

# Year 8 – Term 2



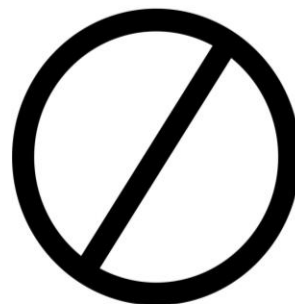
# Knowledge Organiser

Name:

Team:



Mistake



**Write in blue or black ink**  
Professional standards.

**Use a ruler to underline dates and titles and draw all lines**  
Showing care with your work.

**Pictures, diagrams, graphs and tables in pencil.**  
Allowing for mistakes to be easily corrected.

**Cross mistakes out once.**  
Mistakes are fine – it is how you correct them that matters.

**No graffiti.**  
You will need to get rid of it from your work in your own time.

**Worksheets stuck in neatly.**  
In the order that have been completed in.

**Neat handwriting.**  
Always trying to present your work in the best way.

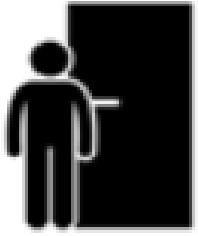
**Complete all work set.**  
To the best of your ability.



*Exceptional*  
★★★★★

# Work Pride Routines

*Pride in work should be shown by all students*



**Greet your teacher at the door.**  
Professional Conduct.



**Enter the classroom quietly.**  
Not causing disruption to others.



**Put your equipment on the desk.**  
Be ready to learn immediately.



**Start the activate task.**  
This will be ready for you as you enter the classroom.



**Answer the register.**  
Do not talk while others are answering.



**Pack away when directed to by the teacher.**  
Prompt and sensible.



**Stand behind your chair when you've packed away.**  
Await further instructions.



**Wait in silence to be dismissed.**  
Your teacher will do this promptly if all other routines have been followed.



**Move onto the corridors using the calm corridor routine.**  
Sensible always.



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★★★★★

# Lesson Routines

*Entry and exit to all lessons should follow these routines.*



**Do not talk whilst the staff member is talking**  
Listen respectfully



**Appropriate contact only**  
Do not hold hands or drape arms over others



**Sit professionally**  
No head on desk/table or slouching



**Communicate appropriately**  
As instructed in lesson depending on learning mode



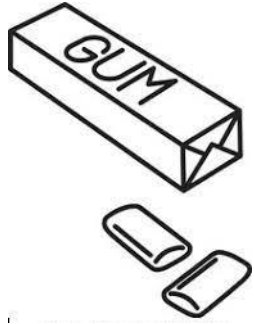
**Follow instructions from ALL staff first time**  
Do not argue with any instruction given



**No mobile phones**  
Adhere to the green line rule. If seen/heard - it's taken.



**Respect the Academy environment**  
Put litter in the bin, do not graffiti, do not damage furniture.



**No chewing Gum**  
Anytime, anywhere on site (outside & in)

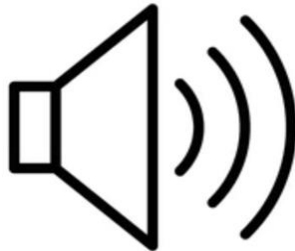
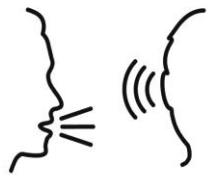
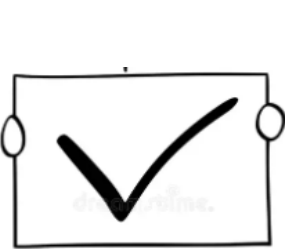


*Exceptional*  
★★★★★

# Behaviour Routines

*To support each other, all staff must follow the behaviour routines*





**Positive framing.**

Using positive language, e.g. 'Thank you to the 80% of pupils who are paying attention.'

**'Hands up, tracking me.'**

Signal with hands up for silence and pupils track the staff member

**Active listening.**

Sitting up, looking at the staff member speaking.

**Calm and purposeful.**

Professional conduct – No shouting, running, slow actions.

**Appropriate volume**

No unnecessary shouting or raised voices

**Professional vocabulary**

Do not use slang terms or over familiar language

**Using subject specific vocabulary in lessons**

Demonstrate aspiration always

**Speak in full sentences**

Always demonstrating your fantastic oracy skills.



Exceptional  
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# Language Routines

*All staff are to use Academy language at all times*



**Line up in the morning where your team leader is stood.**  
Straight line, tracking forward.



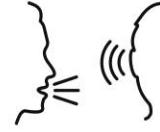
**Sit in teams in alphabetical order.**  
This will mean the place you sit in will never change.



**Coats, bags and scarves should be on the floor or on the back of your chair.**  
Mirroring professional conduct.



**Signal for silence.**  
Raise your hand and fall silent.



**Actively listen.**  
Track the speaker, sit up and pay attention.



**Do not talk or engage in any inappropriate behaviour.**  
Important messages are delivered in these seminars and your conduct should reflect this.



**Wait until your row is dismissed.**  
Stand up and sensibly follow your row.



**Go straight to your lesson, do not congregate at the door.**  
In the direction you are told to by the pastoral team.



*Exceptional*  
★★★★★

# Congregation Routines

*Entry and exit to all seminars will follow the congregation routines*



**Walk in no more than 2 wide file**  
**Purposefully & Professionally**



**Walk calmly & quietly**  
**Not causing disruption to ongoing lessons.**



**Walk on the left**  
**Not going over the white line to allow for flow of traffic.**



**Track the direction of travel**  
**Face the way you are walking.**



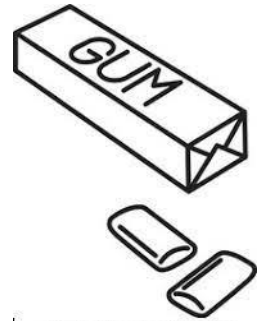
**Walk purposefully/ Do not congregate**  
**Go straight to your destination.**



**No mobile phones**  
**Adhere to the green line rule. If seen/heard - it's taken.**



**No outdoor clothing**  
**No outdoor clothing inside the building. Even if you are heading outside.**



**No chewing Gum**  
**Anytime, anywhere on site (outside & in)**



*Exceptional*  
 ★★★★★

# Corridor Routines

*We will have a green-line to make this clear for everyone.*

***These will be located outside Student Services & The Canteen Entrance.***



# 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.



## Key Concepts

### Key Concept FDP equivalence

| F               | D    | P   |
|-----------------|------|-----|
| $\frac{1}{100}$ | 0.01 | 1%  |
| $\frac{1}{10}$  | 0.1  | 10% |
| $\frac{1}{5}$   | 0.2  | 20% |
| $\frac{1}{4}$   | 0.25 | 25% |
| $\frac{1}{2}$   | 0.5  | 50% |
| $\frac{3}{4}$   | 0.75 | 75% |

### Key Concept Multipliers

|                 |               |
|-----------------|---------------|
| Find 15%        | $\times 0.15$ |
| Increase by 15% | $\times 1.15$ |
| Decrease by 15% | $\times 0.85$ |

For **reverse percentage** problems you can divide by the multiplier to find the original amount.

**Multiplication law:** When multiplying with the same base (number/letter) we add the powers.

General rule:  $a^m \times a^n = a^{m+n}$

$$2^5 \times 2^7 = 2^{5+7} = 2^{12}$$

$$x^3 \times x^8 = x^{3+8} = x^{11}$$

When multiplying the terms we add the powers together.

**Division law:** When dividing with the same base (number/letter) we subtract the powers.

General rule:  $a^m \div a^n = a^{m-n}$

$$2^{14} \div 2^7 = 2^{14-7} = 2^7$$

$$x^{10} \div x^8 = x^{10-8} = x^2$$

When dividing the terms we subtract the powers together.

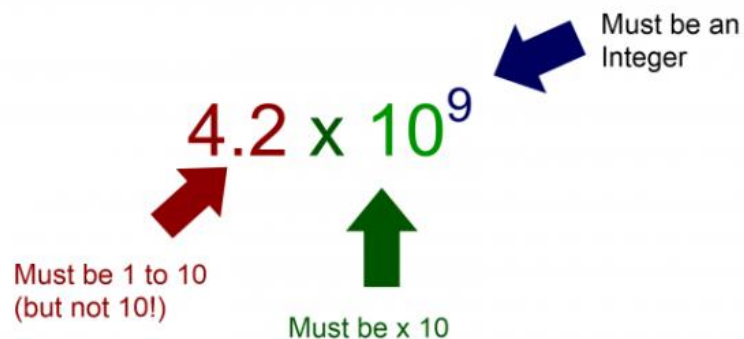
**Brackets law:** When raising a power to another power we multiply the powers together.


General rule:  $(a^m)^n = a^{m \times n}$

$$(5^4)^2 = 5^{4 \times 2} = 5^8$$

$$(h^9)^3 = h^{9 \times 3} = h^{27}$$


When raising to a power we multiply the powers together.





| Keyword  | Definition  |
|---|---|
| Simplify  | Grouping and combining similar terms.   |
| Inequality  | An inequality compares two values showing if one is greater than, less than, or equal to another. |
| Sequence  | Items or numbers put in a predetermined order.  |
| Term  | A single number or variable.  |
| Linear  | The difference between terms increases or decreases by a constant value.                          |
| Non-linear  | The difference between terms increases or decreases by different amounts.                         |
| Arithmetic  | A sequence where the difference between terms is constant.  |
| Geometric   | A sequence where each term is found by multiplying the previous term by a fixed number.           |
| Power/ exponent/ indices  | Number that tells you how many times to use the number in multiplication.                         |
| Invest  | Use money with the goal of it increasing in value over time (usually in a bank).                  |
| Standard form   | A system of writing very big or small numbers.  |
| Overestimate  | Rounding up (gives a solution higher than the actual value).                                      |
| Underestimate   | Rounding down (gives a solution lower than the actual value).                                     |

| Sparx Maths                     |  |
|---------------------------------|--|
| Topic                           | Video Numbers                            |
| Algebraic Notation              | M813, M830                               |
| Function Machines               | M175, M428                               |
| Substitution                    | M417, M327, M208, M979                   |
| Simplifying Expressions         | M795, M531, M949, M120                   |
| Solving One/ Two Step Equations | M634, M647, M855, M401, M902             |
| Solving Harder Equations        | M387, M509, M554, M957                   |
| Inequalities                    | M384, M118, M732                         |
| Sequences                       | M381, M241, M166, M991, M866, M418, M981 |
| Rounding                        | M111, M431, M994, M131, M878, M730       |

| Topic Links   |
|---|
| This topic links to: <ul style="list-style-type: none"> <li>• Multiplication, division, indices, and roots</li> <li>• Understanding and plotting graphs</li> <li>• Simplifying and factorising expressions</li> <li>• Bounds and error intervals</li> </ul> |

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



**Challenge Activities** 

Work out the value of each shape:

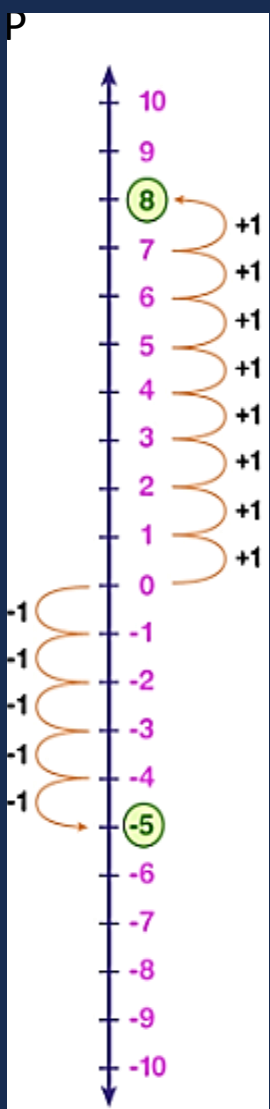
$$\square + \square + \triangle = 27$$

$$\triangle + \triangle + \bigcirc = 26$$

$$\square + \bigcirc + \square = 32$$



# Maths Quick Reference: Number Skills



### 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

- A **factor** is a number which divides into another number exactly with no remainders.
- A **multiple** of a number is a number in its times table.
- A **prime number** is a number that only has two factors, 1 and itself.

| 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 |

## Adding and Subtracting Decimals

**Adding and subtracting decimals** is the skill of carrying out a calculation involving decimal numbers correctly by understanding place value.

When adding or subtracting with decimals we can use the column method; special care must be taken to ensure that the **decimal points line up** with each other.

**Example**  $12.5 + 6.23$

$$\begin{array}{r} 12.50 \\ + 6.23 \\ \hline 18.73 \end{array}$$

Decimal points lined up.

You may find it useful to fill any "empty" spaces on the ends of numbers with zeros

| Decimal points lined up                                       | (Incorrect) Lining up the digits from the right hand side     |
|---|---|
| $\begin{array}{r} 12.5 \\ + 6.23 \\ \hline 18.73 \end{array}$ | $\begin{array}{r} 12.5 \\ + 6.23 \\ \hline 72.28 \end{array}$ |

Prime numbers: 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37...

# BIDMAS

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

Order of Operations

|   |   |   |   |   |                                       |
|---|---|---|---|---|---------------------------------------|
| + | x | + | = | + | } Same signs, answer is positive      |
| - | x | - | = | + |                                       |
| + | x | - | = | - | } Different signs, answer is negative |
| - | x | + | = | - |                                       |

## Multiplying and Dividing Decimals

### Multiplying: Using scaled calculations

**Example**  $0.08 \times 0.3$

$$24 \div 100 \div 10 = 24 \div 1000 = 0.024$$

Multiply the numerator and denominator by powers of 10 to make the denominator an integer.

### Multiplying: Counting decimal places

**Example**  $0.002 \times 3.1$

4dp total in the question

Multiply the non-zero digits:  $2 \times 31 = 62$

Answer: The digits 62 with 4 dp 0.0062

### Dividing: Using equivalent fractions

**Example**  $8.4 \div 0.04$

$$\frac{8.4}{0.04} = \frac{840}{4} = 210$$

### Dividing: Using short division

**Example**  $7.11 \div 3$

Use this method when the divisor (number you're dividing by) is an integer.

