terror. Castles
Why did William choose to build Motte and Bailey castles?	They could be built quickly and were less expensive than other castles, mainly because they were made partly from wood. They were also secure.
How did Castles help William keep control of England?	The Normans used these large fortresses to impose their authority over a whole country.

Career Focus - Where could this take you?



**I am an Architect:** My job is to design new buildings and help improve old ones. I ensure I use the correct materials and consider what will make a building strong as well as attractive on the eye. I have a wide knowledge of architecture throughout history and spend time researching the heritage of the buildings that I work on. Architecture is influenced by society and culture and my study of history enables me to understand this connection.

Challenge Activities

- Create a model of a Motte and Bailey castle using materials you can find at home! E.g. wooden lollypop sticks, cardboard and newspaper. You could also bake a cake to look like a castle or draw / paint a castle then label it.
- Research a Norman castle in England that is still standing today. Then write a newspaper report detailing all you have found. You should include:
  - When was it built?
  - Why was it built?
  - Who has lived there?
  - What it is used for now.
  - Pictures of it (and maps too, if available).
  - Any other interesting or important facts or history about your chosen castle.

Topic Links

This topic links to other humanities topics such as:

- Medieval Life
- Christianity
- Power and religion through time.

Additional Resources

To further develop your knowledge and skills see:

<https://www.bbc.co.uk/teach/class-clips-video/history-ks3-ks4-1066/zm3m382>

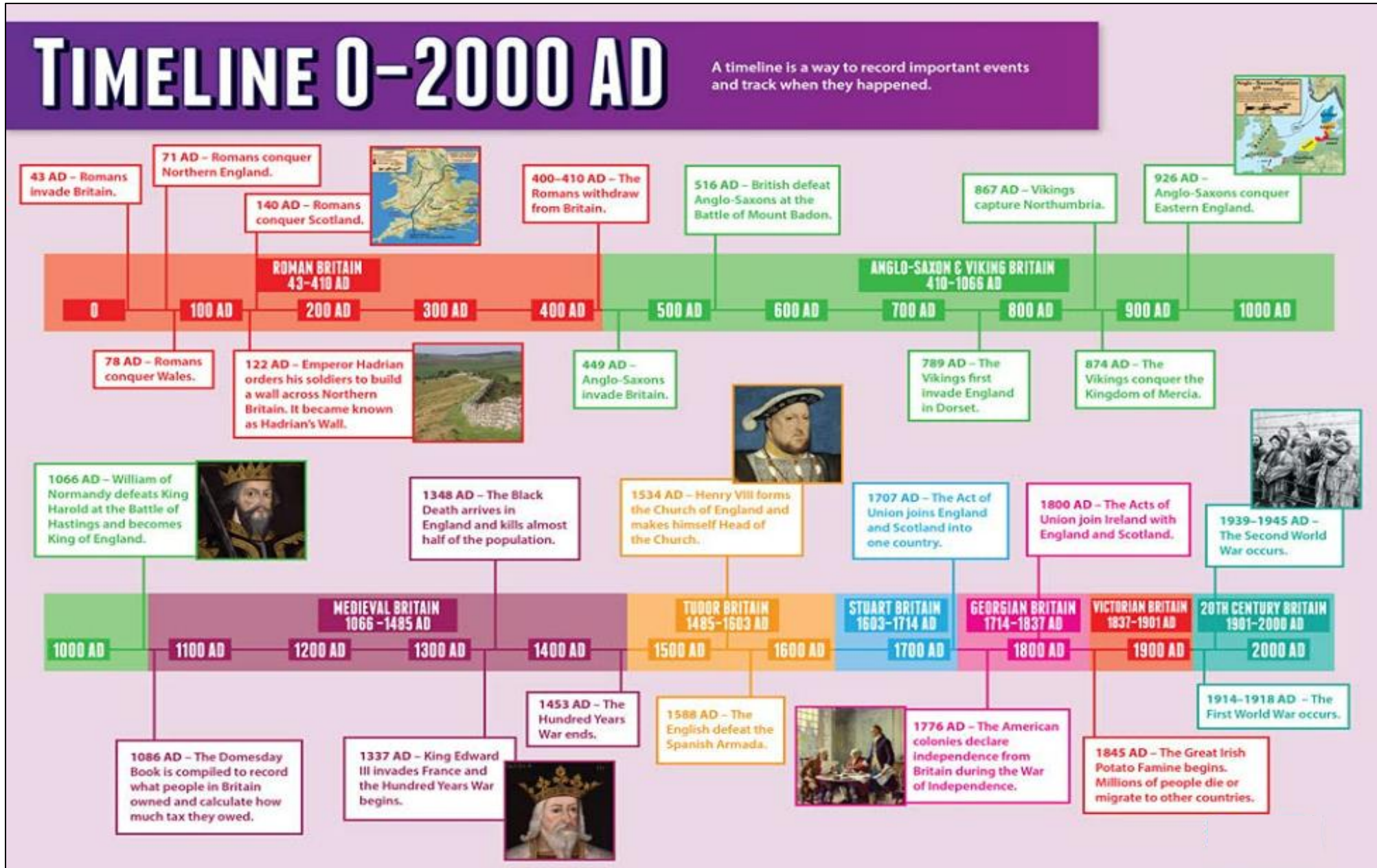
<https://www.bbc.co.uk/bitesize/topics/zshtyrd>

<https://www.essentially-england.com/norman-castles-a-to-z.html>





## Timeline





The learning outcomes for this topic are:

- Locate and name the main human and physical features of the UK
- Describe the reasons why the climate varies across different parts of the UK

- Explain how the population is distributed across the UK
- Evaluate whether the UK is an island on its own or not

Keyword	Definition
Asylum seeker	A person who flees to another country for safety and asks for permission to stay there Economic migrant – people who move to a new place to find work and improve their standard of living
Emigrant	A person who leaves his or her country to settle in another country
Immigrant	A person who moves here from another country, to live
Leeward	Sheltered from the wind
North Atlantic Drift	A warm current in the Atlantic Ocean; it keeps the weather on the west coast of Britain mild in winter
Population	The number of people living in a place
Population Density	The average number of people living in a place, per square kilometer.
Rain Shadow	The dry area on the leeward side of a hill
Refugee	A person who has been forced to flee from danger (for example war)
Region	An area of the world or a country having definable characteristics but not always fixed boundaries
Rural area	Countryside, where people live on farms and in small villages
Urban area	A built-up area (town or city)
Windward	Facing into the wind

## Key Concepts

### The British Isles

The UK is divided into 2 countries  
the UK and the Republic of Ireland.

The UK is made up of 4 nations:

- England
- Scotland
- Wales
- Northern Ireland



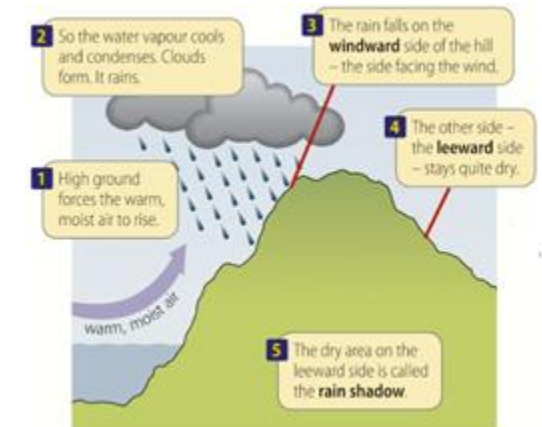
### Facts on the British Isles

Flag of UK 					
Flag of Republic of Ireland 					
Area (square kilometres)	130 400	77 100	20 800	14 200	70 300
Population (millions)	53.5	5.3	3.1	1.8	4.6
Flag of this British nation					

### The Physical landscape



### Why is it wetter in the west of the UK?





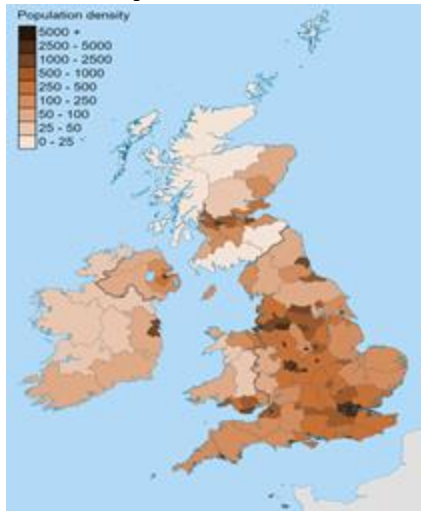


- Locate and name the main human and physical features of the UK
- Describe the reasons why the climate varies across different parts of the UK
- Explain how the population is distributed across the UK
- Evaluate whether the UK is an island on its own or not

## Key Concepts



### UK Population Distribution



The distribution of people in the UK is not evenly spread due to physical geography (climate and mountains). Most people live in the South-East and in towns which developed during the Industrial Revolution.

### UK links to the World



- Trade - Buy & sell goods to other countries
- Transport - 25 airports, Channel Tunnel & 30 ports
- Communications - Internet, phone, music & TV
- Investment - Many foreign companies have business here
- Membership - Of the UN and Commonwealth
- Tourism - 40 million visitors come to our country each year
- Culture - Books, fashion, music, TV & sport is watched around the World
- Aid - We give 0.7% of our earning a year to poorer countries

### London

South-West of the UK, developed and named Londinium by the Romans.