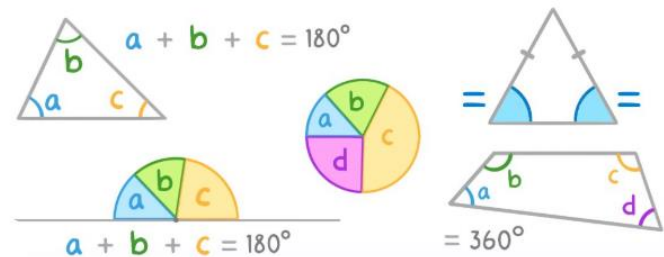
Line up the decimal points.

$$3 \overline{) 7.11} = 2.37$$

# Maths Quick Reference: Geometry & Measures

## Quadrilaterals

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



## Key Concepts

Exterior angle

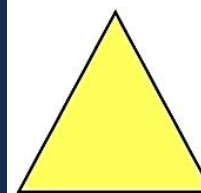
Interior angle

$$\text{Exterior} = \frac{360}{\text{no. of sides}}$$

Angles at a point add to  $360^\circ$

Angles on a line add to  $180^\circ$

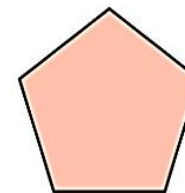
Sum of interior =  $180^\circ \times 4 = 720^\circ$



Triangle



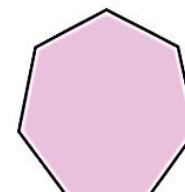
Quadrilateral



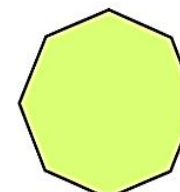
Pentagon



Hexagon



Heptagon



Octagon



Nonagon



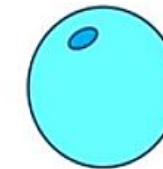
Decagon



Cone



Cylinder



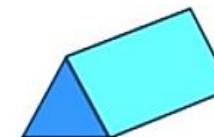
Sphere



Square Based Pyramid



Cube



Triangular Prism



Tetrahedron



Cuboid

### Acute angle

Greater than  $0^\circ$  but less than  $90^\circ$



### Reflex angle

Greater than  $180^\circ$  but less than  $360^\circ$



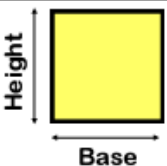
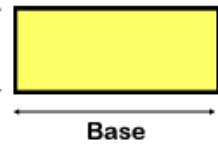

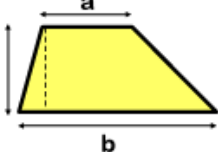
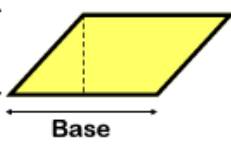
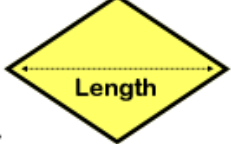
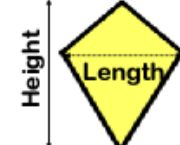
### Obtuse angle

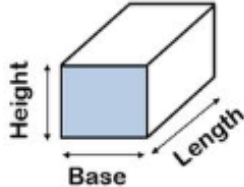
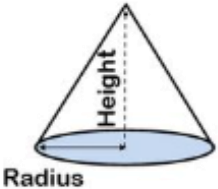
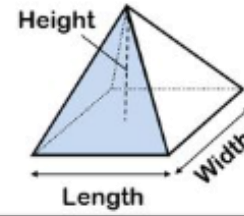

Greater than  $90^\circ$  but less than  $180^\circ$





# Maths Quick Reference: Geometry (Areas & Volumes)

| Shape  | Name                 | Formula for Area                         |
|--|----------------------|--|
|    | <b>Square</b>        | Base x Height                            |
|    | <b>Rectangle</b>     | Base x Height                            |
|    | <b>Triangle</b>      | Base x Perpendicular Height ÷ 2          |
|    | <b>Trapezium</b>     | $\frac{(a + b) \times \text{height}}{2}$ |
|   | <b>Parallelogram</b> | Base x Perpendicular Height              |
|  | <b>Rhombus</b>       | Length x Height ÷ 2                      |
|  | <b>Kite</b>          | Length x Height ÷ 2                      |

| Shape   | Name           | Formula for Volume  |
|---|----------------|---|
|    | <b>Prism</b>   | Cross-sectional area x length   |
|    | <b>Cone</b>    | $\frac{1}{3} \times \pi r^2 \times \text{height}$                           |
|   | <b>Pyramid</b> | $\frac{1}{3} \times \text{length} \times \text{width} \times \text{height}$ |
|  | <b>Sphere</b>  | $\frac{4}{3} \times \pi r^3$  |

**Length**

$\begin{matrix} \times 10 \\ \downarrow \\ \text{cm} & \text{mm} \\ \uparrow \\ \div 10 \end{matrix}$ 
 $\begin{matrix} \times 100 \\ \downarrow \\ \text{m} & \text{cm} \\ \uparrow \\ \div 100 \end{matrix}$ 
 $\begin{matrix} \times 1,000 \\ \downarrow \\ \text{km} & \text{m} \\ \uparrow \\ \div 1,000 \end{matrix}$

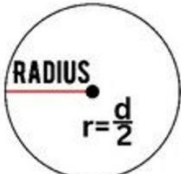
**Mass**


$\begin{matrix} \times 1,000 \\ \downarrow \\ \text{g} & \text{mg} \\ \uparrow \\ \div 1,000 \end{matrix}$ 
 $\begin{matrix} \times 1,000 \\ \downarrow \\ \text{kg} & \text{g} \\ \uparrow \\ \div 1,000 \end{matrix}$ 
 $\begin{matrix} \times 1,000 \\ \downarrow \\ \text{t} & \text{kg} \\ \uparrow \\ \div 1,000 \end{matrix}$


**Volume**


$\begin{matrix} \times 1,000 \\ \downarrow \\ \text{l} & \text{ml} \\ \uparrow \\ \div 1,000 \end{matrix}$ 
 $\begin{matrix} \times 10 \\ \downarrow \\ \text{cl} & \text{ml} \\ \uparrow \\ \div 10 \end{matrix}$ 
 $\begin{matrix} \times 100 \\ \downarrow \\ \text{l} & \text{cl} \\ \uparrow \\ \div 100 \end{matrix}$

**CIRCLE FORMULAS**

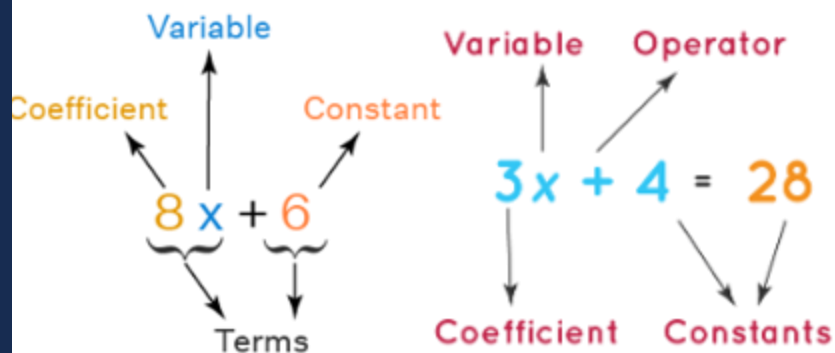

 $r = \frac{d}{2}$


 $2r = d$


 $\text{AREA } \pi r^2$


 $\text{CIRCUMFERENCE } 2\pi r \text{ or } \pi d$

# Maths Quick Reference: Algebra Skills



## Substitution

**Substitution** means replacing the variables in an algebraic expression with numerical or algebraic values.

**Example**

Find the value of  $3b + 4$  when  $b = 10$

$3b$  means  $3 \times b = 3 \times 10 = 30$

So  $3b + 4 = 30 + 4 = 34$

## Expanding Brackets

**Expanding brackets** means multiplying each term in the brackets by the expression outside the brackets. It is the reverse process of factorisation.

**Examples**

Expanding brackets

$$3(2x + 1) = 6x + 3$$

Factorising

Expanding brackets

$$(x + 5)(x + 1) = x^2 + 6x + 5$$

Factorising

## Collecting Like Terms

**Collecting like terms** is a way of simplifying algebraic expressions.

To do this we identify the like terms in an algebraic expression and combine them by adding or subtracting.

**Example** Collect the like terms  $3a + 4b + 2a - 2b$

$3a$  and  $+2a$  are like terms

$+4b$  and  $-2b$  are also like terms, but they are different to the terms with the letter  $a$ . The plus or minus sign in front of a term belongs to that term.

$$3a + 4b + 2a - 2b = 3a + 2a + 4b - 2b$$

$$= 5a + 2b$$

## Algebraic Notation

**Algebraic terms** is a system for writing mathematical expressions and equations using letters, symbols, and operations.

**Examples**

| In words                       | In algebraic notation |
|--------------------------------|-----------------------|
| 2 more than $m$                | $m + 2$               |
| 5 less than $h$                | $h - 5$               |
| 4 lots of $a$ or $4 \times a$  | $4a$                  |
| $y$ divided by 3 or $y \div 3$ | $\frac{y}{3}$         |

Numbers and letters written next to each other indicate multiplication.

Divisions are written using fraction notation.

## Solving Equations

$$6x - 5 = 7$$

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

$$6x = 12$$

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

$$x = 2$$

## Mean, Median, Mode

The **mean, median and mode** in maths are averages.

### Mean:

Find the total of the values and divide the total by the number of values.

$$\text{mean} = \frac{\text{total}}{\text{number of values}}$$

### Median:

Arrange the values in numerical order, from the smallest value to the highest value and find the middle value.

### Mode:

Find the most frequently occurring item in the data set.

#### Mean

7, 3, 4, 1, 7, 6

Sum of numbers divided by the total numbers

$$\text{Mean} = (7+3+4+1+7+6)/6 \\ = 28/6 = 4.66$$

#### Median

7, 3, 4, 1, 7, 6

Arrange in order and pick the middle value

1, 3, **4, 6**, 7, 7

$$\text{Median} = (4+6)/2 = 5$$

#### Mode

7, 3, 4, 1, 7, 6

Most common number

**7**, 3, 4, 1, **7**, 6

$$\text{Mode} = 7$$

#### Range

7, 3, 4, 1, 7, 6

Difference between highest and lowest

$$\text{Range} = 7 - 1 = 6$$

## 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)

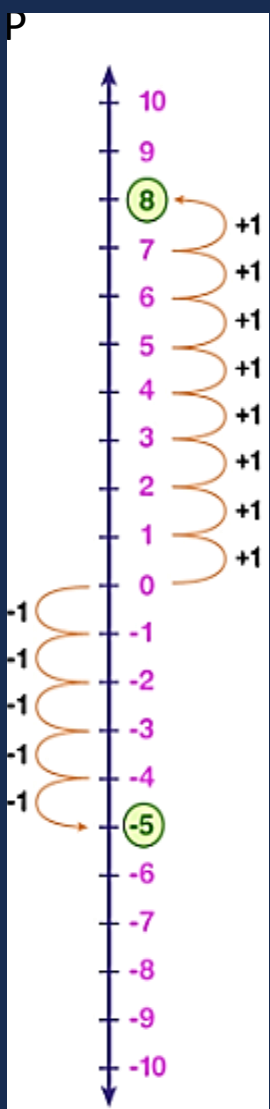
## Types of Data

The different **types of data** we need to know are:

- **Primary data** - data collected from an original source
- **Secondary data** - data collected from a secondary source
- **Qualitative data** - non-numerical data
- **Quantitative data** - numerical data
- **Discrete data** - exact values or whole numbers that are not rounded
- **Continuous data** - measurements that are rounded



# Maths Quick Reference: Number Skills



### 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

- A **factor** is a number which divides into another number exactly with no remainders.
- A **multiple** of a number is a number in its times table.
- A **prime number** is a number that only has two factors, 1 and itself.

| 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 |

## Adding and Subtracting Decimals

**Adding and subtracting decimals** is the skill of carrying out a calculation involving decimal numbers correctly by understanding place value.

When adding or subtracting with decimals we can use the column method; special care must be taken to ensure that the **decimal points line up** with each other.

**Example**  $12.5 + 6.23$

$$\begin{array}{r} 12.50 \\ + 6.23 \\ \hline 18.73 \end{array}$$

Decimal points lined up.

You may find it useful to fill any "empty" spaces on the ends of numbers with zeros

| Decimal points lined up                                       | (Incorrect) Lining up the digits from the right hand side     |
|---|---|
| $\begin{array}{r} 12.5 \\ + 6.23 \\ \hline 18.73 \end{array}$ | $\begin{array}{r} 12.5 \\ + 6.23 \\ \hline 72.28 \end{array}$ |

Prime numbers: 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37...

# BIDMAS

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

Order of Operations

|   |   |   |   |   |                                       |
|---|---|---|---|---|---------------------------------------|
| + | x | + | = | + | ] Same signs, answer is positive      |
| - | x | - | = | + |                                       |
| + | x | - | = | - | ] Different signs, answer is negative |
| - | x | + | = | - |                                       |

## Multiplying and Dividing Decimals

| Multiplying: Using scaled calculations  | Multiplying: Counting decimal places   |
|---|--|
| <p><b>Example</b> <math>0.08 \times 0.3</math></p> $\begin{array}{l} \times 100 \\ \hline 8 \times 3 = 24 \\ \hline 24 \div 100 \div 10 = 24 \div 1000 = 0.024 \end{array}$ | <p><b>Example</b> <math>0.002 \times 3.1</math></p> <p>4dp total in the question</p> <p>3dp      1dp</p> <p>Multiply the non-zero digits: <math>2 \times 31 = 62</math></p> <p>Answer: The digits 62 with 4 dp <u>0.0062</u></p> |

| Dividing: Using equivalent fractions   | Dividing: Using short division  |
|--|---|
| <p><b>Example</b> <math>8.4 \div 0.04</math></p> <p>Multiply the numerator and denominator by powers of 10 to make the denominator an integer.</p> $\begin{array}{r} 8.4 \times 100 = 840 \\ 0.04 \times 100 = 4 \\ \hline 840 \div 4 = 210 \end{array}$ | <p><b>Example</b> <math>7.11 \div 3</math></p> <p>Use this method when the divisor (number you're dividing by) is an integer.</p> $\begin{array}{r} 2.37 \\ 3 \overline{) 7.11} \end{array}$ <p>Line up the decimal points.</p> |

## Quadrilaterals

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

Triangle:  $a + b + c = 180^\circ$

Circle:  $a + b + c + d = 360^\circ$

### Key Concepts

Exterior angle:  $Exterior = \frac{360}{no. of sides}$

Interior angle

Angles at a point add to  $360^\circ$

Angles on a line add to  $180^\circ$

Sum of interior =  $180^\circ \times 4 = 720^\circ$

### Acute angle

Greater than  $0^\circ$  but less than  $90^\circ$

### Reflex angle

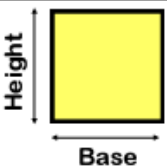
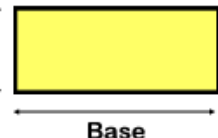

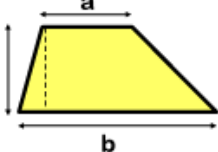
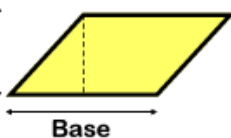
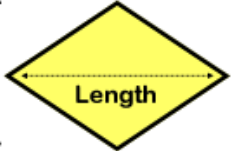

Greater than  $180^\circ$  but less than  $360^\circ$

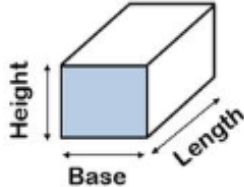
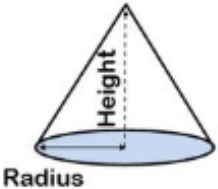
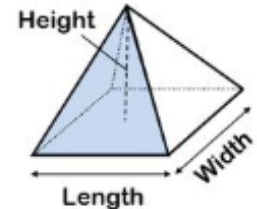

### Obtuse angle

Greater than  $90^\circ$  but less than  $180^\circ$

|          |                  |             |                      |
|----------|------------------|-------------|----------------------|
|          |                  |             |                      |
| Triangle | Quadrilateral    | Pentagon    | Hexagon              |
|          |                  |             |                      |
| Heptagon | Octagon          | Nonagon     | Decagon              |
|          |                  |             |                      |
| Cone     | Cylinder         | Sphere      | Square Based Pyramid |
|          |                  |             |                      |
| Cube     | Triangular Prism | Tetrahedron | Cuboid               |