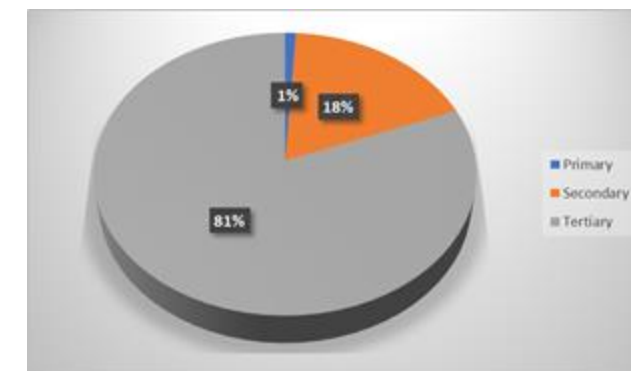


**Our capital city**  
population: 8.3 million, or 13% of the UK's population  
share it contributes to the UK's wealth: 19%  
% of its population born outside the UK: 37%  
daily commuters from outside London: around 750 000  
secondary schools: around 660  
hospitals: around 80  
cinemas: around 110  
premiership football clubs: 5  
shops: thousands  
places to eat: thousands



### The UK Economy

Primary: 1%  
Secondary: 18%  
Tertiary: 81%







- Locate and name the main human and physical features of the UK
- Describe the reasons why the climate varies across different parts of the UK

- Explain how the population is distributed across the UK
- Evaluate whether the UK is an island on its own or not

## Retrieval Practice



Questions	Answers
How many countries are in the British Isles? Name them	2 – The UK and Republic of Ireland
Which parts of the UK receive the most rainfall and why?	The north and west due to relief rainfall over mountains areas
Why is it colder as you go up a mountain?	As air moves from low to high it expands, then the temperature drops
Name 2 Rivers in England	Thames and Severn
What year did England, Scotland and Wales become Great Britain?	1707
What is the population of the UK?	67 million people
How many nations make up the United Kingdom?	4 – England, Scotland, Wales and Northern Ireland
Which area of the UK has the highest population density and why?	The South-East of the UK (around London) as the land is flatter, a warmer climate and good transport links to Europe
Give 3 ways the UK is linked to the rest of the World	Members of the UN, 0.7% of our income goes to countries who are poorer and 40 million people visit every year from other countries

## Career Focus - Where could this take you?



I'm a meteorologist. I study weather patterns and climate change, working to improve computer forecasting models. I use research to predict events like floods and droughts, and I also examine how weather impacts the spread of pollution and diseases. As a forecaster, I collect data from various sources like satellites, radar, sensors, and weather stations. I analyse this information using computer programs to predict the weather.

## Challenge Activities



1. Create a collage which highlights some of the UK's physical features.
2. Find out in the news, in the UK, a topic which is to do with geography. Write your own report on this subject and set it out like a newspaper front page.
3. Design a mascot to represent the UK. Write a paragraph to explain why you have chosen that design. Focus on historical figures or traditions from the UK.
4. Create top trumps cards for 6 cities in the UK - include size, population, age, height above sea level and distance from London.
5. Create an advert (on paper or online) encouraging people to visit London. You must include at least 4 tourist destinations.

## Topic Links



This topic links to other humanities topics such as:

- The Romans
- Population
- Weather and climate

We will also be practising how to:

- Analyse data from maps and graphs

## Additional Resources



BBC Bitesize:



YouTube:



UK economy & links to the world






## Key Concepts: World – Countries and Oceans



# Year 7 Multi-faith Britain

The learning outcomes for this topic are:


- To identify different faiths celebrated in Britain.
- To explain why it is important to celebrate multi-faith Britain
- To describe how Britain is a multi-faith society
- To explain how sacred texts and religious leaders influence their followers.

Keyword	Definition 
Religion	A set of beliefs about the cause and purpose of the universe.
Spirituality	An individual practice giving a person a sense of peace and purpose.
Community	A group of people in a place or a group of people who share the same beliefs, interests and practices.
Values	The things that are important to us.
Multicultural Societies	People of different races, ethnicities, and nationalities living together in the same community.
The Golden Rule	A common belief in all religions to treat one another with respect, as you would like to be treated yourself.
Religious leader	A person who leads, teaches and guides a group of people who share a common faith.
Stereotyping	The act of judging a person or group of people because of the actions or behaviours of others that are similar.
Belief	Something one accepts as true or real; a firmly held opinion.
sacred text	Texts that are central to the teachings of almost every given religion.

Key Concepts														
<p><u>The 6 main reasons why Britain has become a multi-cultural Society:</u></p> <ul style="list-style-type: none"><li>•Invasion over centuries from different groups of people.</li><li>•People from a country that was formerly part of the British Empire have been allowed the freedom to settle in Britain.</li><li>•Some people have escaped from political persecution in their native countries.</li><li>•Others seek freedom to practice their religion.</li><li>•Some migrants want economic opportunities e.g, jobs &amp; a better standard of living.</li><li>•Others were encouraged from the UK government, for example after WWII.</li></ul>	<p><u>Why is it important to learn about different religions?</u></p> <p>Different faiths give interesting ideas about the meaning of life and the help people become open minded.</p> <p>RE teaches you how to think about your own beliefs. It provokes you to be reasonable about beliefs.</p> <p>Lots of young people can't make up their minds about God, life, death, beliefs and what they all mean. RE can help you do that.</p> <p>There are six world religions with millions of followers in the UK. We need to know about these for pretty much any job we do.</p> <p>Religious beliefs are one of the protected characteristics in the UK. Protected characteristics are personal aspects that you cannot be discriminated for.</p>													
	<p><b>Respect</b> is important in society for our well-being and success. When we respect others and feel respected in return, it can foster positive relationships and a sense of belonging.</p>													
	<p><u>The Six World Religions practiced in Britain:</u></p> <p>Christianity (2.2 billion followers worldwide)</p> <p>Islam (1.6 billion followers worldwide)</p> <p>Hinduism (1 billion followers worldwide)</p> <p>Buddhism (376 million followers worldwide)</p> <p>Sikhism (23 million followers worldwide)</p> <p>Judaism (14 million followers worldwide)</p>	<p><u>The sacred texts</u></p> <table><tr><td>Judaism</td></tr><tr><td>Christianity</td></tr><tr><td>Islam</td></tr><tr><td>Buddhism</td></tr><tr><td>Hinduism</td></tr><tr><td>Sikhism</td></tr></table>	Judaism	Christianity	Islam	Buddhism	Hinduism	Sikhism	<table><tr><td>The Bible</td></tr><tr><td>The Bhagavad Gita</td></tr><tr><td>The Torah</td></tr><tr><td>The Guru Granth Sahib</td></tr><tr><td>The Qur'an</td></tr><tr><td>The Tripitaka</td></tr></table>	The Bible	The Bhagavad Gita	The Torah	The Guru Granth Sahib	The Qur'an
Judaism														
Christianity														
Islam														
Buddhism														
Hinduism														
Sikhism														
The Bible														
The Bhagavad Gita														
The Torah														
The Guru Granth Sahib														
The Qur'an														
The Tripitaka														

Retrieval Practice	
Questions	Answers
What is multi-faith?	People of different races, ethnicities, and nationalities living together in the same community.
Why is respect important?	It can create positive relationships and a sense of belonging.
Why is Britain multicultural?	Many people have moved to live in this country from different parts of the world.
What is a sacred text?	texts that are central to the teachings of almost every given religion.
Name the 6 major world religions.	Christianity, Islam, Hinduism, Judaism, Buddhism, Sikhism.
Why is it important to learn about other religions?	If you don't know anything about religion, then you won't be able to understand literature, or politics, or history, or art. They are all connected in some ways.
What is the biggest religion?	Christianity.
What is a religious leader?	A person who leads, teaches and guides a group of people who share a common faith.
What are values? Do you have any individual values?	The things that are important to us. Your individual values are important to you.
What is the golden rule?	A common belief in all religions to treat one another with respect, as you would like to be treated yourself.

Career Focus - Where could this take you?



We are Police Officers. The RE skills we have developed include tolerance and respect. These are important qualities to allow us to support people of all faiths and develop strong relationships within communities.

Challenge Activities

- Name the religion and the holy book that matches with each the religious leaders - Jesus, Muhammed (PBUH), Guru Nanak, Abraham, Moses, Buddha and Brahman.
- If all the religious life of your community was banned ( e.g., festivals, worship, charitable activity), then how would people feel? What would happen? Write down your ideas.
- If you were elected Mayor, what would you do for the area to promote good relations between different communities? Write out a speech.
- What information can you recall about the sacred texts?
- Write a paragraph about why it is important to learn about other religions.

Topic Links

This topic links to:



- PME
- Geography
- Social justice and influential people
- Religion in the modern day

We will also be practising how to :

- Argue a point and practice Voice 21
- Participate in a debate
- Write in PEE paragraphs

Additional Resources

To further practise and develop your knowledge see:













## 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.)
<b>BUDDHISM</b>	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
<b>HINDUISM</b>	Hindu	 Om/Aum	Brahman (Shiva Vishnu Brahma)	Indus Valley	none	Vedas Bhagavad Gita Mahabharata	Mandir Temple	Holi Diwali		272,000	1 billion
<b>CHRISTIANITY</b>	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
<b>JUDAISM</b>	Jew	 Star of David	G_d	Israel	Abraham	Torah Tenakh	Synagogue	Rosh Hashanah Pesach Yom Kippur	Hasidic Orthodox Reform Liberal	214,000	14 million
<b>SIKHISM</b>	Sikh	 The Khanda	God Waheguru	Punjab, India	Guru Nanak The ten Gurus	Guru Granth Sahib	Gurdwara	Vaisakhi Diwali	Sahajdhari Amritdhari	239,000	23 million
<b>ISLAM</b>	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

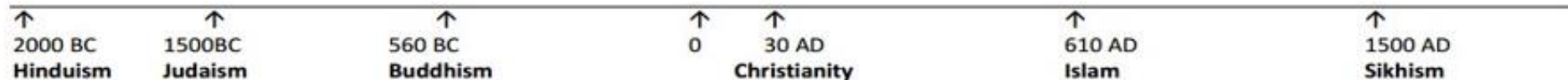
**Atheist** = Someone that doesn't believe in God

**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.



# Year 7 – Bonjour!

- The aims of the sequence of learning are to ensure that all students can:
- meet and greet in French
  - Count to 31
  - Give dates in French

- Spell using the French alphabet
- Understand key phonics sounds.
- Ask and answer simple questions in French.