# Maths Quick Reference: Geometry (Areas & Volumes)

| Shape  | Name                 | Formula for Area                         |
|--|----------------------|--|
|    | <b>Square</b>        | Base x Height                            |
|    | <b>Rectangle</b>     | Base x Height                            |
|    | <b>Triangle</b>      | Base x Perpendicular Height ÷ 2          |
|    | <b>Trapezium</b>     | $\frac{(a + b) \times \text{height}}{2}$ |
|   | <b>Parallelogram</b> | Base x Perpendicular Height              |
|  | <b>Rhombus</b>       | Length x Height ÷ 2                      |
|  | <b>Kite</b>          | Length x Height ÷ 2                      |

| Shape   | Name           | Formula for Volume  |
|---|----------------|---|
|    | <b>Prism</b>   | Cross-sectional area x length   |
|    | <b>Cone</b>    | $\frac{1}{3} \times \pi r^2 \times \text{height}$                           |
|   | <b>Pyramid</b> | $\frac{1}{3} \times \text{length} \times \text{width} \times \text{height}$ |
|  | <b>Sphere</b>  | $\frac{4}{3} \times \pi r^3$  |

**Length**

$\begin{matrix} \times 10 \\ \downarrow \\ \text{cm} & \text{mm} \\ \uparrow \\ \div 10 \end{matrix}$ 
 $\begin{matrix} \times 100 \\ \downarrow \\ \text{m} & \text{cm} \\ \uparrow \\ \div 100 \end{matrix}$ 
 $\begin{matrix} \times 1,000 \\ \downarrow \\ \text{km} & \text{m} \\ \uparrow \\ \div 1,000 \end{matrix}$

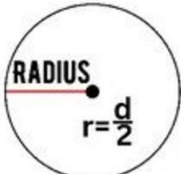
**Mass**


$\begin{matrix} \times 1,000 \\ \downarrow \\ \text{g} & \text{mg} \\ \uparrow \\ \div 1,000 \end{matrix}$ 
 $\begin{matrix} \times 1,000 \\ \downarrow \\ \text{kg} & \text{g} \\ \uparrow \\ \div 1,000 \end{matrix}$ 
 $\begin{matrix} \times 1,000 \\ \downarrow \\ \text{t} & \text{kg} \\ \uparrow \\ \div 1,000 \end{matrix}$


**Volume**


$\begin{matrix} \times 1,000 \\ \downarrow \\ \text{l} & \text{ml} \\ \uparrow \\ \div 1,000 \end{matrix}$ 
 $\begin{matrix} \times 10 \\ \downarrow \\ \text{cl} & \text{ml} \\ \uparrow \\ \div 10 \end{matrix}$ 
 $\begin{matrix} \times 100 \\ \downarrow \\ \text{l} & \text{cl} \\ \uparrow \\ \div 100 \end{matrix}$

**CIRCLE FORMULAS**


 $r = \frac{d}{2}$

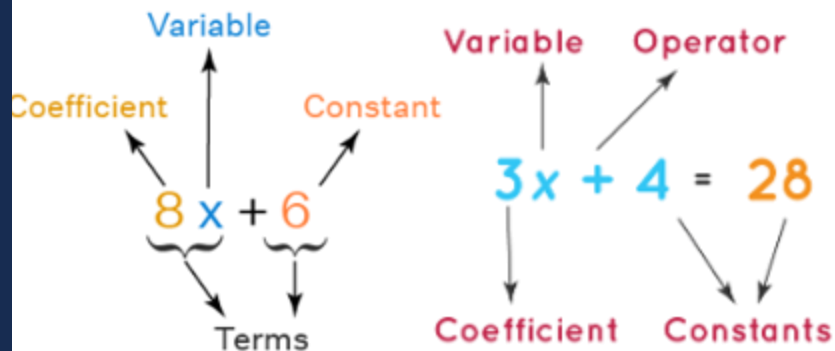

 $2r = d$







# Maths Quick Reference: Algebra Skills



## Substitution

**Substitution** means replacing the variables in an algebraic expression with numerical or algebraic values.

*Example*

Find the value of  $3b + 4$  when  $b = 10$

$3b$  means  $3 \times b = 3 \times 10 = 30$

So  $3b + 4 = 30 + 4 = 34$

## Expanding Brackets

**Expanding brackets** means multiplying each term in the brackets by the expression outside the brackets. It is the reverse process of factorisation.

*Examples*

Expanding brackets

$$3(2x + 1) = 6x + 3$$

Factorising

Expanding brackets

$$(x + 5)(x + 1) = x^2 + 6x + 5$$

Factorising

## Collecting Like Terms

**Collecting like terms** is a way of simplifying algebraic expressions.

To do this we identify the like terms in an algebraic expression and combine them by adding or subtracting.

*Example* Collect the like terms  $3a + 4b + 2a - 2b$

$3a$  and  $+2a$  are like terms

$+4b$  and  $-2b$  are also like terms, but they are different to the terms with the letter  $a$ . The plus or minus sign in front of a term belongs to that term.

$$\begin{aligned} 3a + 4b + 2a - 2b &= 3a + 2a + 4b - 2b \\ &= 5a + 2b \end{aligned}$$

## Algebraic Notation

**Algebraic terms** is a system for writing mathematical expressions and equations using letters, symbols, and operations.

*Examples*

| In words                       | In algebraic notation |
|--------------------------------|-----------------------|
| 2 more than $m$                | $m + 2$               |
| 5 less than $h$                | $h - 5$               |
| 4 lots of $a$ or $4 \times a$  | $4a$                  |
| $y$ divided by 3 or $y \div 3$ | $\frac{y}{3}$         |

Numbers and letters written next to each other indicate multiplication.

Divisions are written using fraction notation.

## Solving Equations

$$6x - 5 = 7$$

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

$$6x = 12$$

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

$$x = 2$$

## Mean, Median, Mode

The **mean, median and mode** in maths are averages.

### Mean:

Find the total of the values and divide the total by the number of values.

$$\text{mean} = \frac{\text{total}}{\text{number of values}}$$

### Median:

Arrange the values in numerical order, from the smallest value to the highest value and find the middle value.

### Mode:

Find the most frequently occurring item in the data set.

#### Mean

7, 3, 4, 1, 7, 6

Sum of numbers divided by the total numbers

$$\text{Mean} = (7+3+4+1+7+6)/6 \\ = 28/6 = 4.66$$

#### Median

7, 3, 4, 1, 7, 6

Arrange in order and pick the middle value

1, 3, **4, 6**, 7, 7

$$\text{Median} = (4+6)/2 = 5$$

#### Mode

7, 3, 4, 1, 7, 6

Most common number

**7**, 3, 4, 1, **7**, 6

$$\text{Mode} = 7$$

#### Range

7, 3, 4, 1, 7, 6

Difference between highest and lowest

$$\text{Range} = 7 - 1 = 6$$

## 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)

## Types of Data

The different **types of data** we need to know are:

- **Primary data** - data collected from an original source
- **Secondary data** - data collected from a secondary source
- **Qualitative data** - non-numerical data
- **Quantitative data** - numerical data
- **Discrete data** - exact values or whole numbers that are not rounded
- **Continuous data** - measurements that are rounded





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.....

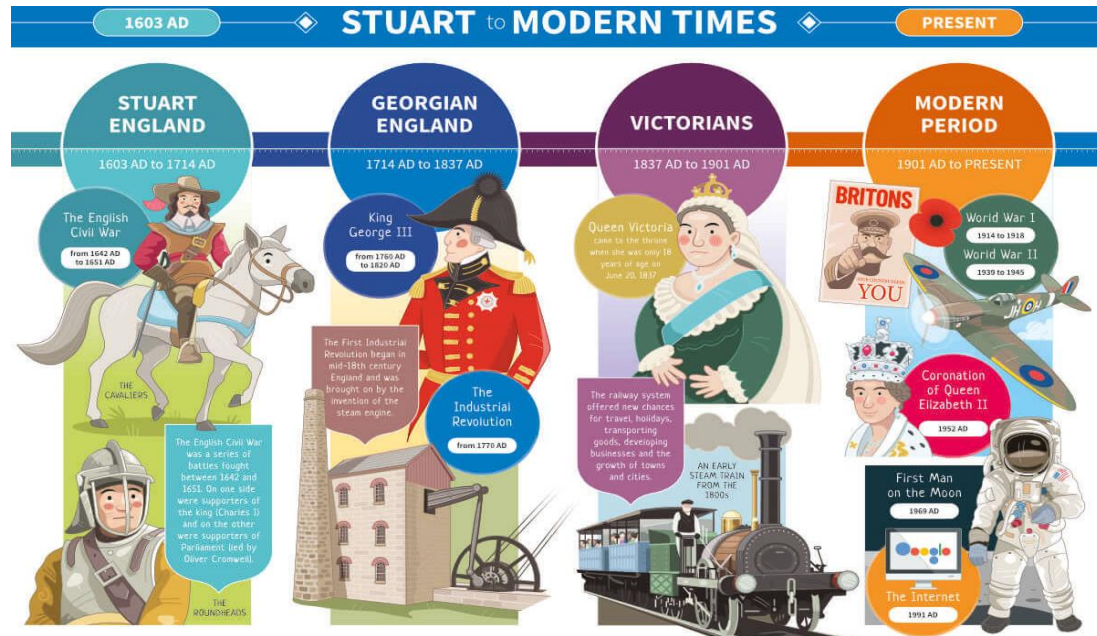
because the text says ‘.....’

The technique x suggests...

This makes the reader / audience think that...

## Knowledge

In this unit, you will study non-fiction texts from both the Victorian era and Modern times to compare how elements of childhood has changed through history.



### Challenge Activities

**Task 1: Research into what life was like for children in the Victorian era. Can you make a poster that outlines:**

- Life experience for the working classes, middle classes, upper classes
- Expected behaviours of children in each class
- Experience of life and work

**Task 2: Make a Venn diagram to compare and consider the differences between a Victorian child and a modern day child. How are each of their experiences similar/different?**

**Task 3: Compare how the viewpoint would change if this was an adult or elderly person's experience of the Victorian age vs. Modern day.**

### Career Focus -



I am a local MP (Member of Parliament). I represent people in my area in Parliament. I listen to concerns from residents, speak up about local issues, and work to improve our community. MPs help make laws, debate important topics, and ensure the government is doing its job properly. They often meet with local groups, attend events, and support individuals needing help with problems like housing or public services. Their role is to be the voice of their community in Parliament.

### Topic Links

This topic links to:

**History-** Looking at how children have been treated or represented throughout history

**English KS4-** Prepares students for contextual understanding of GCSE texts ( A Christmas Carol and Power and Conflict Anthology Poetry).

**PSHE-** Personality traits and empathy skills, problem solving.

### Additional Resources

To further practise and develop your knowledge see:

[How to compare non-fiction texts for KS3 English students - BBC Bitesize](#)

[Comparing Texts - Question and extracts - Sample exam question and answer - AQA - GCSE English Language Revision - AQA - BBC Bitesize](#)

BBC Bitesize- Videos of childhood in each decade [Childhood through time - KS 1 History - BBC Bitesize](#)

- Compare ideas, thoughts, feelings, attitudes and standpoints.
- Analyse how the techniques impact meaning.
- Select a range evidence from two texts.
- Show a detailed understanding of the different ideas and feelings in both texts

## Skills



### Retrieval Practice



| Questions                               | Answers   |
|---|---|
| What are the features of a letter?      | Address, date, Dear Sir/Madam, Yours Sincerely, signature etc.  |
| What are the features of a speech?      | a highly engaging and motivational <b>opening</b><br>a well-structured <b>argument</b> with several main points that include <i>objection handling</i> a dynamic and memorable <b>conclusion</b>  |
| What are the features of an article?    | Headlines, subheadings, bullet points   |
| What does MADFOREST stand for?          | Metaphor, Anecdote/Alliteration, Direct Address, Flattery, Ornate Language, Repetition/Rhetorical Questions, Emotive Language, Superlatives, Triplication (Triples)   |
| When was the Victorian era?             | 1837 - 1901   |
| Who is Malala Yousafzai?                | Malala is a Pakistani female education activist, film and television producer, and the 2014 Nobel Peace Prize laureate at the age of 17.  |
| Which gaol/jail was Oscar Wilde put in? | Reading Gaol/jail   |
| What did the 1834 poor law introduced?  | The new Poor Law ensured that the poor were housed in workhouses, clothed and fed. Children who entered the workhouse would receive some schooling. In return for this care, all workhouse paupers would have to work for several hours each day. |

### Key Skill: Writing about Context

Comparing non-fiction texts can focus on the similarities between the texts - things they have in common. You can also contrast texts and focus on their differences - things that set the texts apart from each other. You could compare and contrast the following:

- **Form** – What types of text (letter, news report, etc) are they?
- **Purpose** – What job (persuading, informing, advertising) is each text doing?
- **Audience** – Who is the intended reader of the text?
- **Subject matter** – What are the texts about?
- **Language choices** – What kinds of words, images or rhetorical devices are being used?
- **Structure** – How is the text ordered?
- **Tone** – What is the overall tone or mood of the writing?
- **Viewpoints and values** – How does each writer view their subject?

Non-fiction texts are all around us and comparing them can help you become more aware of how language is being used in society. Comparing non-fiction texts can often prompt you to notice things that you might not have considered about a text in isolation.

### Skills Practice

Task 1: Can you write a letter of content to respond to this statement: 'Homework is too long, difficult and time consuming. Students shouldn't have to spend 4hours each night on home learning: it causes stress.'



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

| Keyword            | Definition  |
|--------------------|---|
| <b>Victorian</b>   | The historical period during the reign of Queen <b>Victoria</b> , from 20 June 1837 until her death on 22 January 1901. |
| <b>Enlighten</b>   | give (someone) greater knowledge and understanding about a subject or situation   |
| <b>Feral</b>       | (especially of an animal) in a wild state, especially after escape from captivity or domestication                      |
| <b>Angelic</b>     | exceptionally beautiful, innocent, or kind  |
| <b>Vulnerable</b>  | exposed to the possibility of being attacked or harmed, either physically or emotionally                                |
| <b>Innocuous</b>   | not harmful or offensive  |
| <b>Shepherded</b>  | give guidance to (someone), especially on spiritual matter  |
| <b>Detain</b>      | keep (someone) in official custody, typically for questioning about a crime or in a politically sensitive situation     |
| <b>Incredulous</b> | (of a person or their manner) unwilling or unable to believe something  |
| <b>Privilege</b>   | a special right, advantage, or immunity granted or available only to a particular person or group                       |
| <b>Warder</b>      | a guard in a prison   |
| <b>Remit</b>       | cancel or refrain from exacting or inflicting (a debt or punishment).   |

| Keyword             | Definition   |
|---------------------|--|
| <b>Resonating</b>   | evoking images, memories, and emotions.  |
| <b>Comparison</b>   | a consideration or estimate of the similarities or dissimilarities between two things or people  |
| <b>Perspective</b>  | a particular attitude towards or way of regarding something; a point of view   |
| <b>hind leg</b>     | refers to either of the two legs located at the back part of a four-legged animal's body   |
| <b>Testimony</b>    | evidence or proof of something   |
| <b>Barbarity</b>    | extreme cruelty or brutality   |
| <b>Vigorous</b>     | strong, healthy, and full of energy  |
| <b>Virtue</b>       | behaviour showing high moral standards   |
| <b>Abducted</b>     | take (someone) away by force or deception; kidnap  |
| <b>Unscrupulous</b> | having or showing no moral principles; not honest or fair  |
| <b>Trafficking</b>  | unlawfully transport or coerce (someone) in order to benefit from their work or service, typically in the form of forced labour or sexual exploitation |



- Create a critical response to a poem
- Use quotes and evidence
- Analyse the language techniques and their effects





## Knowledge



This scheme of learning will introduce you to some important cultural capital about the world-changing world wars and the evil that has surrounded human behaviours.

We will explore together a variety of pro and anti-war poems to inform our knowledge of 'Power and Conflict' poems that we will study in Year 10/11 as part of your KS4 GCSE course.

Poems should include: Dulce Et Decorum Est, Who's for the Game, The Deserter, Wound in Time etc.

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

### Challenge Activities

Task 1: Research into the following contextual areas. Can you make a poster for each one to show your understanding?

**Propaganda** is a form of communication that aims to influence or persuade an audience to support a certain cause or point of view. It can involve spreading ideas, information, or rumors to help or harm a person, cause, or institution. Propaganda is often biased and can selectively present facts to encourage a particular reaction

**Anti-War Poetry** is a type of poetry that expresses a rejection of war and its associated policies, ideologies, and fantasies.

**Conscientious Objectors** is someone who refuses to serve in the military or work for the military-industrial complex based on their moral, ethical, or religious beliefs.

### Career Focus - War Correspondent



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

#### Topic Links



This topic links to:

- Yr 7 Poetic Forms
- Yr 9 Power and Poetry
- GCSE Conflict Poetry
- Unseen Poetry

#### Additional Resources



To further practise and develop your knowledge



The Trenches



Dulce analysis



Propaganda



Has poetry distorted our view of WWI?

- Create a critical response to a poem
- Use quotes and evidence
- Analyse the language techniques and their effects



## Skills

### Retrieval Practice



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

### Key Skill: Reading Analysis

To analyse poetry, we use the following metacognitive techniques to help guide our ideas and understanding of the poem.

|                                  |   |
|----------------------------------|---|
| <b>Poetry Comprehension 5 Ws</b> | <b>Who?</b> Who is speaking? Who is being addressed?<br><b>What?</b> What event is being described?<br><b>Where?</b> Where are the ideas set?<br><b>When?</b> Time / Past memories & present feelings?<br><b>Why?</b> Why has the poet created these ideas? What was their intention? |
| <b>Essay Paragraph structure</b> | Statement, Evidence/method, Infer, Zoom, Effect   |
| <b>SLIMS</b>                     | Structure, Language, Imagery, Movement, Sound   |

### Skills Practice - Writing



Task 1: Create a story board for the Adam and Eve story in the Christian Bible.

Task 2: Write a letter home about life in the trenches.

Task 3: Using your knowledge of analysing poetry, write a poem of your own.



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



| Keyword            | Definition   |
|--------------------|--|
| Anaphora           | the repetition of a word or phrase at the beginning of successive clauses.                               |
| Assonance          | the repetition of the same or similar vowel sounds within words, phrases, or sentences.                  |
| Caesura            | a break or pause in the middle of a line of verse.   |
| Connotation        | an idea or feeling which a word invokes for a person in addition to its literal or primary meaning.      |
| Denotation         | the literal or primary meaning of a word.  |
| Dramatic Monologue | a poem written in the form of a speech by an imagined character, where they describe a series of events. |
| Enjambment         | the continuation of a sentence without a pause beyond the end of a line, couplet, or stanza.             |
| Imagery            | visually descriptive or figurative language, especially in a literary work.                              |
| Juxtaposition      | the fact of two things being seen or placed close together with contrasting effect.                      |
| Poetic Form        | a set of rules that dictate the rhyme scheme, structure, rhythm, and meter of a poem.                    |

| Keyword     | Definition   |
|-------------|--|
| Plosives    | a plosive speech sound. The basic plosives in English are t, k, and p (voiceless) and d, g, and b.   |
| Rhythm      | the measured flow of words and phrases in verse or prose as determined by the relation of long and short or stressed and unstressed syllables. |
| Rhyme       | correspondence of sound between words or the endings of words, especially when these are used at the ends of lines of poetry.                  |
| Romanticism | a literary and artistic movement marked chiefly by an emphasis on the imagination and emotions.  |
| Sibilance   | a figure of speech in which a hissing sound is created within a group of words through the repetition of "s" sounds.                           |
| Sonnet      | a poem of fourteen lines using any of a number of formal rhyme schemes, in English typically having ten syllables per line.                    |
| Speaker     | the voice of the poem, similar to a narrator in fiction.   |
| Stanza      | a group of lines forming the basic recurring metrical unit in a poem; a verse.   |
| Syllable    | A syllable is a part of a word that contains a single vowel sound and that is pronounced as a unit.  |
| Symbolism   | an artistic and poetic movement using symbolic images and indirect suggestion to express mystical ideas, emotions, and states of mind.         |
| Volta       | Italian word for "turn." In a sonnet, the volta is the turn of thought or argument.  |





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.

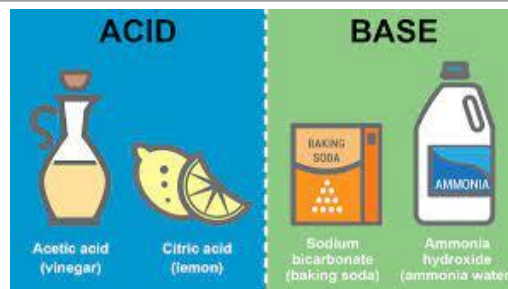
- Identify acids and alkalis using the pH scale
- Explain how neutralisation is used to make salts



| Keyword          | Definition  |
|------------------|---|
| Physical changes | When a substance changes state. It does not make any new chemical substances forming.   |
| Chemical changes | When a chemical reaction occurs leading to the formation of new elements or compounds.  |
| Acid             | A sour tasting substance with a pH 1-6.   |
| Alkali           | A soapy substance with a pH 8-14 (liquid)   |
| Base             | A soapy substance with a pH 8-14 (solid)  |
| Neutral          | A substance that is neither acidic or alkaline with a pH of 7                           |
| Strong acid      | An acid with a pH of 1-3  |
| Weak acid        | An acid with a pH of 4-6  |
| Strong alkali    | An alkali with a pH of 11-14  |
| Weak alkali      | An alkali with a pH of 8-10   |
| pH scale         | A scale used to indicate how acidic or alkaline a substance is.                         |
| Indicator        | A substance that changes colour in the presence of a chemical i.e. acid or alkali.      |
| Neutralisation   | A reaction between an acid and an alkali to produce salt and water (neutral substance). |

## Key Concepts

### Acids and Alkalis



Acids are a group of chemicals that contain a H<sup>+</sup> ion examples of which are vinegar, Hydrochloric acid and Sulphuric acid. Citric acid is found in citrus fruit and is an example of a weak acid.

Alkalis are a group of chemicals that contain the OH<sup>-</sup> ion and have a soapy feel. An example is Sodium Hydroxide. In solid form they are called bases and in solution alkalis.

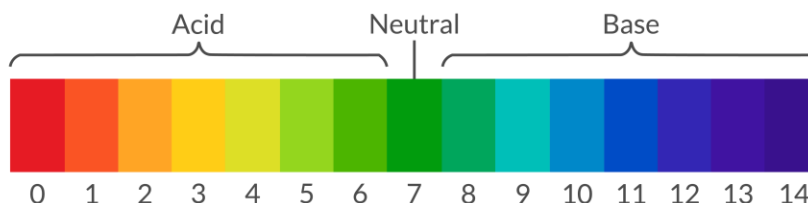
### The pH scale

The pH scale is a number scale from 0 to 14. It tells us how acidic or alkaline an *aqueous solution* is. The pH scale is used to classify *solutions* as acidic, alkaline or neutral.

Neutral solutions are exactly pH 7.

Acidic solutions have pH values less than 7. The closer to pH 0, the more acidic a solution is.

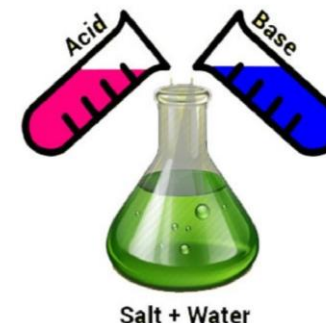
Alkaline solutions have pH values more than 7. The closer to pH 14, the more alkaline a solution is.



**The pH Scale**

### Neutralisation

A chemical reaction happens if you mix together an acid and a base (alkali). The reaction is called a neutralization because a neutral solution is made if you add just the right amounts. The products are salt and water.



Salts have scientific names such as sodium chloride (table salt). The names of salts can be worked out from the acid and the alkali that react to make them.

1. The first word is the metal taken from the name of the alkali.
2. The second word ends with ide or ate and is taken from the name of the acid. Hydrochloric acid = chloride, Sulphuric acid = sulphate, Nitric acid = nitrate.

- Identify acids and alkalis using the pH scale
- Explain how neutralisation is used to make salts

## Retrieval Practice



| Questions   | Answers  |
|---|--|
| What is a physical change?  | When a substances change state; solid, liquid or gas (reversible)  |
| What is a chemical change?  | When substances react to form new substances (irreversible)  |
| What is an acid?  | A sour tasting substance with a pH 1-6.  |
| What is an alkali?  | A soapy substance with a pH 8-14   |
| What is the difference between a base and an alkali?              | A base is a solid and an alkali is a liquid (base dissolved in water)                                    |
| What is the difference between a dilute or concentrated solution? | A dilute solution has more water added so it is weaker. Vice versa.                                      |
| What is an indicator?   | A substance that changes colour in the presence of a chemical i.e. acid or alkali.                       |
| What colour/number is a strong acid on the pH scale?              | Red-Orange, pH 1-3   |
| What colour/number is a strong alkali on the pH scale?            | Purple, pH 12-14   |
| What colour/number is a weak acid on the pH scale?                | Yellow, pH 4-6   |
| What colour/number is a weak alkali on the pH scale?              | Blue, pH 8-10  |
| What colour/number is neutral on the pH scale?                    | Green, pH 7  |
| What is a neutralisation reaction?                                | The reaction between an acid and an alkali to produce a neutral solution. They produce water and a salt. |

## Career Focus - Where could this take you?



I am an environmental chemist so I need to understand the fate and behaviour of chemicals in the environment. I have to evaluate their effects (hazards) and risks to human health and other organisms in the environment. My work is done through desk-based research, fieldwork and/or laboratory work, including measurements, data interpretation and computer modelling. Environmental chemists may be exposed to contaminants and hazardous conditions in the course of their work and wear appropriate personal protective equipment.

## Challenge Activities



1. Produce a poster to show the pH scale: acids and alkalis, with examples of substances for each pH.
2. Produce flash cards to describe the key terms: reversible, irreversible, chemical change and physical change.
3. Make a model of atoms, elements, compounds and mixtures.
4. Antacid tablets are taken to relieve indigestion, the tablets contain alkalis such as calcium hydroxide.
5. Describe how you think antacid tablets may work.

## Topic Links



This topic links to:

- States of matter
- Chemical Reactions
- Energy

We will also be practising how to

- Carry out practical work safely using the scientific method
- Calculate the rate of a reaction

## Additional Resources



To further practise and develop your knowledge see:

Educake - <https://www.educake.co.uk/>  
 BBC Bitesize - <https://www.bbc.co.uk/bitesize/topics/zypsgk7>  
 YouTube Cognito - <https://www.youtube.com/watch?v=vt8fB3MEzLk>

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

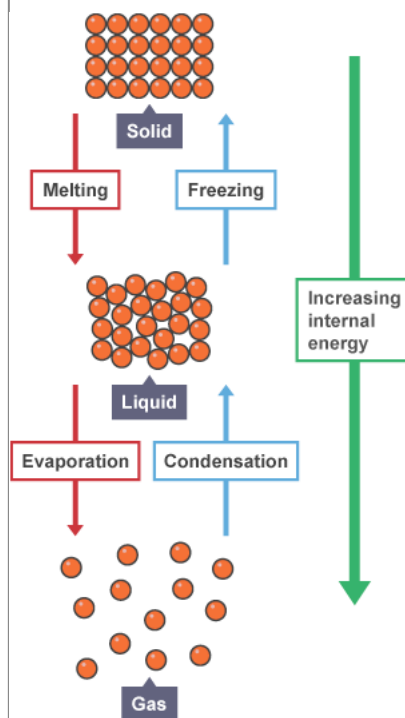
- Describe internal energy
- Explain how energy transferred via conduction, convection and radiation

| Keyword              | Definition  |
|----------------------|---|
| Temperature          | How hot a substance is  |
| Energy               | The ability for something to do work. Measured in Joules (J)      |
| Internal energy      | The total kinetic and potential energy of particles in an object. |
| Chemical store       | Organ systems all working together to form a living organism.     |
| Thermal energy       | Heat energy   |
| Conduction           | The transfer of thermal energy through a material                 |
| Convection           | The transfer of thermal energy through a heated fluid             |
| Fluid                | A substance that can flow (liquid and gas)                        |
| Density              | The mass of a substance per unit of volume                        |
| Infrared radiation   | When energy is transferred by radiation (waves)                   |
| Emit                 | To give off, or discharge.  |
| Electromagnetic wave | A wave that travels through space and carry energy.               |

## Temperature

The hotter an object, the more energy it has in its *thermal energy store*. The average speed of particles in a hot substance is greater than in a cold substance. Temperature is how hot a substance is. Temperature is commonly measured in degrees Celsius (°C) using a thermometer. Temperature depends on the average speed of the particles in a substance.

## Internal Energy



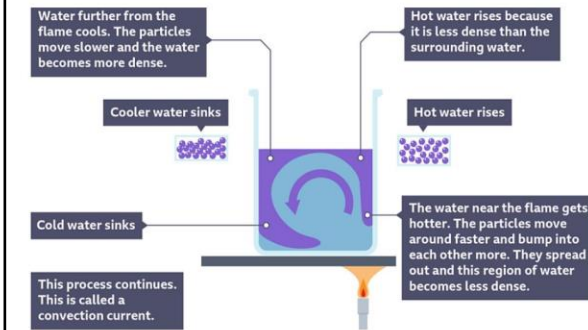
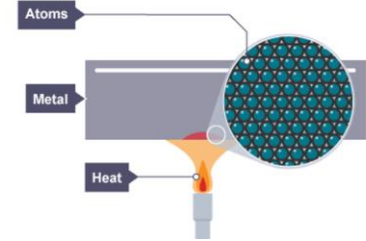
When a material is heated or cooled, two changes may happen to the particles within the material:

Chemical bonds between the particles may form, break or stretch. There is a change in the chemical potential store of energy in the material.

The material will heat up or cool down as the particles within it gain or lose speed. There is a change in the thermal store of energy within the material.

## Conduction and Convection

Conduction is where energy is transferred by the vibrating particles in a substance. The energy is transferred from a hotter region to a cooler region. Conduction happens fastest in solids because the particles are close together.



Convection occurs in fluids; a fluid is a substance that can flow. Both liquids and gases are fluids. The particles in a fluid can move around from one place to another. Hotter fluids are less dense and rise upward, cooler fluids are denser and sink downwards.

## Radiation



All objects transfer energy to their surroundings by *infrared radiation*. The hotter the object, the more infrared radiation it emits. Infrared radiation is a type of electromagnetic wave. Unlike conduction and convection, there are no particles involved. This means that energy can be transferred by radiation when there are no particles, like the vacuum of space.