Keywords - Questions	
French	English
Bonjour! Salut!	Hello! Hi!
Ça va?	How are you?
Comment t'appelles-tu?	What is your name?
Ça s'écrit comment?	How do you spell it?
À plus!	See you later!
Quel âge as-tu?	How old are you?
C'est quelle date aujourd'hui?	What date is it today?
C'est quand ton anniversaire?	When is your birthday/
Qu'est-ce que tu as dans ton sac?	What do you have in your bag?
Tu as une gomme?	Do you have a rubber?
C'est de quelle couleur?	What colour is it?



## Key Concepts- Phonics



vélo



bise



Salut!



Ça va?



portable



araignée



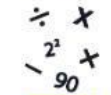
serpent



intelligent



professeur



maths



fenêtre



musique



numéro un



chaud



eau



poisson

<b>A</b> ah	<b>B</b> bay	<b>C</b> say	<b>D</b> day	<b>E</b> ugh!
<b>F</b> eff	<b>G</b> zhey	<b>H</b> ash	<b>I</b> ee	<b>J</b> zhee
<b>K</b> ka	<b>L</b> el	<b>M</b> em	<b>N</b> en	<b>O</b> oh
<b>P</b> pay	<b>Q</b> koo	<b>R</b> err	<b>S</b> ess	<b>T</b> tay
<b>U</b> oo	<b>V</b> vay	<b>W</b> doo bl vay	<b>X</b> iks	<b>Y</b> ee-grec
<b>Z</b> zed				

## Numbers

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

## Months and Days

janvier  
février  
mars  
avril  
mai  
juin



juillet  
août  
septembre  
octobre  
novembre  
décembre

lundi	Monday
mardi	Tuesday
mercredi	Wednesday
jeudi	Thursday
vendredi	Friday
samedi	Saturday
dimanche	Sunday

Months and days **do not** have a **capital letter** in French!

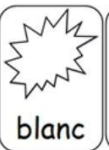
## Colours



rouge



orange



blanc



gris



bleu



violet



jaune



vert



marron



rose



noir



# Year 7 – Bonjour!

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

- meet and greet in French
- Count to 31
- Give dates in French

- Spell using the French alphabet
- Understand key phonics sounds.
- Ask and answer simple questions in French.

## Retrieval Practice



Questions	Answers
Bonjour! Salut!	Bonjour! Salut!
Ça va?	Oui, ça va bien merci. Comme ci comme ça. Non, ça ne vas pas
Comment t'appelles-tu?	Je m'appelle <b>Clara</b> .
Ça s'écrit comment?	<b>Say- el-ah-air-ah</b>
À plus!	À plus / au revoir.
Quel âge as-tu?	J'ai <b>douze</b> ans.
C'est quelle date aujourd'hui?	Aujourd'hui c'est <b>lundi</b> le <b>six octobre</b> .
C'est quand ton anniversaire?	Mon anniversaire c'est le <b>dix janvier</b> .
Qu'est-ce que tu as dans ton sac?	J'ai <b>un stylo</b> et <b>deux crayons</b> .
Tu as <b>une gomme</b> ?	Non, je n'ai pas de <b>gomme</b> .
C'est de quelle couleur?	C'est <b>bleu</b> !

## Career Focus - Where could this take you?



I am a primary school teacher. We teach languages in KS2, so it is very important that I can speak a Language. It doesn't matter which language I speak because learning a language when children are young helps to develop their cognitive skills. This helps to develop their brain and can improve their memory.

## 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 French person. Make a fact file. What do they do? Where do they live? Why are they famous?

## Topic Links



This topic links to other French topics such as

- Introducing yourself and your family

This topic also links to :

- Numeracy
- Geography
- Literacy

## Additional Resources



SentenceBuilders – [Sentencebuilders.com](https://www.sentencebuilders.com)

Active Learn - [www.pearsonactivelearn.com](https://www.pearsonactivelearn.com)

You will be given your username and password by your teacher.



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

- Can give their name age and birthday.
- Can say how many brothers and sisters they have.
- Can describe their pets.

• Can say what they like and dislike using cognates.

- Can describe their personality.
- Can conjugate 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> person singular of key verbs eg avoir and être.

Key Questions 	Meaning
Comment ça va?	How are you?
Comment t'appelles-tu?	What is your name?
Ça s'écrit comment?	How do you spell it?
Quel âge as-tu?	How old are you?
C'est quand ton anniversaire?	What date is your birthday?
Tu as des frères et sœurs?	Do you have any brothers or sisters?
Tu as un animal?	Do you have a pet?
Qu'est-ce qu'il y a dans ta salle de classe?	What is there in your classroom?
Tu aimes <b>le foot</b> ?	Do you like football?
Tu es comment?	What are you like?
Qu'est-ce que tu fais?	What do you do?

## Key Concepts – Vocabulary

Un chat 	Un lapin 	Un perroquet 	Une souris 
Un chien 	Un poisson 	Un cochon d'inde 	Une tortue 
Un serpent 	Un hamster 	Une araignée 	Un oiseau 

## Phonics

 qu		
quatre 4	musique 	équipe 

 ai		 in	
vrai ✓	maison 	lapin 	vingt 20

## Grammar – Key verbs

### être (to be)

j' <b>suis</b>	I am
tu <b>es</b>	you are
il/elle <b>est</b>	he/she is

**aimer** (to like) is a regular **-er** verb.

j' <b>aime</b>	I like
tu <b>aimes</b>	you like
il/elle <b>aime</b>	he/she likes

### avoir (to have)

j' <b>ai</b>	I have
tu <b>as</b>	you have
il/elle <b>a</b>	he/she has

**J'ai** deux frères. I **have** two brothers.

You also use **avoir** with age.

Quel âge **as-tu**? How old are you?

**J'ai** onze ans. I am 11 years old.

To make it negative, use **ne ... pas** to make a 'sandwich' around the verb.

Je **ne suis pas** très grand(e).  
I am not very tall.

<b>assez</b>	quite	<b>trop</b>	too
<b>très</b>	very	<b>un peu</b>	a bit

## Adjectives

Most adjectives change their ending to 'agree' with the noun.

masculine	feminine
amusant	amusant <b>e</b>
arrogant	arrogant <b>e</b>
bavard	bavard <b>e</b>
fort	fort <b>e</b>
grand	grand <b>e</b>
intelligent	intelligent <b>e</b>
méchant	méchant <b>e</b>
patient	patient <b>e</b>
petit	petit <b>e</b>
timide*	timide





- Can give their name age and birthday.
- Can say how many brothers and sisters they have.
- Can describe their pets.

- Can describe their personality.
- Can conjugate 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> person singular of key verbs eg avoir and être.

## Retrieval Practice



Questions	Answers
Comment ça va?	Ça va bien merci et toi?
Comment t'appelles-tu?	Je m'appelle <b>Sarah</b> .
Ça s'écrit comment?	Ça s'écrit <b>ess- ah – air – ah – ash</b> .
Quel âge as-tu?	J'ai <b>onze</b> ans.
C'est quand ton anniversaire?	Mon anniversaire c'est le <b>douze novembre</b> .
Tu as des frères et sœurs?	J'ai <b>deux</b> frères et <b>une</b> sœur.
Tu as un animal?	Oui, j'ai un chat et un chien.
Qu'est-ce qu'il y a dans ta salle de classe?	Dans ma salle de class il y a <b>des chaises</b> et <b>des tables</b> . Il y a aussi <b>un tableau interactif</b> .
Tu aimes <b>le foot</b> ?	<b>Oui, j'aime</b> le foot mais je n'aime pas <b>la gymnastique</b> .
Tu est comment?	Je suis <b>assez grand</b> et <b>intelligent</b> .
Qu'est-ce que tu fais?	J'aime <b>jouer</b> et <b>tchatter en ligne</b> .

## Career Focus - Where could this take you?



I am a marketing officer. I create ideas to advertise products and services.  
I use languages to communicate with customers overseas and I do research to see what sells abroad.

## Challenge Activities



1. Create a poster all about you. Add as much detail as you can
2. Record a short paragraph about yourself.
3. Make a calendar with the French months and add your birthday and other important dates.
4. Make a fact file about France or a French – speaking country,

## Topic Links



This topic links to:

- Bienvenue
- Hobbies
- Family and friends

## Additional Resources



To further practise and develop your knowledge see:

- Active Learn
  - Sentence builders.com
- Your teacher can remind you of your login.

Year 7 French – Essential Grammar and Vocabulary

Greetings

Bonjour - Good morning  
Salut - hello  
Bonsoir - good evening

Au revoir - Goodbye  
À plus - See you later

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

Je m'appelle - I am called

Pleasantries

(Comment) ça va? How are you ?

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

ça va - ok  
ça va mal - Bad



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

Key verbs - avoir

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

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

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

\_\_\_\_\_ ans - \_\_\_\_\_ years old

une sœur- a sister  
un frère- a brother  
une demi-sœur- a stepsister / half-sister  
un demi-frère - a stepbrother / half-brother  
trois sœurs - three sisters



4. Tu es comment? What are you like ?

Key verbs être

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

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

Je ne suis pas - I'm not

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

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



3. Qu'est-ce que tu aimes ?

Key verbs - opinions

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

J'adore - I love  
Je déteste - I hate

Il /elle aime - he/she likes

le sport - sport  
le collège - school

la danse - dance  
la musique - music

les araignées - spiders  
les glaces - ice creams



C'est - it's ...  
sympa - nice  
cool  
moderne

nul - rubbish  
triste - sad  
démodé - old-fashioned

Let's show off!