## Retrieval Practice

| Questions  | Answers   |
|--|---|
| What equipment do we use for measuring temperature?      | Thermometer   |
| What does temperature depend upon?                       | The average speed of the particles in a substance.                                |
| What changes occur when a substance is heated or cooled? | Chemical bonds may break, form or stretch. The particles change speed.            |
| Which substances have the most internal energy?          | Gases   |
| Which substances have the least internal energy?         | Solids  |
| What is conduction?                                      | When energy is transferred through vibrating particles in a substance.            |
| Which substances conduct heat the fastest?               | Solids because the particles are close together.                                  |
| What is convection?                                      | When heat is transferred through a fluid.   |
| What is a fluid?   | A substance that can flow. This is gases and liquids.                             |
| What happens to fluids when they are heated?             | They become less dense and particles rise.  |
| What happens to fluids when they cool?                   | They become denser and particles sink.  |
| What is radiation?                                       | When objects transfer energy to their surroundings.                               |
| What is the electromagnetic spectrum?                    | The range of all types of electromagnetic radiation including infrared radiation. |

## Career Focus - Where could this take you?



I am a heat engineer. I install and service heating and air conditioning systems in buildings like offices, schools and hospitals. I can also find and fix faults as well as carry out routine maintenance on systems. Doing a college course helped me learn some skills to get a trainee engineer apprenticeship. These skill include knowledge of building and construction, problem solving skills, analytical thinking skills and the ability to use my initiative.

## 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 different ways heat is transferred in the home. Produce a leaflet to inform people how this works.
4. Produce a Venn diagram to compare conduction, convection and radiation.
5. Find out more about ? and what they do. What qualifications would you need for this career? What current research is being done? What is the salary?
6. Construct a fact file about a famous historical scientist that helped us to understand more about how heat energy is transferred.

## Topic Links



This topic links to other science topics such as

- Energy
- Particle model

We will also be practising how to

- Collect data and analyse data collected during investigations

## Additional Resources



To further practise and develop your knowledge see:

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

YouTube Cognito –  
[https://www.youtube.com/watch?v=Eizsm5V8c\\_c](https://www.youtube.com/watch?v=Eizsm5V8c_c)  
<https://www.youtube.com/watch?v=je-qc7sxYzU>



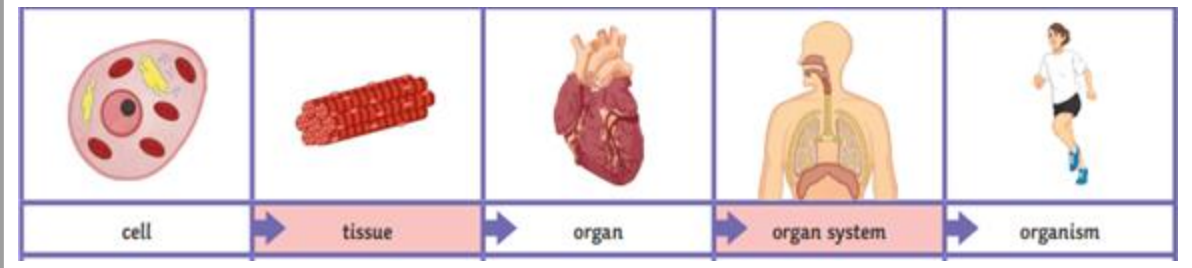


The aims of the sequence of learning are to ensure that all students:

- Describe a healthy diet and the consequences of diet imbalances
- Explain how the digestive system, enzymes and bacteria help us to digest food

| Keyword          | Definition  |
|------------------|---|
| Tissue           | A group of cells with a similar structure and function.   |
| Organ            | A group of tissues carrying out a particular function.  |
| Organ System     | Organs working together as a system.  |
| Organism         | Organ systems all working together to form a living organism.   |
| Digestive system | A system that breaks down large molecules into smaller molecules and absorbs them into the bloodstream. |
| Oesophagus       | A muscular tube that connects the mouth to the stomach  |
| Pancreas         | An organ that produces the digestive enzymes that are added to the small intestine                      |
| Bile             | A substance produced by liver that emulsifies fats (separates into small droplets)                      |
| Enzyme           | A biological catalyst that speeds up reactions in the body.   |
| Balanced diet    | A system that transports substances around the body in the blood.                                       |
| Alcohol          | The organ that pumps blood around the body.   |
| Nicotine         | A condition where the arteries supplying the heart become narrowed or blocked.                          |

## Principles of Organisation

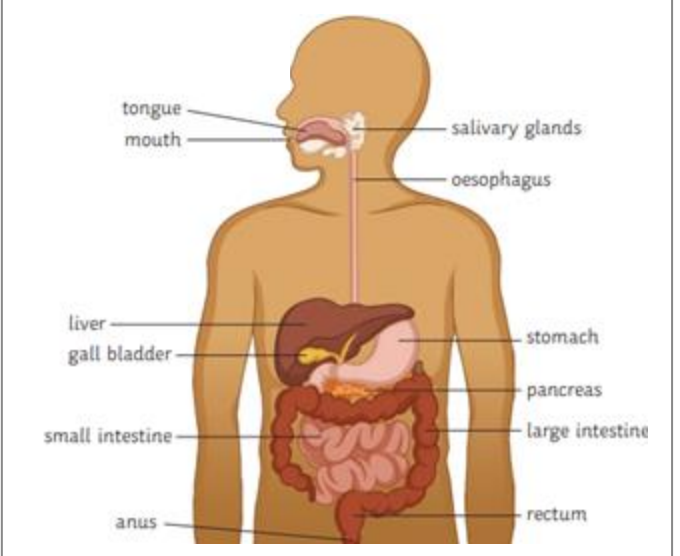


## Healthy Eating

A balanced diet contains the correct amount of all food groups.

The food groups are: carbohydrates, lipids, proteins, vitamins, minerals, dietary fibre and water. Each food group has its own role to play within a healthy diet.

## The Digestive System



The purpose of the digestive system is to break down large molecules into smaller soluble molecules that can then be absorbed into the bloodstream. The rate of these reactions is increased by enzymes.

## Enzymes

An enzyme is a biological catalyst; enzymes speed up chemical reactions without being used up. This happens because it lowers the activation energy required for the reaction to occur. They have an active site which the molecules fit into and they will only work on certain substrates.

## Smoking and Alcohol

Alcohol is a depressant slows down messages in the nervous system, which includes the brain, spinal cord and other nerves. This often makes you feel less alert and lengthens reaction times. Alcohol is found in beer, wines and spirits such as vodka. Excessive alcohol consumption can lead to heart disease, stroke, liver disease, high blood pressure and cancer,

Nicotine is the most addictive drug in tobacco. It is found in both cigarettes and some e-cigarettes/vapes. The nicotine from smoking cigarettes or vaping causes the person to want more. Nicotine also increases heart rate and blood pressure, and makes narrower than normal. This can lead to .



- Describe a healthy diet and the consequences of diet imbalances
- Explain how the digestive system, enzymes and bacteria help us to digest food

## Retrieval Practice



| Questions  | Answers   |
|--|---|
| What are the levels of organisation?                   | Cell, Tissue, Organ, Organ System, Organism.  |
| Name the parts of the digestive system.                | Specialised structures that perform various jobs inside cells.  |
| What is the function of the mouth?                     | The teeth mechanically digest food, and the salivary glands add the enzyme amylase to break down starch                   |
| What is the function of the stomach?                   | Creates digestive juices containing enzymes and breaks down food.   |
| What is the function of the small intestine?           | Break down food and absorb nutrients into the bloodstream   |
| What is the function of the large intestine?           | To absorb water.  |
| Enzymes are biological catalysts. What does this mean? | Speeds up specific chemical reactions inside the body.  |
| What are the different types of digestive enzymes?     | Carbohydrases that break down carbohydrates, Proteases that break down protein and Lipases that break down fats (lipids). |
| What does a healthy diet consist of?                   | The correct quantities of carbohydrates, lipids, proteins, vitamins, minerals, dietary fibre and water.                   |
| What lifestyle factors can affect health?              | Diet, Smoking, Alcohol and Exercise.  |
| What is the addictive chemical in tobacco?             | Nicotine  |
| What diseases can alcohol consumption lead to?         | Heart disease, stroke, liver disease, high blood pressure and cancer  |
| What is cancer?  | Uncontrolled cell growth that leads to the formation oftumours.   |

## Career Focus - Where could this take you?



**I am a pathologist.** This is a medical healthcare provider who examines bodies and body tissues, I am also responsible for performing lab tests. I help other healthcare providers reach diagnoses and I play an important role in the treatment team. I could work in an NHS or private hospital or in a laboratory. My job is exciting and fulfilling because I get to use my problem solving and analytical skills to come up with a better solution to fight viruses, infections, and other life-threatening conditions.

## 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 the organ systems of the body in more detail. What is the nervous system? How does the endocrine system work?
4. Carry out some research into how diet can influence our likelihood of developing diseases.
5. Find out more about pathologists and what they do. What qualifications would you need for this career? What current research is being done? What is the salary?
6. Construct a fact file about a famous historical scientist that helped us to understand more about the human body and how it works.

## Topic Links



This topic links to other science topics such as

- Cells
- Energy

We will also be practising how to

- Construct a leaflet using imperative language to warn about the dangers of smoking and alcohol

## Additional Resources



To further practise and develop your knowledge see:  
Educake - <https://www.educake.co.uk/>

YouTube Cognito -

- <https://www.youtube.com/watch?v=VO2OkpwAG9o>
- <https://www.youtube.com/watch?v=vMI46qGOMDw>
- <https://www.youtube.com/watch?v=6jz9WvfKDVc>
- <https://www.youtube.com/watch?v=UN5BIPfMUkg>

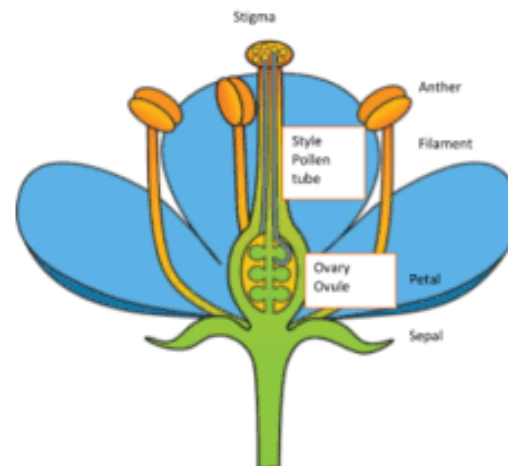
- Describe how plants reproduce
- Explain how seeds are dispersed



| Keyword       | Definition   |
|---------------|--|
| Adaptation    | The features that a cell has that allow it to perform a particular function.                         |
| Gamete        | A sex cell.  |
| Pollen        | A powdery substance produced for sexual reproduction.  |
| Ovule         | Female sex cell, found in the ovary.   |
| Pollination   | the transfer of pollen from the stamens to the stigma, either in the same flower or a different one. |
| Fertilisation | The joining of a pollen grain nucleus and an ovule to form an embryo                                 |
| Seed          | Structure containing the embryo of a new plant   |
| Fruit         | The ovary develops into this after fertilisation   |
| Carpel        | All the female parts of a flower, made up of the stigma, style and ovary                             |
| Stamen        | All the male parts of a flower, made up of the anther and filament.                                  |
| Anther        | The part of a stamen that contains the pollen.   |
| Filament      | The stalk that supports the pollen bearing anther.   |
| Stigma        | The sticky bulb in the center of flowers and collects pollen.  |
| Style         | Connects the ovary to the stigma.  |
| Ovary         | Found at the base of the petals and contains the ovules.   |

## Key Concepts

### Plant reproductive Systems



### Pollination

- Pollen is carried by insects or blown by the wind from one flower to another. This process is called pollination.
- Pollen reaches the new flower and travels to the ovary where it fertilises egg cells (ovules) to make seeds. This is fertilisation.



### Seed dispersal

The seeds are scattered by animals or the wind. This process is called dispersal. Some of the seeds will grow into new plants.

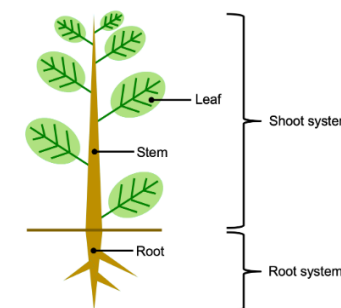
The seeds are dispersed in different ways:

- By the wind
- By an explosion or quick release
- By sticking to animal's fur
- By animals eating them



### Plant organs

Plants have different organs to do different jobs:



Leaves – carry out photosynthesis and make food

Roots – absorb water and anchor the plant

Stem – supports the leaves and transports water to them

Flower – carries out sexual reproduction





- Describe how plants reproduce
- Explain how seeds are dispersed

## Retrieval Practice



| Questions   | Answers   |
|---|---|
| Name the organs of a plant.   | Leaves, roots, stem and flower.   |
| Name the parts of a flowering plant.                                    | Stem, Sepal, Ovary, Ovule, Filament, Anther, Petal, Stigma, Style.  |
| Name the male parts of a plant  | Stamen – anther and filament.   |
| Name the female parts of a plant  | Carpel – style, stigma and ovary.   |
| How does a flowers scent and bright colours help it to reproduce?       | Scent and colour help it to attract insects.  |
| Where are pollen grains found?  | The anther at the top of the stamen.  |
| What is pollination?  | When pollen is transferred by insects or wind from one flower to another.   |
| Where must the pollen reach for fertilization to occur?                 | The stigma at the top of the carpel.  |
| What happens to the pollen once it reaches the new flower?              | It travels down the style until it reaches the ovary and fertilizes the ovule.  |
| When a flower is fertilized it dies, but what does its ovary grow into? | The fruit which contains the seeds.   |
| How are seeds dispersed?  | Via animals, the wind or water.   |
| Why are seeds dispersed?  | To allow them to grow away from one another to give them space and so they don't compete for sunlight, water and nutrients. |
| What is germination?  | When a seed begins to grow.   |
| What do seeds need to grow?   | Warmth, water and a safe location.  |

## Career Focus - Where could this take you?



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

## Challenge Activities



1. Make flash cards for the key words.
2. Create a mind map of the plant reproduction topic. Remember to include key words and links between information.
3. Produce a fact file or a poster about plant reproduction and seed dispersal. Include some examples of unusual plants.
4. Write a letter to a farmer about the best methods to use for crop production, explaining why insects are vital for food production.
5. Research a scientist that helped us understand plants better.