J'aimerais avoir - I'd like to have  
Je pense que - I think that  
A mon avis - In my opinion  
Personnellement - personally



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

Describing a photo

Il y a -  
There is/are

un tableau - a board  
un ordinateur - a computer

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

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

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

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

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

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

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

NO capital letters for months in French!



WAGOLL

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

Bonjour, je m'appelle Marc Hello. My name is Marc

et j'ai onze ans. and I am 11 years old.

Mon anniversaire est le quatre mai. Also, my birthday is the 4<sup>th</sup> of May.

Je suis très sympa I am very nice

et assez intelligent and quite clever

mais je ne suis pas patient. but I'm not patient.

J'ai une sœur I have a sister

mais elle est méchante. but she is naughty.

J'aimerais avoir un frère! I would like to have a brother!

J'adore la danse I love dance

parce que c'est amusant because it's fun

Tu aimes le sport? Do you like sport?

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



# Computing

Our students will:

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



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

- Demonstrate knowledge of cyberbullying by describing how to deal with it
- Demonstrate knowledge of online safety and respectful communication by describing how to deal with risky scenarios, dangers of technology and how to behave online

- Demonstrate knowledge of digital data by describing the threats, how it can be used and consequences of not following laws
- Apply knowledge from this unit to accurately describe some keywords

Keyword	Definition
E-Safety	The safe and responsible use of technology
Cyber bullying	The use of electronic communication to bully a person, typically by sending messages of an intimidating or threatening nature
Password	A combination of characters that allows access to a computer system or service
Smart Devices	An electronic gadget that is able to connect, share and interact with its user and other smart devices
Hacking	The gaining of unauthorised access to data in a system or computer system
Social Engineering	Content that tricks you into revealing your personal information e.g. log in details or credit card details
Malware	A program or software that is specifically designed to disrupt, damage, or gain unauthorised access to a computer system
Big Data	The collection, storage and analysis of large and complex digital data to find trends or patterns to help companies make a decision
Computer Legislation	Laws required to put people off from using computers to commit unlawful activities
Deepfake	“Deepfake” are computer-generated clips that are designed to look or sound very realistic
Netiquette	“Netiquette” are rules and ways for interacting with others on the internet, in a considerate and respectful way.

## Key Concepts



## HOW TO SPOT FAKE NEWS

**CONSIDER THE SOURCE**  
Click away from the story to investigate the site, its mission and its contact info.

**READ BEYOND**  
Headlines can be outrageous in an effort to get clicks. What's the whole story?

**CHECK THE AUTHOR**  
Do a quick search on the author. Are they credible? Are they real?

**SUPPORTING SOURCES?**  
Click on those links. Determine if the info given actually supports the story.

**CHECK THE DATE**  
Reposting old news stories doesn't mean they're relevant to current events.

**IS IT A JOKE?**  
If it is too outlandish, it might be satire. Research the site and author to be sure.

**CHECK YOUR BIASES**  
Consider if your own beliefs could affect your judgement.

**ASK THE EXPERTS**  
Ask a librarian, or consult a fact-checking site.





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

- Demonstrate knowledge of cyberbullying by describing how to deal with it
- Demonstrate knowledge of online safety and respectful communication by describing how to deal with risky scenarios, dangers of technology and how to behave online

- Demonstrate knowledge of digital data by describing the threats, how it can be used and consequences of not following laws
- Apply knowledge from this unit to accurately describe some keywords



## Retrieval Practice

Questions	Answers
What does the term 'Cyberbullying' mean?	The use of electronic communication to bully a person, typically by sending messages of an intimidating or threatening nature.
Why should you not post your real name online?	It becomes possible to find out some personal details about you, such as, your home address, age and telephone number.
Describe at least three different way you can protect yourself from Malware?	<ul style="list-style-type: none"> <li>• Install antivirus software with 'active scanning'</li> <li>• Always update software to reduce risks of threats</li> <li>• Use strong passwords – chose different passwords</li> </ul>
What are the dangers of using free public Wi-Fi?	As you are connecting to an unsecure internet connection, your computer will be easier to hack. Hackers can access every piece of information your sending out on the internet and also access the files on that computer
What would you do if you clicked on a link that loaded up a website with unsuitable and inappropriate content.	Switch my monitor off and tell my parent or carer – they help you to block the website to stop it from loading up again.
What advice would you give to somebody to stay safe when playing online games?	Disable the chat feature, if that's not possible, only play and talk to people you know in real life and play where your parents can hear the conversations.
What are the dangers of using technology in our everyday life?	It can result in a lack of privacy, increased chances of your devices being hacked and an over-reliance of technology making it difficult to do things that have become automated or not required to do manually.
Give two examples of common of social engineering attacks and briefly explain each one	<ul style="list-style-type: none"> <li>• Email – look like they are from a real company but the email domain is slightly different e.g. pretending to be from a bank</li> <li>• Clicking on ads to which seem too good to be true – will download malware instead which causes damage</li> </ul>
Give some examples of how companies like Google and Facebook track us online	Save every piece of personal data to create a personal profile of every user – to target you with ads and sell your profiles to third parties for ads. Google and Facebook own lots of apps which also track everything you do and add to your profile

## Career Focus - Where could this take you?



I am a **cyber security engineer** and it is my job to identify any threats or vulnerabilities in systems or software. I have to be confident in trouble shooting problems and testing systems.

## Challenge Activities



1. Create a poster on MS PowerPoint that includes the following details: definition of cyberbullying, advice on what you should do if somebody was being cyberbullied and what you think we can do in the future to help stop cyberbullying in our school.
2. Do you agree or disagree with the following statement? You must back up your answer with reasons and examples. "People under the age of 14 should not be allowed to use the internet without adult supervision".
3. Create a short vlog about which new technologies you think could create safety issues for children in the future? Give advice on how you could tackle these problems.

## Topic Links



This topic links to:

- Computing Curriculum: Understand a range of ways to use technology safely, respectfully, responsibly and securely
- English and RSE (being a responsible citizen and using language appropriately)

## Additional Resources



To further practise and develop your knowledge see:

- [www.childline.org.uk](http://www.childline.org.uk)
- [www.thinkuknow.co.uk](http://www.thinkuknow.co.uk)
- [stopcyberbullying.org](http://stopcyberbullying.org)



Our students will:

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



- The aims of the sequence of learning are to ensure that all students:
- Understand what the 7 Formal Elements of Art are.
  - Learn how to use each of the formal elements in their work.
  - Learn how to draw from observation of a primary resource.

- Learn how to present research pages that include facts/images/and an example of working in the style of an artist.
- Learn how to produce a personal response in the style of the artist being studied.

Keyword	Definition
Formal elements	The parts used to make a piece of art work.
Line	The path made by a moving point. For example a brush dipped in paint. A line can take many forms.
Tone	The lightness or darkness of something. By adding tone to line drawings the illusion of form is created.
Colour	This is what we see when light strikes a surface and is reflected back to the eye.
Texture	The way something feels to the touch.
Shape	Created by a line that starts and finishes at the same point. Shapes are flat (height and width) and can be geometric or organic.
Pattern	A repeated, decorative design.
Form	A 3-dimensional object that has height, width and depth.
Composition	The placement of different elements in a piece of artwork (what goes where).
Primary colours	Colours that can not be made by mixing other colours together.
Secondary colours	Created when equal amounts of 2 primary colours are mixed together.
Complimentary colours	Colours found opposite each other on the colour wheel.
Cool colours	Colours that remind you of water. They are calming and will recede in a piece of artwork. Blue/green/purple.
Warm colours	Colours that remind you of fire. They have energy and will stand out in a piece of artwork. Red/yellow/orange.

## Key Concepts

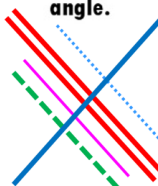
**Vertical lines go up and down.**



**Horizontal lines run left to right across the page.**



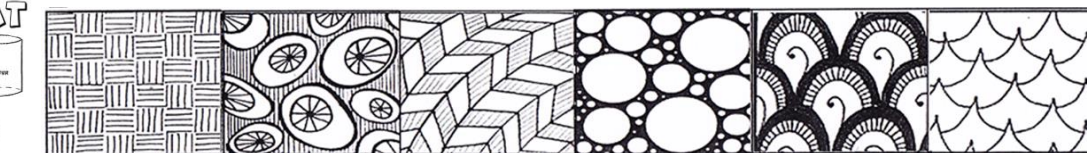
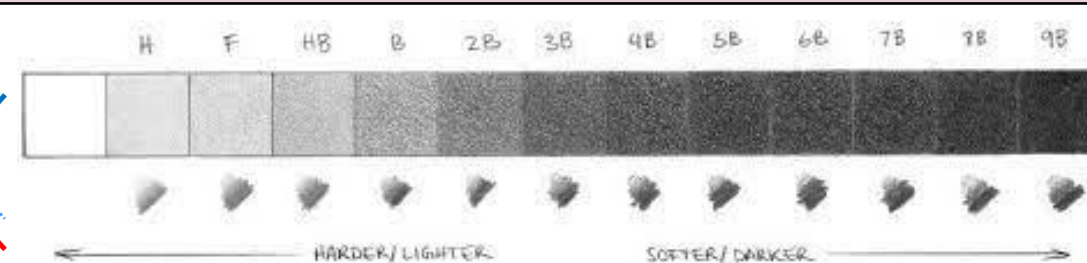
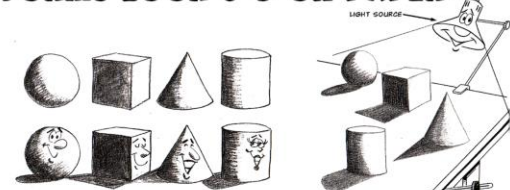
**Diagonal lines are set at an angle.**



Shapes are Flat **FORMS ARE FAT**



**ARTISTS USE SHADING TO MAKE FORMS LOOK 3-D ON PAPER.**



## Visual Texture

Visual texture is the way an object looks as it would feel if it could be touched.

Examples:

Rough



Rocky



Soft



Wet



Sandy



Furry/Hairy



Bumpy



Fluffy



Slick



Woven



Prickly



Scaly



Pointy



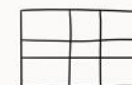
Flaky



## A BEGINNERS GUIDE TO COMPOSITION



Rule of Thirds



Golden Section



Golden Triangles



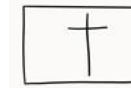
Spiral Section



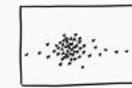
Golden Spiral



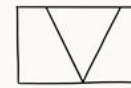
Harmonious Triangles



Cross



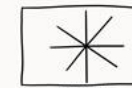
Focal Mass



V-Arrangement



Diagonal



Radial



L-Arrangement



Compound Curve












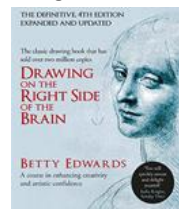
Pyramid



Circular



Retrieval Practice 	
Questions	Answers
Does a piece of artwork use all of the formal elements?	A piece of artwork can use all of the formal elements, however some artwork may include only some for example Mondrian is well known for his use of line, shape and primary colours. There may be an emphasis on only 1 of the elements, for example Bridget Riley's work focuses on the use of patterns that are created to confuse the eye.
How can you easily remember complimentary colour pairings?	  
Why is observational drawing from primary resources so important?	It trains you to focus on the subtle changes in line and shape. It develops your fine motor skills and spatial awareness. This skills are transferable to other subject areas.

Career Focus - Where could this take you? 	
 <div> <p>My job is an <b>illustrator</b>. I produce still drawings for use in advertisements, books, magazines, packaging, greetings cards and newspapers. I combine hand-drawing and painting with digital media to create complete illustrations. Refining designs with illustration software.</p> </div>	
Challenge Activities 	
<p>Try some of these drawing exercises at home.</p> <p><a href="https://www.youtube.com/watch?v=COTs2FB_SWo">Continuous line contour drawing</a> <a href="https://www.youtube.com/watch?v=COTs2FB_SWo">https://www.youtube.com/watch?v=COTs2FB_SWo</a></p> <p><a href="https://www.youtube.com/watch?v=Gaq4QqEds0k">Upside down drawing</a> <a href="https://www.youtube.com/watch?v=Gaq4QqEds0k">https://www.youtube.com/watch?v=Gaq4QqEds0k</a></p> <p><a href="https://www.youtube.com/watch?v=jXDIFozKSHo">Negative space drawing</a> <a href="https://www.youtube.com/watch?v=jXDIFozKSHo">https://www.youtube.com/watch?v=jXDIFozKSHo</a></p> <p>Draw an animal of your choice in the style of Heather Galler.</p>	
Topic Links 	Additional Resources 
<p>This topic links to:</p> <ul style="list-style-type: none"> <li>• Design Technology – drawing skills including rendering to show different materials.</li> <li>• Mathematics – geometric shapes, rules, measurements.</li> </ul>	<p>To further practise and develop your knowledge see:</p> <p><b>Drawing on the Right Side of the Brain</b> by Betty Edwards</p> 





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

- Demonstrate safe use of tools and equipment.
- Rank Fibres in order of environmental impact.

Justify the importance of sustainability within Textile manufacture.

- Demonstrate a clear understanding of the manufacturing Process
- Create a range of design ideas using several methods of communication to explain your ideas.

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

## Key Concepts



## Health and Safety

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



## Sewing Machines

There are several ways to decorate textiles, each method has a different process, and they create a unique appearance on the fabric. Embroidery, applique, ribbon applique, and printing.



## Properties Of Fibres Natural - Plant

**Linen:**

- Fresh, cool to wear
- Very absorbent, fast dries
- Stiffer handle
- Good drape
- Durable
- Creases badly
- Wash and iron

**Applications**  
Summer clothing, table cloths etc

**Cotton:**

- Very absorbent
- Dries slowly
- Cool to wear
- Soft handle
- Good drape
- Durable
- Creases easily
- Wash and iron

**Applications**  
Jeans, Towels, T-shirts

# NATURAL FIBRES

WOOL



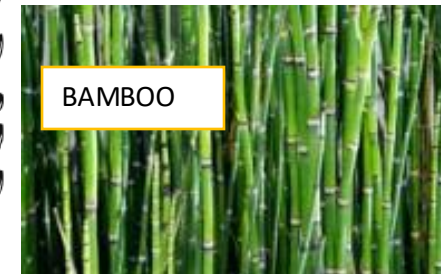
COTTON



SILK



BAMBOO





- The aims of the sequence of learning are to ensure that all students:
- Demonstrate safe use of tools and equipment.
  - Rank fibres in order of environmental impact.

- Justify the importance of sustainability within Textile manufacture.
- Demonstrate a clear understanding of the manufacturing Process
- Create a range of design ideas using several methods of communication to explain your ideas.

## Retrieval Practice



Questions	A1	A2	A3	A4	A5
A. How is cotton produced?	From a plant	From a factory	From Coal & oil	From Aldi	From a tree
B. Where does Silk come from?	A rabbit	A moth	A butterfly	A worm	A cow
C. What is a design Specification?	A list of design solutions	A list of costings	A list of design issues	A list of important points	A detailed list of what the product must be
D. What are Fibres?	A thin thread of a natural or synthetic substance	A source of material	An origin of cotton	A type of synthetic fibre	A fraying edge
E. What are decorative techniques?	A type of folding	A type of sewing technique	A method of adding pattern and texture to fabric.	A type of printing	A type of fabric testing
F. What physical properties do fabrics have? (select more than 1)	Stretchy	Soft handle	Creases easily	Stiff	Strong
Which questions did you get wrong?	Quick Corrections (bridge learning gaps & misconceptions)				

## Career Focus - Where could this take you?



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

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

You will need a foundation diploma in Art & Design or A level equivalent, Kirklees College offer a Level 1-3 in Art and Design and Leeds City College offer a Level 3 diploma in Fashion and Textiles, you will need 4 GCSE grades 4 and above including maths and English.

Salaries usually range from around £13,000 to £40,000 a year.

## Challenge Activities



Properties

\_\_\_\_\_

\_\_\_\_\_

Suggested Fibre Type

\_\_\_\_\_

\_\_\_\_\_

Product Type

\_\_\_\_\_

\_\_\_\_\_



Properties

\_\_\_\_\_

\_\_\_\_\_

Suggested Fibre Type

\_\_\_\_\_

\_\_\_\_\_

Product Type

\_\_\_\_\_

\_\_\_\_\_

## Topic Links



This topic links to:

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

## Additional Resources



To further practise and develop your knowledge see:

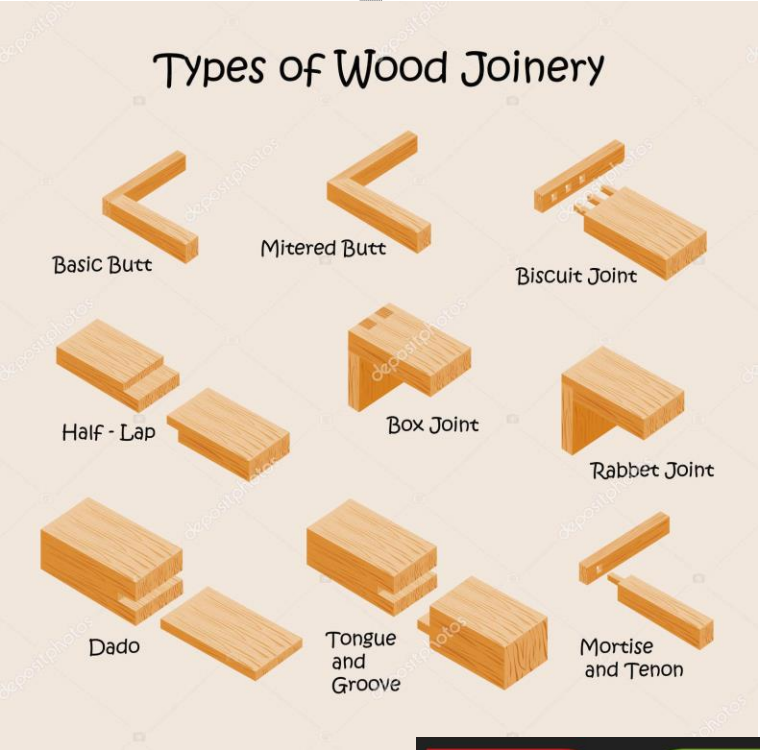
- [The ONLY textiles recycling video YOU NEED TO WATCH – YouTube](#)
- [How to Tie-Dye at Home Like a Pro - Try These 5 Easy Techniques! – YouTube](#)
- [Classification Of Textile Fibers - Sources Of Textile Fibre – YouTube](#)
- [Fairtrade - How Cotton Is Produced - YouTube](#)




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

## Key Concepts

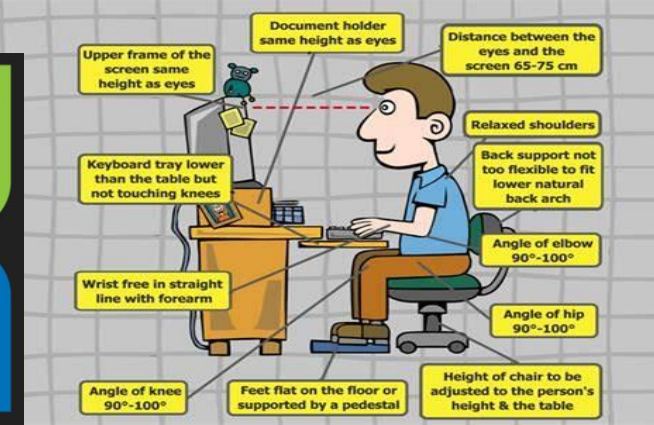
### Product Analysis





### Material Types



### Ergonomics









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

- Demonstrate safe use of tools and equipment.
- Explain a range of wood joints and their function.
- Plan a sequences of making identifying tools and materials.