## Topic Links



This topic links to:

- Specialized cells
- Interdependence

We will also be practising how to

- Research information
- Test different methods of seed dispersal

## Additional Resources



To further practise and develop your knowledge see:

Educake - <https://www.educake.co.uk/>  
BBC Bitesize - <https://www.bbc.co.uk/bitesize/topics/zybbkqt>  
YouTube Cognito - [https://www.youtube.com/watch?v=Gf\\_WLrXAqIA](https://www.youtube.com/watch?v=Gf_WLrXAqIA)



# 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

- Describe the Middle Passage
- Evaluate the reasons for the abolition of the Slave Trade

| Keyword              | Definition   |
|----------------------|--|
| Slave                | A person owned by another person. They are forced to work and are not paid.                                      |
| The Trade Triangle   | The system of trade between Europe, West Africa and the Americas.  |
| Trade                | The buying, selling and exchanging of goods and services.  |
| Capture              | To take hold or gain control by force or through planning.   |
| Shackles             | Iron chains used to fasten the legs or hands of a slave or prisoner.   |
| Branding             | To mark a person or animal with a hot iron to show ownership.  |
| Middle Passage       | The second ( <i>middle</i> ) journey of the Trade Triangle, carrying slaves from Africa to the Americas.         |
| Auction              | A place where people can buy and sell things, often people bid against each other and the highest bid wins.      |
| Plantation           | A large area of farmland, or estate, planted with particular crops like tobacco, cotton and sugar cane.          |
| Overseer             | Person on a plantation paid a wage to organise the work of the enslaved people (manager).                        |
| Resistance           | To strive against, or refuse to comply (sometimes secretly) with a decision or established ways of doing things. |
| Underground Railroad | Network of routes that were underground and helped slaves escape.  |
| Quaker               | A member of the Religious Society of Friends (a Christian movement).   |
| Campaign             | Working in an organised way to achieve a goal.   |
| Abolish / Abolition  | To bring to an end; in this context to end the slave trade and slavery.  |

## Key Concepts

### The Triangular Trade:

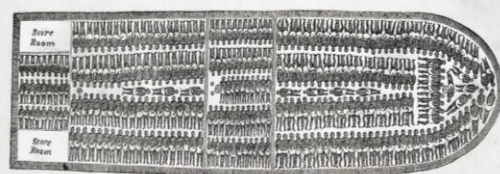
The trade of slaves was called the triangular trade because it had trade in three stages, making a triangle between Europe, Africa and the Americas. Manufactured goods were taken from Europe, e.g. textiles and weapons to Africa, where they were exchanged for slaves. Then slaves were transported from Africa to the Americas. This was known as the 'middle passage'.

The final route was to take goods produced as a result of slave labour in the Americas, e.g. sugar, cotton and tobacco back to Europe.



### Capture and Transport:

Early slave traders from Europe occasionally raided the coast of Africa in order to capture slaves but this was both dangerous and often ineffective. Instead European slave traders formed allegiances with African rulers to trade goods for slaves. Africans who became slaves therefore were most likely to have been captured in raids or wars by fellow Africans and then sold into slavery. Other possible, but less likely routes into slavery, included being kidnapped, being found guilty of a crime, or offending tribal customs.



### The Middle Passage:

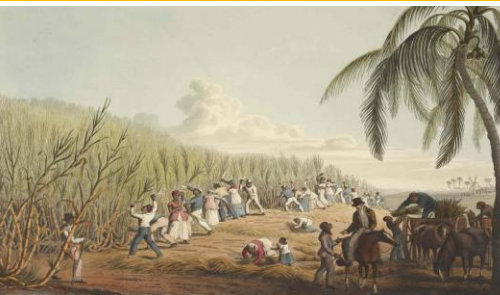
The Middle Passage was the alternative name for the second part of The Trade Triangle which involved a 12-week journey across the Atlantic Ocean. Slaves were kept in appalling conditions: They were packed into the ship in very tight quarters below deck and were chained lying down for most of the journey. Many died during the journey due to illnesses like dysentery and injuries they received from the crew. Very little food was given to them – just enough to keep them alive. If they disobeyed orders, they were severely punished. Some threw themselves overboard in order to avoid their fate.

### Plantations:

After being bought at auction, slaves were transported to their new "home" on a plantation, given a new name and branded with their new owners initials to reinforce the fact that they were now 'property'. On these plantations slaves were forced to complete the many varied tasks required to grow and refine cash crops like sugar, cotton and tobacco. Slaves of course worked for nothing, therefore maximising profit, and had no rights; their owners could do whatever they wanted with their 'possessions'. Slaves lived in 'huts' and conditions were tough, with working hours being extremely long – sometimes 18-20 hours a day. Punishments could be severe if you were brave enough to disobey your master and could include being whipped, maimed or even killed.

### Auction:

The auction block was where slaves were sold to the highest bidder. Children and babies would often be taken away from parents, and families would never see each other again. Slaves were sold in cattle-like auctions to Europeans looking for labour to work on their plantations. A strong, healthy male could fetch up to \$500, whilst any slave who was ill, older, or sometimes children would be sold for discount as part of a 'Scramble'.



### Rebellion and Resistance:


There were various forms of resistance, including: running away, breaking tools and ruining crops. One of the most famous rebellions was in Virginia; a slave called Nat Turner killed his master and his family along with 55 other white people. Turner was executed as a result.

### Abolition of the Slave Trade:

In 1787, the Society for the Abolition of the Slave Trade was set up to campaign against slavery. They boycotted sugar, distributed leaflets and presented petitions to Parliament through their representative MP - William Wilberforce. As well as political action, religious outcry and economic concerns about rising costs of running plantations all played a part in Britain abolishing The Slave Trade in 1807, then finally slavery in 1833.



- Describe the Middle Passage
- Evaluate the reasons for the abolition of the Slave Trade

| Retrieval Practice  |   |
|--|---|
| Questions  | Answers   |
| What goods were traded at each point of the Triangular Trade?  | Manufactured goods like textiles and weapons were taken from Europe. Slaves were taken to the Americas. Then sugar, cotton and tobacco were taken back to Europe. |
| What kind of conditions did slaves endure during the Middle Passage?                                   | Slaves were chained, lying down in a stuffy and smelly environment. They were given very little food and diseases were common,                                    |
| How were slaves prepared for auction?  | They were hosed down with water, scrubbed clean and any wounds were disguised with pine tar.  |
| What happened to a slave once they had been sold at auction?   | Most often separated from their family, their names were changed and they were branded. They were now the property of their masters.                              |
| Name two ways slaves could rebel / resist:   | Slaves would resist by refusing to eat, running away, breaking tools and damaging crops. They also used the 'underground railroads'.                              |
| How were slaves punished if they disobeyed their masters?  | Slaves were often whipped or put in shackles and sometimes they could be maimed or even killed.   |
| What methods of campaigning took place against slavery?  | Boycotting sugar, distributing leaflets, petitions and speeches in Parliament   |
| How did Olaudah Equiano help the Abolition Movement?   | Equiano wrote an autobiography, wrote letters and campaigned. He also gave speeches and spoke to members of the public about his life as a slave.                 |
| Why did people oppose the abolition of the Slave Trade?  | Many people and Members of Parliament (MP's) were slave owners or owned plantations.  |
| When was the Slave Trade and Slavery abolished in Britain?   | The Slave Trade was abolished in Britain on 25 <sup>th</sup> March 1807 and later slavery was abolished on 28 <sup>th</sup> August 1833.                          |

## Career Focus - Where could this take you?



**I am an MP:** My job is to represent my local area and constituents. I do this by making speeches in Parliament and highlighting campaigns that I feel strongly about or that have been brought to my attention by the public. I will debate and discuss my views, present petitions and challenge the Government. I vote on new laws and changes to existing laws.

## Challenge Activities

1. Research and write a newspaper article about the Slave Ship Zong. There is a link in the additional resources box to help you get started, but you should conduct your own in-depth research. Don't forget to include a picture with your article.
2. OR Research Tacky's rebellion in 1760 and write a newspaper report explaining what happened and why? Think about the causes, events and consequences.
3. Produce a mini-project on some aspect of the topic we are currently studying. You might choose to:
  - Write a biography of a slave who survived or was freed (i.e. Olaudah Equiano).
  - Create a PowerPoint on the campaigns that have occurred over time.
  - Write a poem about the abolition of the Slave Trade.

## Topic Links

This topic links to other Humanities topics such as:

- Queen Elizabeth I
- Industrial Revolution
- Africa
- Christianity

## Additional Resources

To further practise and develop your knowledge see:  
<https://www.theguardian.com/law/2021/jan/19/the-story-of-the-zong-slave-ship-a-mass-masquerading-as-an-insurance-claim>  
<https://www.bbc.co.uk/bitesize/guides/zqv7hyc/revision/9>  
<https://www.bbc.co.uk/bitesize/topics/z2qj6sg>  
<https://www.bl.uk/learning/histcitizen/campaignforabolition/abolitionbackground/abolitionintro.html>



- Explore changes and continuity in Britain between 1750 and 1900.
- Explain why British Industry was so successful.

- Analyse a variety of sources to explain what life was like for children working in the mills.
- Evaluate positive and negative features of working in the Mill Industry.

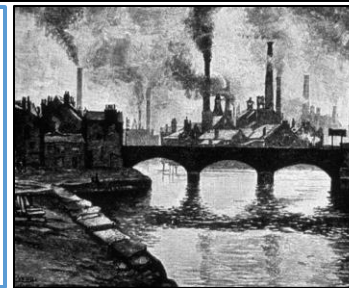
| Keyword               | Definition  |
|-----------------------|---|
| Industrial Revolution | A time of great change in Britain between 1750 to 1900.   |
| Population            | Number of people living in a particular place.  |
| Invention             | Something new which is created - it can be an object or an idea.  |
| Economy               | System of how money is used within a particular country.  |
| Agriculture           | Process of producing food by farming of certain plants or raising animals.  |
| Poverty               | Lack of basic human needs such as clean water, nutrition, healthcare, education and shelter.                            |
| Industry              | Process of making products by using machines and factories.   |
| Factory               | Place where machines are used to produce goods  |
| Mass production       | Production of many products in one go, e.g. textiles  |
| Patent                | Gives the inventor the right to exclude others from making, using or selling their invention for a certain time period. |
| Rural                 | Countryside living with not many houses or people.  |
| Urban                 | Towns and cities where many people live and work.   |
| Orphan                | A child who has lost both parents.  |
| Apprentice            | A young person who works for someone in order to learn their skill.   |
| Parliament            | Lawmaking group, in the UK government.  |

## Key Concepts

### Industrial Changes Overview:

Britain was the leader of the Industrial Revolution and **1750 to 1900** saw major changes:

**Transport** moved from horse power to steam power. **Production** moved from things being made in houses (domestic) to being made in **factories**. People moved from the **countryside** to the **city**. **Inventions** improved production in factories. Britain became the centre of the trading world.



### Reasons for the Industrial Revolution:

Population increase = demand for more food and clothes. Clothes made quicker on machines = factories built. Use of coal for steam = power for machines. Transport gets quicker = easier to get goods to shops. Rise of key people = inventions and money invested in machines. All of this means more industrial change.



### Changes in agriculture

1750 farms were still using medieval ways of planting crops and rearing animals. As population increased, new machines, crops and ways of farming were introduced, e.g. bigger animals and steam powered threshers for wheat. Small fields were replaced and hedges removed. This meant farm workers lost their jobs and many had to move to towns and cities.



### Changes in population:

In 1750, the total population of the UK was about 11 million. This grew to about 42 million by 1900! Moving from rural to urban areas also saw a huge rise; in 1750, only 20% of the population lived in towns, but by 1900 it was 70%. This meant far more people were working in new industries but this also caused problems because they all needed food and homes. As a result, poverty increased, overcrowding was an issue and by 1900, London alone, had 4.5 million inhabitants.



### Factory working conditions

**Long working hours:** Shifts were usually 12-14 hours a day, 6 days a week and sometimes half day on a Sunday.  
**Low wages:** A typical wage for male workers was about 15 shillings (75p) a week, but women and children were paid much less, with children only receiving three shillings (15p). For this reason, employers preferred to employ women and children. An even better option was to take on an apprentice, as they didn't receive any wages, but were given lodgings, food and clothing instead.  
**Cruel discipline:** People were beaten, whipped and hit with sticks or a leather strap. Other punishments included nailing children's ears to the table and dowsing them in water to keep them awake. Fines and not allowing toilet breaks were also common  
**Accidents:** Children crawling into dangerous, unguarded machinery led to many accidents including loss of limbs and death.  
**Health:** The air was full of dust, which led to chest and lung diseases. The loud noise made by machines also damaged workers' hearing.

**The Steam Engine – 1717:** Thomas Newcomen invented the first steam engine. It would later be improved by James Watt which meant steam engines could replace water and horsepower in a wide variety of industries, which allowed more factories to be built.

### Some inventions of the Industrial Revolution

**The Water Frame - 1769:** Richard Arkwright invented a machine, powered by water, to spin cotton into yarn, quickly and easily. His machines did not need skilled operators so anybody could work on them.

**The Locomotive – 1814:** Richard Trevithick was a pioneer in early steam engine technology. He developed a new high-pressure steam engine which could be used to reliably move goods and passengers. This invention made transport much easier and quicker.



- Explore changes and continuity in Britain between 1750 and 1900.
- Explain why British Industry was so successful.

- Analyse a variety of sources to explain what life was like for children working in the mills.
- Evaluate positive and negative features of working in the Mill Industry.

| Retrieval Practice   |  |
|--|--|
| Questions  | Answers  |
| Explain how education changed between 1750 and 1900?   | Education changed by the implementation of schools; schools were built near factories in order to encourage people to move to areas where there were factories.  |
| Name one improvement in health and medicine in Britain by the 1900s:                                       | The Industrial Revolution between 1750 and 1900 brought on major advances in medicine, especially in the fields of hygiene and vaccinations for previously deadly diseases.  |
| Explain what is meant by the term raw materials?   | Raw materials are resources that are extracted from the earth to make products. They can also be taken from plants and animals.  |
| Why was British industry so successful? Give two reasons.  | The British Industry was successful because the bigger population meant more workers for the factories. Food became cheaper so people's diets improved so less people died. There were more people to buy the goods and to work, due to more raw materials, coal, iron clay, etc. industry could thrive. Improvements in transport, like, ships and the railway. |
| How did Richard Arkwright's waterframe help factories and production?                                      | The water frame allowed for the mass production of cotton thread as it allowed production to be quicker and the thread stronger, which in turn led to the proliferation of factories and the rise of the industrial economy.   |
| Tell me two ways you could become a child worker in the mills  | You could become a child worker as if you were poor, you would be sold into it, or if your family lived in the housing on site of the factory you would work there after finishing school.   |
| What job roles were children given in the mills? Give two examples   | Children would be scavengers picking up material, thread and clearing dirt and dust, They could also work as piecers, who stood at the spinning machines and repaired broken thread  |
| What were working conditions like in the mills and factories?  | Long working hours, low wages, cruel discipline, fierce systems of fines, accidents, risks to health   |
| How did the Factory Act of 1819 improve conditions in the mills?   | No child under the age of nine to work. Children between the ages of nine and 13 years: 48-hour week; must go to school part-time. This Act applied to cotton factories. Once again there was no formal way to enforce this act as no inspectors were created to investigate factories   |
| In your opinion, what was the most significant change during the Industrial Revolution in Britain and why? | I believe the most significant change was the invention of machines in factories to do the work of hand tools because it meant more items could be produced.   |

## Career Focus - Where could this take you?



**I am a Novelist:** My job is to write books of fiction, and sometime non-fiction, creating characters and plots that may be imaginary or based on real events. I have to make sure I have researched the area I want to focus on and plan my ideas, plots and characters. I will then draft, write, edit and proof-read my work.

## Challenge Activities

1. Research the History of local mills in Huddersfield or surrounding areas (within Kirklees, Calderdale and Bradford) and produce a PowerPoint to explain your findings. You must include key information about the mill then and now and include images.
2. Design a board game based around 'factory working conditions'. This should include clues, questions for players to ask, stumbling blocks along the way and then a puzzle to solve to find the winner.
3. Imagine it is the early 1800s; write a report to Parliament explaining why the working day and conditions for people in Britain are unfair. Especially highlight what needs to change for children working in the mills and factories.