- Demonstrate an understanding of the users wants and needs.

## Retrieval Practice



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

## Career Focus - Where could this take you?



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

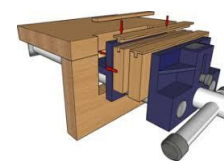
Kirklees college offer an Onsite Construction: Carpentry and Joinery Level 3 you will need 5 GCSE grades 4 or above must include Maths and English.

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

## Challenge Activities



Can you name the selection of Equipment and Explain how it is used?



## Topic Links



This topic links to:

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

## Additional Resources



To further practise and develop your knowledge see:

<https://youtu.be/zfk7TLobsv0>

<https://youtu.be/7LBv2UWOI4Y>

<https://youtu.be/7s-13XOobTM>





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

- Demonstrate safe and hygienic working practices
- Demonstrate knowledge of the Eatwell Plate through practical tasks, discussion and written tasks

- Identify the key differences between food manufacturing and processing

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

## Key Concepts

### The 4Cs Concept

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



Clean



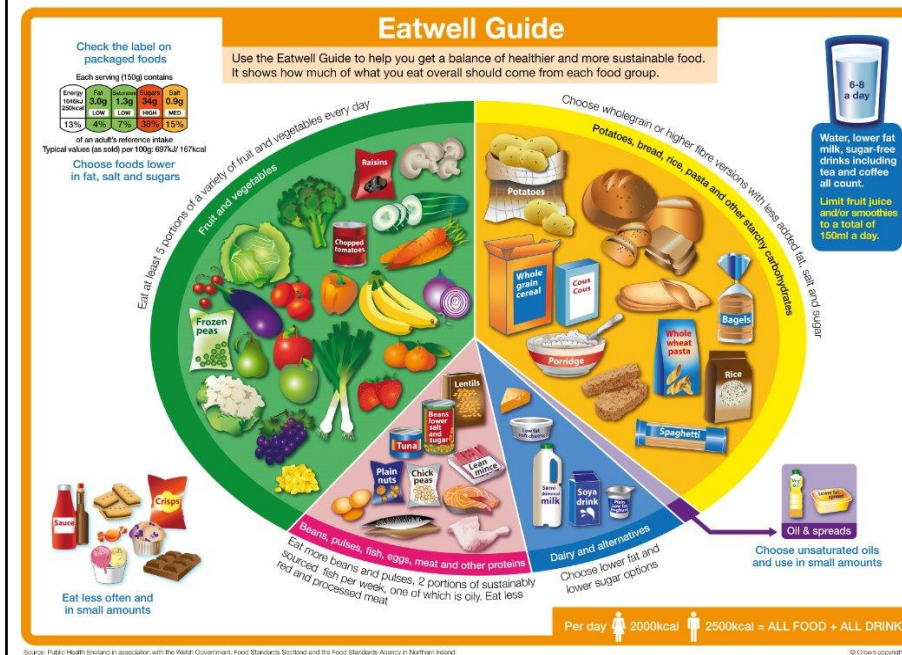
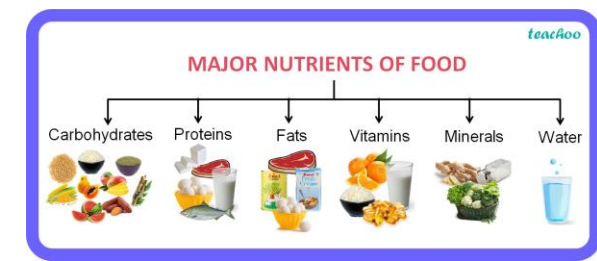
Chill



Cook



Separation



# Ingredients Lists - Rotation 1 Year 7

## 1. FRUIT SALAD

- ☐ 1 x small orange
- ☐ 12 grapes
- ☐ 1 x kiwi fruit
- ☐ 1 banana
- ☐ 1 apple
- ☐ 1 lemon or lime
- ☐ 1 small carton of orange juice or pineapple juice

We will be chopping ingredients in lesson

## 2. PASTA SALAD

- ☐ 100g dried pasta shapes
- ☐ 50g grated cheese
- ☐ 5 cherry tomatoes
- ☐ ¼ cucumber
- ☐ 25g sweetcorn (drained - frozen is fine)
- ☐ 2 spring onions
- ☐ 3 lettuce leaves
- ☐ ½ pepper

**School will provide mayonnaise and salad cream**

We will be chopping ingredients in lesson

## 3. CHOCOLATE CHIP COOKIES

- ☐ 75g margarine
- ☐ 75g brown sugar
- ☐ 150g self-raising flour
- ☐ 100g chocolate chips

**School will provide vanilla essence and egg**

If possible, please measure out ingredients at home

**PLEASE ALWAYS BRING IN A SUITABLE CONTAINER TO TAKE YOUR COOKING HOME**





- 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

## Fruit salad



### Method:

1. Peel the clementine and separate into segments.
2. Cut the grapes in half and remove any seeds.
3. Peel the kiwi fruit and slice.
4. Peel the banana and slice carefully.
5. Quarter the apple, remove the core and slice.
6. Place all the fruit in a bowl.
7. Add the orange juice and mix together.



### Equipment

- Vegetable knife
- Chopping board
- Bowl
- Measuring spoons
- Spoon

### Ingredients

- 1 clementine / orange
- 6 red grapes
- 6 green grapes
- 1 kiwi fruit
- 1 banana
- 1 apple
- 2 x 15ml spoons orange juice

\*\*\*\* Sealed container with a lid  
\*\*\*\*

Note: You can use any fruit you prefer: blueberries, raspberries etc.

Skills:	Meaning
1.	<b>General Practical Skills:</b> Weighing ingredients, measuring, preparing ingredients and equipment, correct cooking times, testing for readiness and sensory testing.
2.	<b>Knife skills:</b> Can use equipment safely. Slicing, dicing and chopping
3.	<b>Preparing fruit and vegetables:</b> I can prepare fruit and vegetables in many different ways: Slicing, peeling, grating, dicing and chopping.
7.	<b>Preparing, combine and shape:</b> Techniques to prepare, cook and combine different ingredients.

### Career Focus - Where could this take you?



My job is **food technologist** and I study foods and their nutritional content. I use laboratory skills and techniques to identify nutrients and calorie content of foods.

### Challenge Activities

Try some of these recipes at home

Follow the links

[Energy Bar](#)

[Home made burgers](#)

[Chapati recipe](#)

[For Further 30 minute recipes](#)

Food skills are acquired, developed and secured over time

**Bridge hold**

**Claw grip**





- 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

## Pasta Salad



### Equipment:

Sauce pan  
Chopping board  
Vegetable knife  
Colander  
Wooden spoon  
Mixing bowl  
Table spoon

### Ingredients:

- 50g grated cheese
- 100g dried pasta shapes
- 2tbsp. Mayonnaise or salad cream
- 5 cherry tomatoes
- ¼ cucumber
- 25g sweetcorn
- 2 spring onions
- 3 lettuce leaves
- ½ red or green pepper.

### Method:

1. Bring a small saucepan of water to the boil, and then add the pasta. Simmer for about 8 – 10 minutes (check the packet instructions).
2. While the pasta is cooking, prepare the other ingredients:
  - shred the lettuce;
  - slice the spring onions, tomato and pepper, or if you have cherry tomatoes cut in half;
  - chop the cucumber into small chunks;
3. Drain the boiling hot water away from the pasta into a colander in the sink. Cool the pasta by rising it under a cold tap for a few moments. Drain well.
4. Place the pasta in the serving dish and stir in 1 x 15ml spoon of dressing:
  - Add sweetcorn into the pasta and mix evenly.
5. Assemble the remaining ingredients over the pasta in layers.
6. Lastly, drizzle over the remaining dressing.

### Skills:

### Meanings

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.
8. **Sauce Making including:** starch based, reduction and emulsions

## KITCHEN CONVERSIONS

### SPOONS & CUPS

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



TABLESPOON  
15 ML



DESSERTSPOON  
10 ML



TEASPOON  
5 ML

### MILLILITERS

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



FLOUR 32g  
SUGAR 50g  
BUTTER 55g



FLOUR 64g  
SUGAR 100g  
BUTTER 112g



FLOUR 125g  
SUGAR 200g  
BUTTER 225g

### GRAMS

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





## Chocolate Chip Cookies



### Method:

- Set oven at Gas 4 / 180°C.
- Grease a baking tray.
- Wash hands and put on apron.
- Collect a mixing bowl.
- Place margarine and sugar in bowl and cream with a white spoon.
- Add vanilla essence and chocolate chips.
- Add flour – mix with wooden spoon.
- Gradually add egg.
- Pull together and shape.
- Bake for 10 minutes.

### Equipment

- Large mixing bowl
- Rolling pin
- Table knife
- Measuring jug
- Wooden spoon
- Round bladed knife

### Dough ingredients

- 75g margarine
- 75g brown sugar
- Half an egg
- 2 drops of vanilla essence
- 150g self-raising flour
- 100g chocolate chips

**\*\* Bring container with a lid \*\*\***

**Tip:** Can use different chocolate chips, nuts or add coco.

Skills:	Meaning
1.	<b>General Practical Skills:</b> Weighing ingredients, measuring, preparing ingredients and equipment, correct cooking times, testing for readiness and sensory testing.
4.	<b>Use of the cooker (and Skills 6: Cooking Methods):</b> Using the cooker including: the hob, grill and oven.
6.	<b>Cooking Methods:</b> Using the cooker including: the hob, grill and oven.
7.	<b>Preparing, combine and shape:</b> Techniques to prepare, cook and combine different ingredients.
10.	<b>Dough:</b> Making dough including: bread, pastry and pasta.
11.	<b>Raising Agents:</b> Use of raising agents including: eggs, chemical, steam and biological.

## KITCHEN CONVERSIONS

### SPOONS & CUPS

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



TABLESPOON  
15 ML



DESSERTSPOON  
10 ML



TEASPOON  
5 ML

### MILLILITERS

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

### GRAMS

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



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



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









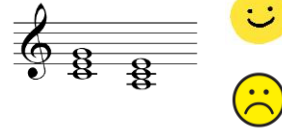

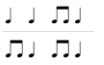
1 CUP  
FLOUR 125g  
SUGAR 200g  
BUTTER 225g



# Year 7 - Minimalism

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

- show development of appropriate musical vocabulary through the MAD TSHIRT mnemonic (keywords).
- identify musical features of Minimalist music, applying appropriate musical vocabulary correctly.
- compose an authentic, Minimalist composition, using appropriate instrumental technique.

Keyword(s)	Definition
<b>Melody</b> 	The main layer or tune of a piece
<b>Articulation</b> 	The way the notes are played – long and smooth or short and detached <b>Legato</b> – Long and smooth <b>Staccato</b> – Short and choppy. 
<b>Dynamics</b> 	How loud or quiet the sound is
<b>Texture</b> 	The <b>layers</b> that make up a piece <ul style="list-style-type: none"><li>• <b>Monophonic</b> – Single layer on its own.</li><li>• <b>Homophonic</b> – One melody with accompaniment.</li><li>• <b>Polyphonic</b> – More than one melody at the same time.</li></ul>
<b>Structure</b> 	The way the music is put together in sections. <b>E.g. – Beginning, Middle and End.</b>
<b>Harmony and Tonality</b> 	<b>Harmony:</b> The <b>chords and scales</b> that accompany the melody. <b>Diatonic Harmony</b> – Chords and scales that blend well together. <b>Dissonant Harmony</b> – Chords and scales that clash with each other. <b>Tonality</b> – Whether the music is in a <b>Major</b> ☺ or <b>Minor</b> ☹ Key.
<b>Instrumentation/Performance Forces</b>	The <b>instruments</b> or <b>voices</b> used to perform a piece.
<b>Rhythm</b> 	The <b>note values</b> used
<b>Tempo</b> 	The <b>speed</b> of the beat

## Key Concepts - Minimalism

### Minimalism

A style/form of music that uses very few (and simple) musical materials.



### Ostinato

A repeating pattern in *classical* music,

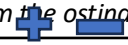


### Melody

The melodies are made up of ostinato patterns.

Melodies are *developed* by:

**Adding or deleting notes from the ostinato patterns.**



### Articulation

Minimalism pieces use both legato (long and smooth) and staccato (short and choppy) articulation.

### Dynamics

Minimalist pieces commonly use different dynamics.

You will often hear:

- Gradual increase in volume (*crescendo*)
- Gradual decrease in volume (*diminuendo*)



### Structure

Minimalist pieces do not really have a clear structure (a clear beginning, middle and end). They tend to be quite long and **gradually** build in texture before **gradually** ending.

### Texture

The texture (layers) in minimalist music *gradually* builds up. It often begins with a **monophonic** (single layer) texture and becomes **polyphonic** (more than one melody at the same time).

### Harmony

Minimalist music usually has **diatonic** harmony.



### Instrumentation/Performance

#### Forces

When listening to minimalist pieces you will notice that they only use a few different instruments in the performance.

### Rhythm

Minimalist music uses lots of repetitive rhythms. Minimalism also uses syncopation (offbeat rhythms).



### Tempo

Minimalist pieces use a variety of **different** tempos. Always listen carefully to work out whether it is using a slow, moderate or fast tempo.



- show development of appropriate musical vocabulary through the MAD TSHIRT mnemonic (keywords).
- identify musical features of Minimalist music, applying appropriate musical vocabulary correctly.
- compose an authentic, Minimalist composition, using appropriate instrumental technique.

## Retrieval Practice

Firstly, make sure you have **memorised** the definitions for all the keywords we use in music:

*Melody / Articulation / Dynamics / Texture / Structure / Harmony / Instrumentation and Forces / Rhythm / Tempo.*

Using your knowledge organiser you must:

- Look, cover and check.
- Have somebody else test you.
- Make flash cards to test yourself.

Questions	Answers
What are <b>minimalist</b> melodies made up of?	Ostinato patterns. The patterns are <b>adapted</b> by <i>adding</i> or <i>deleting</i> notes as the piece of music progresses.
What type of <b>articulation</b> does minimalism use?	Minimalism uses <b>legato</b> and <b>staccato</b> articulation.
What type of <b>dynamics</b> does minimalism use?	Minimalist pieces commonly use different dynamics. You will often hear: <ul style="list-style-type: none"> <li>• Gradual increase in volume (<i>crescendo</i>)</li> <li>• Gradual decrease in volume (<i>diminuendo</i>)</li> </ul>
What type of <b>texture</b> does minimalist music use?	The texture (layers) in minimalist music <i>gradually</i> builds up. It often begins with a <b>monophonic</b> (single layer) texture and becomes <b>polyphonic</b> (more than one melody at the same time).
Describe the <b>structure</b> of minimalist music.	Minimalist pieces do not really have a clear structure (a clear beginning, middle and end). They tend to be quite long and <b>gradually</b> build in texture before <b>gradually</b> ending.
Describe the <b>harmony</b> if minimalist music.	Minimalist music usually has <b>diatonic</b> harmony
Describe the use of <b>instrumentation</b> in minimalist music.	Minimalist pieces only use a few different instruments in the performance.
Describe the use of <b>rhythm</b> in minimalist music	Minimalist music uses lots of repetitive rhythms. Minimalism also uses syncopation (offbeat rhythms).
Describe the use of <b>tempo</b> in minimalist music.	Minimalist pieces use a variety of <i>different</i> tempos. Always listen carefully to work out whether it is using a slow, moderate or fast tempo.

## Career Focus - Where could this take you?



I am Philip Glass and I am a composer of Minimalist music. During my career I have worked as a film composer, writing minimalist music for films.

## Challenge Activities



- When developing your minimalist composition can you adapt your ostinato pattern even more? Try:

> **Octave Displacement** or **Rhythmic Augmentation** – These are more advanced techniques and you'll need to ask your teacher how to do them! (They are not included on the knowledge organiser!)

## Topic Links



**Maths** – The development of the ostinato patterns introduces mathematical procedures.

**History** – Minimalism was developed in the 1960s. One performance in the 1960s at the Carnegie Hall even caused a riot! The people listening had never heard anything like it... and they did not like it!

## Additional Resources



Develop your knowledge and understanding further with these resources:

- 1) [BBC KS3 Music – Minimalism](#)
- 2) [GCSE Bitesize - Minimalism](#)





- The aims of the sequence of learning are to ensure that all students:
- Can identify core skills and processes
  - Can demonstrate core skills in isolation

- Can demonstrate core skills in a competitive game

Keyword	Definition
<b>Pass</b>	To keep possession of the ball by maneuvering it between different players with the objective of advancing it up the playing field.
<b>Catch</b>	To receive the ball from another player and keep possession.
<b>Defend</b>	To resist the attack of the opposing team.
<b>Attack</b>	The action of attacking or engaging an opposing team with the objective of scoring points or goals.
<b>Tackle</b>	Trying to take the ball from an opponent.
<b>Intercept</b>	To obstruct someone/something from getting to their desired position/destination.

## Key Concepts

### Defending

#### 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**).



#### Balance

Defenders need to move into an appropriate **formation** in relation to where the ball is.



### Attacking

#### 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.



#### Improvisation

Players need to become **creative** to get past an organised defence e.g. one-tuos, fake passes, outwit defenders with the ball



### You should already know:

- The aim of an invasion game
- The name of at least 2 invasion games

### You will be assessed on:

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

### Athletes to research further:

Harry Kane



LeBron James



Helen Housby



Lewis Ludlam







- Can identify core skills and processes
- Can demonstrate core skills in isolation

- Can demonstrate core skills in a competitive game



## Retrieval Practice

Questions	Answers
<b>What are the core Netball and Basketball skills?</b>	Chest pass, Bounce pass, Shoulder pass, Overhead pass, Two-footed landing, Shooting, Pivot, Defending and Attacking.
<b>What are the Netball positions?</b>	Goalkeeper, Goal defence, Wing defence, Centre, Wing attack, Goal attack and Goal shooter.
<b>What are the core football skills?</b>	Dribbling close to feet, Dribbling changing direction, Passing side foot, Passing close distance, Defending and Attacking.
<b>What are the core Rugby skills?</b>	Target with hands out, Push pass, Catching, Protecting, Side-stepping, Attacking, Defending.

## Career Focus - Where could this take you?



I am a biologist. Understanding how the body works, fitness principles, and healthy living helps me study organisms and their environments. I explore the links between physical health and biology, contributing to research that improves lives and well-being.

## Challenge Activities



1. Design a new rule for either football, netball, basketball or rugby. Explain how your rule will impact the game.
2. Create a mind map of all of the equipment needed to play an invasion game of your choice.