## Topic Links Additional Resources

This topic links to other humanities topics such as:

- The Slave Trade
- Jack the Ripper
- The making of the UK
- Twentieth Century World

We will also be practicing how to:

- Use statistical data as a source
- Write a piece of Historical Fiction

To further practise and develop you knowledge see:

<https://www.calderdale.gov.uk/wtw/timeline/1810-1850/1810-1850-1.html>

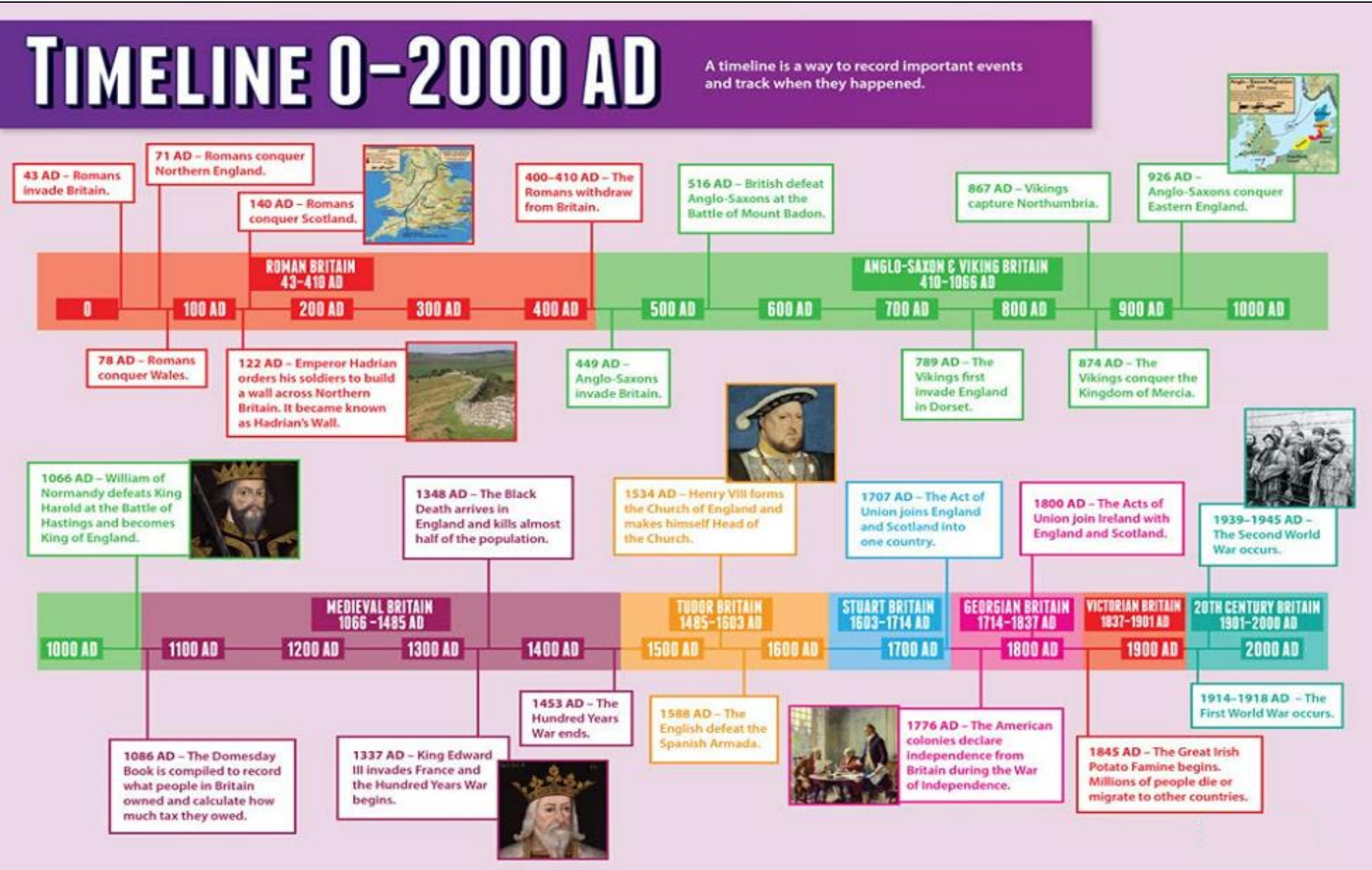
<https://yorkshire.u08.eu/halifax/>

<https://yorkshire.u08.eu/huddersfield/>

[https://huddersfield.exposed/wiki/Newsome\\_Mills,\\_Hart\\_Road,\\_Newsome](https://huddersfield.exposed/wiki/Newsome_Mills,_Hart_Road,_Newsome)



Timeline



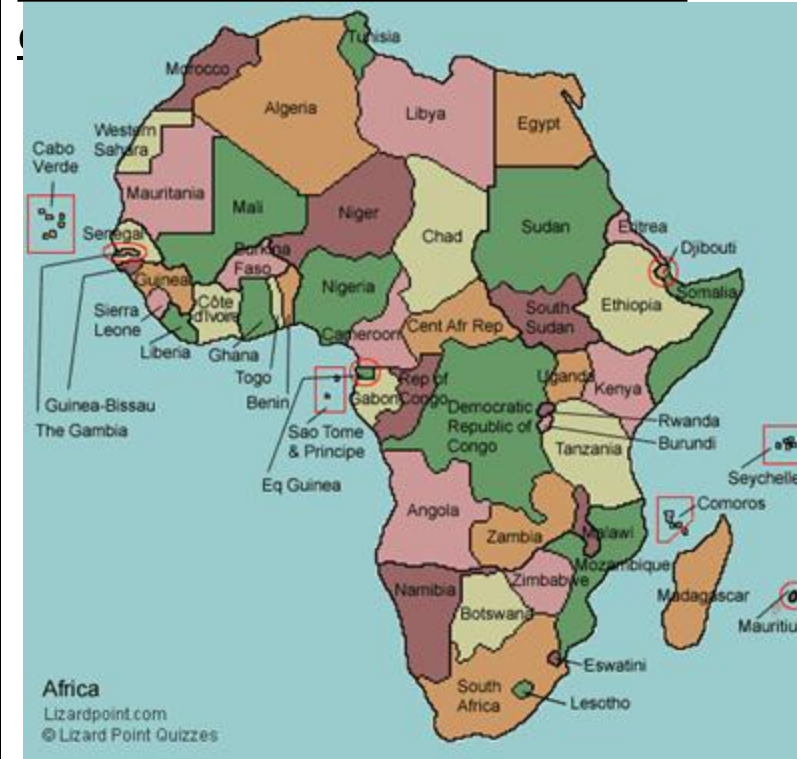


- The aims of the sequence of learning are to ensure that all students:
- Describe the human and physical geography of Africa
  - Explain the colonialism of Africa
  - Evaluate the statement is Africa rich or poor?
  - Explain how plants and animals have adapted to Africa's biomes

| Keyword         | Definition   |
|-----------------|--|
| Adaptations     | The process of change by which an organism or species becomes better suited to its environment |
| Biomes          | A large area with similar climate, plants and animals  |
| Climate         | What the weather in a place is usually like, over the year                                     |
| Colonised       | When people settle in a place and establish political control over it                          |
| Density         | How crowded/packed together an area is   |
| Desert          | A large, dry, barren area, usually having sandy or rocky soil and little or no vegetation      |
| Desertification | Process where fertile land turns to desert, often through overuse                              |
| Distribution    | The way in which something is shared out among a group or spread over an area                  |
| Exploited       | To make use of a place, or people for your own benefit   |
| Independence    | When a country governs itself  |
| Rainforests     | Area with lush vegetation, with many different species of plants and animals                   |
| Relief          | The difference in height from the surrounding terrain  |
| Savanna         | Area with grassy plains and scattered trees  |
| Stereotype      | Fixed opinions people have that do not reflect reality   |
| Tropics         | The region between the tropics of Cancer and Capricorn   |

## Key Concepts

### Africa is a continent and it has 54



### History

Historically, Africa was home to many civilisations, empires and kingdoms (such as Ancient Egypt and Mali Empire). In the 1400's Europeans arrived and traded with Africa for gold, ivory and slaves. Eventually, European countries colonised parts of Africa and in 1884 they carved up Africa into different countries, which they would rule. Over time, these colonies grew tired of being exploited and struggled to gain independence (the first to gain this was Libya in 1951).

### The continents by land area

| Continent     | millions of square km |
|---------------|-----------------------|
| Asia          | 44.6                  |
| Africa        | 30.1                  |
| North America | 24.5                  |
| South America | 17.8                  |
| Antarctica    | 13.2                  |
| Europe        | 9.9                   |
| Oceania       | 8.1                   |

### Africa's natural wealth

Africa has large deposits of aluminium, copper and uranium. It has 10% of the world's known oil deposits. It can grow a wide variety of crops to export (such as tea and coffee). It is also one of the top continents for gold and diamonds.



- The aims of the sequence of learning are to ensure that all students:
- Describe the human and physical geography of Africa
  - Explain the colonialism of Africa
  - Evaluate the statement is Africa rich or poor?
  - Explain how plants and animals have adapted to Africa's biomes

## Key Concepts

### Africa's Population Distribution

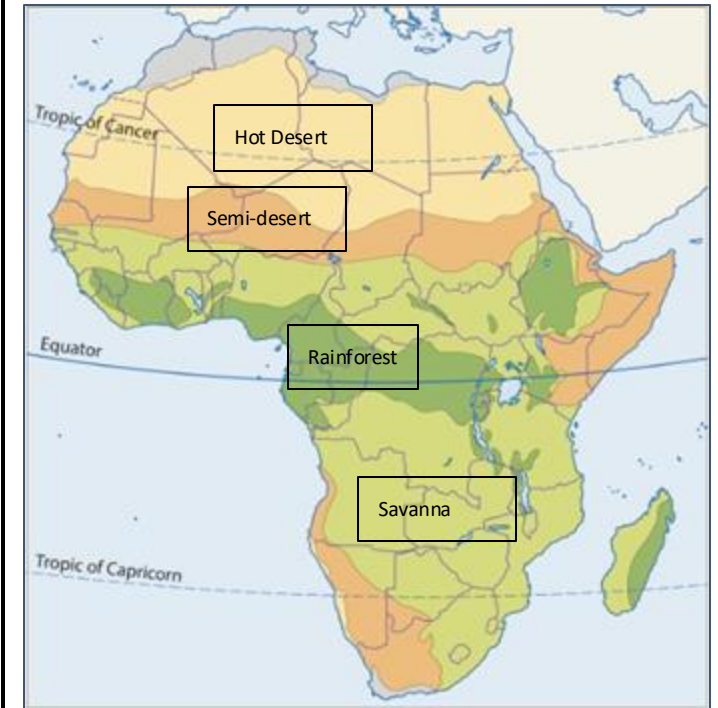


| Key  |   |
|--|---|
| <b>Population density</b><br>people per square kilometre | <b>Major cities</b><br>population in millions |
| over 100   | over 3  |
| 10-100   | 1-3   |
| 1-10   | 0.5-1   |
| under 1  | 0.1-0.5                                       |

### Africa's Physical Features



### Africa's Biomes



#### Semi-desert

- Some rain
- Grass, shrubs and scattered trees, some rodents
- Most people farm - maize, chickpeas, cattle and goats

#### Hot desert

- Hot in the day and little rain
- Plants have to find and store water - some have long tap roots
- Camels, ostriches, snakes and scorpions

### Biomes

#### Savanna

- Warm all year with a wet season
- Grassland and acacia trees
- Lions, elephants and giraffes
- Desertification is a problem here

#### Rainforest

- Warm and wet all year round
- Thousands of species of plants and trees
- Gorillas, snakes, hippos and birds

- Describe the human and physical geography of Africa
- Explain the colonialism of Africa
- Evaluate the statement is Africa rich or poor?
- Explain how plants and animals have adapted to Africa's biomes

## Retrieval Practice



| Questions  | Answers  |
|--|--|
| How many countries is Africa comprised of?         | 54   |
| Name 2 resources which contribute to Africa wealth | Gold and diamonds  |
| Name an ancient African kingdom                    | The Mali Empire  |
| Where is population density highest in Africa?     | On the coast, in particular around Nigeria and Central Africa      |
| What is the longest river in Africa?               | River Nile   |
| Name 2 deserts in Africa                           | Sahara and Kalahari  |
| Name 3 African biomes                              | Hot desert, Rainforest and Savanna                                 |
| Where is the semi-desert biome found?              | North and south of the equator, next to the savanna and hot-desert |
| How do plants adapt to survive in hot deserts?     | They can find and store water - some have long tap roots           |
| What is desertification?                           | Process where fertile land turns to desert, often through overuse  |

## Career Focus - Ecologist



I am an ecologist. I research the impact of human activity, like housing and intensive agriculture, on the environment. I build computer models to predict the effects of development or climate change and research and contribute to legislation and policy. We manage and create wildlife conservation areas, woodland and meadows. We also monitor species and habitats



## Challenge Activities

- Create top trumps cards for 8 African cities- include size, population, highest mountain, number of cities, birth rate and death rate
- Create a model in a box of one of these African biomes (Rainforest, Desert or Savanna Grassland). Include models/images of the vegetation, animals, climate and labels to describe what it is like
- Design a quiz or game to help students remember the names and capital cities of African countries

## Topic Links



This topic links to themes in:

- History - slavery and empire
- Music - African music
- Science – Biomes
- French – Francophonie (French speaking countries)

## Additional Resources



The QR code will take you to the united learning platform website. Click on lessons, Geography, Year 8 Africa



<https://continuityoak.org.uk/lessons>





## Key Concepts: World – Countries and Oceans





- Describe how humans use animals
- Explain/ argue whether animals and humans have equal rights
- Describe at least one religions perspective of abortion
- Evaluate whether or not Carla Foster should have been sent to prison

| Keyword                | Definition  |
|------------------------|---|
| Free Range             | Farming that allows the animals to roam free and behave naturally.  |
| Factory Farming        | An intensive system of farming to rear animals quickly and cheaply indoors with very little space and low welfare.                                      |
| Animal Experimentation | Procedures performed on living animals for purposes of research into basic biology and diseases, assessing the effectiveness of new medicinal products. |
| Inhumane               | Lacking pity, kindness or mercy, being cruel.   |
| Sanctity of Life       | Life is sacred (holy) because it is God-given.  |
| Responsibility         | To be in charge of own actions.   |
| Extinction             | When all members of a species has died and will never exist again.  |
| Vegetarianism          | The belief/view held by people who do not eat meat.   |
| Vegan                  | A person who will not eat or use any animal products.   |
| Exploitation           | Act of selfish needs to take advantage of something to profit or benefit from it.   |

## Key Concepts

### Animal rights

**Animal rights** refers to the idea that animals should be entitled to live lives that are free from **abuse** by humans. In the UK, there are laws designed to protect animals from **cruelty**. For instance, it is a crime to neglect or mistreat an animal, including when an animal is being transported or slaughtered. It is also **illegal** to stage fights between animals for entertainment or to test cosmetics on animals. Some forms of hunting are also illegal and people can be fined or face imprisonment if they cause unnecessary suffering to animals.

### Islam

Muslims believe that animals exist for the benefit of human beings, but also that they should be treated with kindness and compassion.

### Christianity

As humans, they should avoid harming animals because it is sinful. Likewise, they believe that all of God's creatures - human and non-human - are sentient and capable of pain and suffering. And while this belief is not mainstream for all Christians, it does reveal that Christians interpret man's dominion differently.