## 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

## Additional Resources



To further practise and develop you knowledge see:

- <https://tgfu.weebly.com/invasion-games.html>
- [https://en.wikipedia.org/wiki/Association\\_football](https://en.wikipedia.org/wiki/Association_football)
- <https://www.youtube.com/watch?v=aBuxsRnU50A>
- <https://www.world.rugby/the-game/laws/home>



- Show Knowledge and understanding of basic key concepts
- Demonstrate safe working practice
- Apply knowledge and practice in basic fitness tests

Keyword	Definition
Power	Power = strength x speed.  They are used together to move in sport.
Co-ordination	The ability for muscles to move different body parts in time.
Reaction Time	The time taken for a person to react to the movement in sport.
Agility	The ability to change direction at speed.
Balance	The ability to maintain your centre of mass and control without falling over.
Speed	To move quickly in the shortest time over a distance. $\text{Speed} = \text{distance} / \text{time}$ .
Cardiovascular endurance	The ability for the heart and blood vessels to transport oxygenated blood to the working muscles so they work for a long time.
Muscular strength	The maximum force that your muscles can make to move an object.
Muscular endurance	Your muscles can work continuously at a low to medium level for a long period of time without them getting tired.
Flexibility	This is the range of movement that can be performed around a joint by the muscles.
Body composition	This is the total amount of fat, bone and muscles of a person's body.

**Key Concepts** You should already know: - Some components of fitness and be able to apply them to a healthy and active lifestyle  
You will be assessed on: - Understanding - Technique - Application - Leadership

## Health and Fitness Key Concepts

### IMPORTANCE OF WARM UP EXERCISES BEFORE WORKOUT

#### What is a warm-up?\*

- A warm-up is a session which takes place prior to doing physical activity
- Usually a warm-up will consist of light cardiovascular exercises combined with stretches

#### Effects of the warm-up\*\*

- Dilates blood vessels, ensuring that your muscles are well supplied with oxygen
- Raises your muscles' temperature for optimal flexibility and efficiency
- By slowly raising your heart rate, the warm-up also helps minimize stress on your heart

Note : Individual results may vary

#### How long should a warm up last? \*\*

- Most warm up sessions last between 20 minutes and half an hour
- The more intense the activity, the longer the warm-up.

Information adapted from :  
\*<http://www.nsmi.org.uk/articles/injury-prevention/warming-up.html>

**HERBALIFE**



- Show Knowledge and understanding of basic key concepts
- Demonstrate safe working practise.
- Apply knowledge and practice in basic fitness tests

## Retrieval Practice:

Use the missing words to complete the fitness testing protocols for the three different tests below.



### What is the test protocol?

(Fill in the missing words)

#### Missing words:

Between,  
Side,  
Average,  
Static,  
Tips

- The athlete chucks the end of his/her finger tips
- The athlete stands \_\_\_\_\_ onto the wall, keeping both feet remaining on the ground, reaches up as high as possible with one hand and marks the wall with the \_\_\_\_\_ of the fingers
- The athlete from a \_\_\_\_\_ position jumps as high as possible and marks the wall with the chalk on his fingers
- The assistant measures and records the distance \_\_\_\_\_ the two marks
- The athlete repeats the test 3 times
- The assistant calculates the \_\_\_\_\_ of the recorded distances and uses this value to assess the athlete's performance.

### Standing Long Jump test

### What is the test protocol?

(Fill in the missing words)

#### Missing words:

Tips,  
Extended  
Reaches  
Average  
Shoes

- The athlete warms up for 10 minutes and then removes their \_\_\_\_\_.
- The assistant secures the ruler to the box top with the tape so that the front edge of the box lines up with the 15cm (6 inches) mark on the ruler and the zero end of the ruler points towards the athlete.
- The athlete sits on the floor with their legs fully \_\_\_\_\_ with the bottom of their bare feet against the box.
- The athlete places one hand on top of the other, slowly bends forward and \_\_\_\_\_ along the top of the ruler as far as possible holding the stretch for two seconds.
- The assistant records the distance reached by the athlete's finger \_\_\_\_\_ (cm).
- The athlete performs the test three times.
- The assistant calculates and records the \_\_\_\_\_ of the three distances and uses this value to assess the athlete's performance.

### Sit and reach test

### What is the test protocol?

(Fill in the missing words)

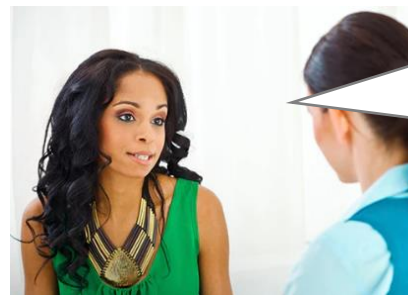
#### Missing words:

Whistle  
Warms up  
Go  
400m  
12 minutes

- The athlete \_\_\_\_\_ for 10 minutes.
- The assistant gives the command "\_\_\_\_\_", starts the stopwatch and the athlete commences the test.
- The assistant keeps the athlete informed of the remaining time at the end of each lap (\_\_\_\_\_).
- The assistant blows the \_\_\_\_\_ when the \_\_\_\_\_ has elapsed and records the distance the athlete covered to the nearest 10 metres.

### Cooper 12 min run

## Career Focus - Where could this take you?



My career is known as a healthy lifestyle coach. I help people with problems linking to their health. I give advice on how people can change their physical, mental and social health by setting goals and targets for people to achieve over a set time period. My job is very rewarding as it makes a positive impact on people's lives.

## Challenge Activities



### Design a Fitness test knowledge card:-

Can you create a fitness test card that shows the instructions on how to complete the tests and include a picture and diagram to help with your understanding. This could be completed using a computer or on A4 paper.

### Create a match the keywords to definition poster:-

Select between four to six different keywords and match them to the correct definition answers. Make sure on the reverse of your skill card you have included the correct answers so students can test and assess themselves and others.

## Topic Links



This topic links to:

- RSHE – Understanding physical activity can help with physical, mental and social wellbeing
- English – understanding and defining key terminology
- Mathematics – problem solving, recording figures and analysing performance.
- Voice 21 – testing others in the class on keywords and the reasons why it is important to warm up.

## Additional Resources




To further practise and develop your knowledge see:

<https://www.topendsports.com/testing/tests/>

<https://www.teachpe.com/training-fitness/fitness-testing>



Keyword	Definition
Racket	A piece of equipment with a handle, frame and head. This is used to hit the shuttle or ball over the net
Shuttle	A cone shaped object with a cork base. This is hit over the net with the racket.
Net	Rectangular net placed across the court. It divides the court in two.
Court	The playing surface area marked out with lines
Table	The playing surface used to play table tennis
Serve	A shot that is selected to start a game in net and wall activities
Forehand shot	Shot taken with the palm of your hand facing the direction of the stroke.




**Key Concepts** You should already know: - The aim of net and wall games

You will be assessed on: - Understanding - Technique in isolation - Technique in game - - Attitude to learning


### Badminton

- A badminton match is played to the best of three games.
- A coin toss or spinning of the racket determines first serve or choice of side.
- The object of a badminton game is to hit the badminton shuttlecock over the badminton net and onto the ground within bounds on your opponent's side of the court.
- A rally can also be lost by hitting the shuttle into the badminton net, out of bounds, before it crosses the net to your side, or if it strikes your clothing or body rather than your badminton racket.




### Volleyball

- Six players from each team are on the court at one time
- Games are played to 15, 25 or 30 points (win by 2)
- A team needs to win 2 out of 3 games or 3 out of 5 games to win.
- Before a team serves, all six players rotate clockwise one position.
- Teams are allowed up to 3 hits to successfully return the ball the the opponents' side of the net.



### Table Tennis

- A serve must bounce on both sides of the table
- Players cannot volley the ball
- Service changes every 2 points
- First to 7 points wins (win by 2)
- A player can serve in ANY direction





Retrieval Practice



Questions	Answers
What are some of the core skills needed for attacking in badminton.	<ol style="list-style-type: none"> <li>Smash shot is a core skill and the aim is to hit the shuttle as hard as possible to the oppositions side of the court .</li> <li>The long serve is a core skill for attacking in badminton. The aim is to send the opponent to the back of the court.</li> </ol>
What are some of the core skills needed for defending in badminton.	<ol style="list-style-type: none"> <li>The overhead clear shot is used in a rally situation so that you force your opponent to move to the back of the court.</li> <li>The drop shot is a gentle forehand or backhand shot that applies little force to the shuttle so it drops just over the net.</li> </ol>
What are some of the core skills needed for attacking in table tennis.	<ol style="list-style-type: none"> <li>Top spin forehand drive shot is a fast open palm shot facing the direction of the stroke. By placing top spin on the ball, the balls rotation means it travels faster.</li> <li>Back spin forehand or backhand shot is a skill that is designed to slow down the speed of a rally in table tennis.</li> </ol>
What are some of the core skills needed for defending in badminton.	<ol style="list-style-type: none"> <li>Backhand push shot and the forehand push shot are two skills designed to slow down the speed of a rally in a game. This gives the person more time to react to the next shot.</li> </ol>

Career Focus - Where could this take you?



I am a badminton racket maker who relies on clear communication and attention to detail. Understanding instructions, reading technical manuals, and discussing designs with customers are crucial. My skills help me select the best materials and craft high-quality rackets that perform well and meet players' needs.

Challenge Activities



- Design a skill card:-**  
 This can be used in a PE lesson to help a student to assess their current ability level. Make the skill card to teach the correct way to Serve in either badminton or table tennis.
- Create a rules of the game poster:-**  
 This can be used by all students in their PE lessons for badminton or table tennis when their role is umpiring a game so that all games can be played fairly following RITA values. Your poster should have 3-5 basic rules.

Topic Links



Additional Resources



- This topic links to:
- Science –The role of the cardiovascular system; the physics of sports
  - English –understanding and defining key terminology
  - Mathematics –problem solving, recording figures and analysing performance and score keeping
  - Voice 21 –coaching peers and explaining rules by officiating
- To further practise and develop your knowledge see:
- <https://www.badmintonengland.co.uk/>
- <https://www.tabletennisengland.co.uk/>



# Username and Passwords