### Judaism

Judaism places a large amount of stress on the proper treatment of animals because they are seen as a part of God's creation. The Jewish tradition clearly states that it is forbidden to be cruel to animals. Humans must avoid *tsa'ar ba'alei chayim* - causing pain to any living creature.

### Hinduism

Hindu teachings hold the belief that all living creatures have a soul, and that they are a part of the supreme soul. Therefore, all living creatures - both human and non-human - are respected like Buddhist traditions.

### Buddhism

Buddhism is known to be a religion that practices and promotes peace for both human and non-human animals. The First Precept, do not kill or harm others, is highly debated over as it relates to animal suffering.

### Sikhism

Animals should be respected. We are also taught that there is no difference between the human sphere and the sphere of nature. Both were created from the same divine light. This is our golden opportunity to achieve closeness to God and indeed our responsibility that we look after all those life forms.





- Describe how humans use animals
- Explain/ argue whether animals and humans have equal rights
- Describe at least one religions perspective of abortion
- Evaluate whether or not Carla Foster should have been sent to prison



## Key Concepts

### The RSPCA

Founded in 1824, it is the oldest and largest animal welfare organisation in the world and is one of the largest charities in the UK.

We were the first to introduce a law to protect animals and work hard to ensure that all animals can live free from pain and suffering. Through our campaigns we raise standards of care, and awareness of issues, affecting animals today.

Through investigations and prosecutions, we stand up to those who deliberately harm animals to send out a clear message - we will not tolerate animal abuse. Our highly trained officers tackle neglect and cruelty on every level working to stamp out animal cruelty.

Animals can rely on us to rescue them when they need us most. To rehabilitate them wherever possible, provide them with the very best veterinary care and to find them new homes, either through rehoming or release.



### The Five Freedoms

The Five Freedoms of animal welfare present a standard of care that is followed across the globe. Included in the UK government's Animal Welfare Act 2006, they state that every living being deserves the right to humane treatment.

- **Freedom from hunger and thirst** - by ready access to fresh water and a diet to maintain full health and vigour;
- **Freedom from discomfort** - by providing an appropriate environment including shelter and a comfortable resting area;
- **Freedom from pain, injury or disease** - by prevention, rapid diagnosis and treatment;
- **Freedom to express normal behaviour** - by providing sufficient space, proper facilities and company of the animal's own kind; and
- **Freedom from fear and distress** - by ensuring conditions and treatment which avoid mental suffering.

### Animal Welfare Labels UK



#### FREE RANGE

Unfortunately, Free Range is not always the promise of open space and prancing lambs we often imagine. Welfare standards can vary wildly between different free range producers, from small-scale egg farmers with hens in a field to industrial producers who adhere to the minimum standards.

#### FACTORY FARMING

Industrial farming involves large-scale intensive production of crops and animals for human consumption. The most extreme example is factory farms, where animals are reared year-round in huge numbers. They are bred to grow quickly and are fed on cheap food. Farmers are continually pushed to produce more for less.

#### ANIMAL EXPERIMENTATION

Animal experiments are widely used to develop new medicines and to test the safety of other products. Many of these experiments cause pain to the animals involved or reduce their quality of life in other ways. If it is morally wrong to cause animals to suffer then experimenting on animals produces serious moral problems. Animal experimenters are very aware of this ethical problem and acknowledge that experiments should be made as humane as possible. They also agree that it's wrong to use animals if alternative testing methods would produce equally valid results.



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| Retrieval Practice  |  |
|---|--|
| Questions   | Answers  |
| What different ways are animals used?                     | Animals can be used as domestic animals such as pets, as well as used for food and in some cases for testing certain products. Animals can also be used as a mean of transport, as well as helping workload. |
| What does vegan mean?                                     | A person who does not eat any food from animals.   |
| What does Buddhism say about animals?                     | Animals need to be respected. Buddhism promote peace and freedom for both animals and humans.  |
| Why is the NCPCA important?                               | NCPCA looks after and cares for animals that are suffering within the world. Their objective is to serve and protect all animals.  |
| Explain the term factory farming.                         | When animals are used for food, but are kept indoors in very small and populated places.   |
| Define the term free range.                               | Farming that allows the animals to roam free and behave naturally.   |
| What is the main statement that all religions believe in? | All animals need to be respected.  |



## Career Focus - Where could this take you?



"I am a free-range farmer, I love to see my animals make the most of the wider space around them. The care and importance of maintaining free animals is vital to provide healthy and ethical produce. Religious Education has given me the skills and knowledge to explore and know more about free-range as well as the benefits it has on the animals as well as identifying ethical views on animal rights."

## Challenge Activities



- Create a leaflet for someone to explain animal rights and why it is important to look and care for animals.
- Design a poster to campaign against animal cruelty.
- Do you think human life is valued more than an animal's life? Explain your question in more detail. Include a quote within your answer.
- Research the history on animal rights. Do you think it has changed over the years?
- How can we protect animals? Explain your answer.

Don't forget!  
Point  
Explain  
Evidence  
(Quote)

## Topic Links



This topic links to other RE topics such as:

- Islam
- Sikhism
- Buddhism

This topic links with other subjects such as:

- Science
- English

We will also be practising how to

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

## Additional Resources



To further practise and develop your knowledge see:

<https://www.bbc.co.uk/bitesize/topics/zkdk382/articles/zns2k>  
<https://study.com/academy/lesson/animal-rights-ethics-arguments.html>



- Describe how humans use animals
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| Keyword                 | Definition   |
|-------------------------|--|
| Fetus                   | A developing baby  |
| Abortion                | The intentional ending of a pregnancy                    |
| Age of consent          | Age at which it is legal to have sex (16 in the UK)      |
| Infertility             | The inability to be able to produce children             |
| Miscarriage             | Natural ending of a pregnancy before the Fetus is viable |
| Pregnancy               | The state of having a fetus within the uterus.           |
| Conscientious Objection | A moral objection to something                           |
| Sanctity of life        | All human life is sacred and a gift from God             |

| Key Concepts  |
|---|
| <p style="text-align: center;"><b><u>The Law on Abortion in the UK</u></b></p> <p>Abortion is lawful in England, Scotland, and Wales provided the criteria in the Abortion Act 1967 are met. In all other circumstances, administering or procuring an abortion is a crime.</p> <p>Abortion is lawful in Northern Ireland provided the criteria in the Abortion Regulations 2020 are met.</p> <p>Unless abortion is necessary to save a woman's life or prevent grave permanent injury, doctors have a right of conscientious objection under the Abortion Act or the Abortion (Northern Ireland) Regulations. At the same time, patients have a right to receive objective and non-judgmental care. Doctors with a conscientious objection should inform patients as soon as possible and must tell them about their right to see another doctor, making sure they have enough information to exercise that right. If it is not practical for a patient to arrange to see another doctor, the doctor must make sure that arrangements are made for another suitably qualified colleague to take over care of the patient.</p> <p>As with all other medical procedures, patients must give the appropriate consent for abortion.</p> <p>Under-16s can consent to an abortion if they are competent to do so. Those with parental responsibility for minors lacking competency can consent to treatment in their best interests on their behalf.</p> <p>Patients, both adult and child, have the right to confidentiality. This cannot be overridden except in exceptional circumstances.</p> <p style="text-align: center;"><b><u>Religious Perspective</u></b></p> <p><b><u>ISLAM:</u></b> Muslims regard abortion as wrong and haram (forbidden), but many accept that it may be permitted in certain cases. All schools of Muslim law accept that abortion is permitted if continuing the pregnancy would put the mother's life in real danger. This is the only reason accepted for abortion after 120 days of the pregnancy.</p> <p>Different schools of Muslim law hold different views on whether any other reasons for abortion are permitted, and at what stage of pregnancy if so.</p> <p><b><u>Judaism</u></b> does not forbid abortion, but it does not permit abortion on demand. Abortion is only permitted for serious reasons. Judaism expects every case to be considered on its own merits and the decision to be taken after consultation with a rabbi competent to give advice on such matters.</p> <p>Strict Judaism permits abortion only in cases where continuing the pregnancy would put the mother's life in serious danger. In such circumstance (where allowing the pregnancy to continue would kill the mother) Judaism insists that the foetus must be aborted, since the mother's life is more important than that of the foetus.</p> <p><b><u>The Church of England</u></b> encourages people to think through the issue of abortion very carefully and recognises that each individual will have differing views on the subject.</p> <p>The Church of England shares the Roman Catholic view that abortion is 'gravely contrary to the moral law'. The Church of England is keen to ensure that as many abortions as possible are carried out as early as possible. However, in the rare exceptions that a termination has to be carried out beyond 24 weeks, it should only take place where there is a serious foetal disability and survival will be for a very short period of time.</p> |



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## The Case Study of Carla Foster

Carla Foster had admitted to illegally procuring her own abortion when she was between 32 and 34 weeks pregnant.

A judge told her last month she would serve half her 28-month term in custody and the remainder on licence, however the Court of Appeal reduced the term to 14 months suspended.

Dame Victoria Sharp, sitting with Lord Justice Holroyde and Mrs Justice Lambert at the London court on Tuesday, called it "a very sad case".

"It is a case that calls for compassion, not punishment," Dame Victoria said.

Foster appeared at the hearing via a video link from Foston Hall prison, Derbyshire.

The mother-of-three from Staffordshire was jailed at Stoke-on-Trent Crown Court on 12<sup>th</sup> June 2023.

The court heard she had moved back in with her ex-partner at the start of lockdown, while pregnant by another man.

She procured pills by post from the British Pregnancy Advisory Service (BPAS) after providing information that led staff to believe she was seven weeks pregnant. Although abortion is legal up to 24 weeks, after 10 weeks the procedure is carried out in a clinic.

On 11 May 2020, after she took the abortion pills, emergency services received a call to say she had gone into labour.

The baby was born not breathing during the call and pronounced dead about 45 minutes later.

Foster was initially charged with child destruction, which she denied.

She later pleaded guilty to an alternative charge of section 58 of the Offences Against the Person Act 1861, administering drugs or using instruments to procure abortion, which was accepted by the prosecution.



Dame Victoria told the court there was "no useful purpose" served by detaining Foster in custody, and added her case had "exceptionally strong mitigation".

Foster's barrister Barry White said there had been a lack of "vital reports" into his client's mental health and the pandemic had added to her existing anxiety.

The Court of Appeal also heard the prison had not allowed Foster any communication with her children during her 35-day incarceration, one of whom is autistic. Mr White highlighted Foster had voluntarily revealed her actions to police, adding: "Had she not done that, it is highly unlikely that she would have ever been prosecuted." Robert Price, from the Crown Prosecution Service, said the original sentence was not "manifestly excessive" and the judge had "correctly made allowances for mitigating factors in this unusually sensitive case".

As well as the 14-month suspended prison sentence, Foster will also have to complete up to 50 days of activity.

In response to the verdict, chief executive of the BPAS Clare Murphy said she was "delighted" the mother would be released from prison and called for a change to the law.

"The court of appeal has today recognised that this cruel, antiquated law does not reflect the values of society today," she said.

"Now is the time to reform abortion law so that no more women are unjustly criminalised for taking desperate actions at a desperate time in their lives."

Right to Life UK, however, urged the government to reject legislation changes and called for a "full inquiry" into how BPAS had come to dispatch Foster's abortion pills.

"Campaigners, led by BPAS... are using this tragic case to call for the removal of more abortion safeguards and the introduction of abortion up to birth across the United Kingdom," said spokesperson Catherine Robinson.

"At at least 32 weeks or around eight months' gestation, [the baby] was a fully formed human child. If her mother had been given an in-person appointment by BPAS, she would still be alive," she added.

- Describe how humans use animals
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## Retrieval Practice



| Questions  | Answers   |
|--|---|
| What is abortion?                                      | Decision to terminate a pregnancy   |
| What is the UK law on abortion?                        | Abortion is legal up to 24 weeks of pregnancy, unless the mother is at risk.  |
| What religions believe that abortion is morally wrong? | All religions believe that abortion is morally wrong.   |
| What is the Sanctity of Life?                          | The belief that all life, no matter at what stage, is sacred and a gift from God.   |
| Who was Carla Foster?                                  | Carla Foster was a British woman who aborted her baby between 32-34 weeks of pregnancy during the 2020 covid pandemic lockdown. She was sent to prison and many ethical debates were raised surrounding this issue. |
| Who can issue an abortion?                             | It can only be a doctor. There would be a proves before one can have an abortion.   |

## Career Focus - Where could this take you?



I am a doctor. I help those who are injured but also may have to help those who seek help for their babies. Understanding the law and moral and ethical debates like abortion is essential when I perform medical procedures on patients and give them medical advice.

## Challenge Activities



- Explain in your own words, what two religions believe about when life begins.
- Research different case studies of abortion cases in the media.
- Design an argument for pro- life and pro- choice

## Topic Links



This topic links to other RE topics such as

- Euthanasia
- Christianity (and other religions)

This topic links with other subjects such as:

- PME
  - Science
- We will also be practising how to
- Argue a point and practise our Voice 21
  - Participate in debates

## Additional Resources



To further practise and develop your knowledge see:

<https://www.bbc.co.uk/ethics/abortion/religion/religion.shtml>







<https://www.nhs.uk/conditions/abortion/>

[https://www.bbc.co.uk/ethics/abortion/child/alive\\_1.shtml](https://www.bbc.co.uk/ethics/abortion/child/alive_1.shtml)



## 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  | <br>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     | <br>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 | <br>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       | <br>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      | <br>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    | <br>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

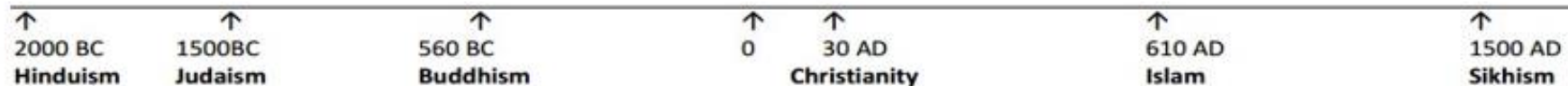
**Atheist** = Someone that doesn't believe in God

**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.



- describe where they and others live.
- talk about the weather.
- Explain what there is to do in their area.

- Give and ask for directions
- Pick out key information in longer texts.
- Use key French sounds accurately.

| Key Questions                                      | English                                   |
|--|---|
| Où habites-tu?                                     | <b>Where</b> do you live?                 |
| Elle est <b>comment</b> ta région?                 | <b>What</b> is your area like?            |
| Qu'est-ce qu'on peut faire à <u>Huddersfield</u> ? | What can you do in Huddersfield?          |
| Quel temps fait-il à <u>Huddersfield</u> ?         | What is the weather like in Huddersfield? |
| Que penses-tu de ta région?                        | What do you think about your area?        |
| Pour aller <b>en ville</b> ?                       | How do I get to town?                     |


## Key Concepts

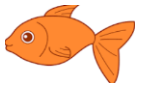

### Giving information about where I live

#### Elle est comment ta région? - What is your region like?

|                |                               |   |  |
|----------------|-------------------------------|---|--|
| Dans ma région | il y a there is/are           | plenty of<br>peu de<br>little, not<br>many<br>trop de<br>too<br>much/many | touristes<br>tourists<br><br>magasins<br>shops               |
| In my region   |                               | un<br>a   | champ - field<br>lac - lake<br>jardin public - park          |
|                |                               | une<br>a  | montagne - mountain<br>plage - beach<br>rivière - river      |
|                | il y'a pas de<br>there are no |   | bâtiments - buildings<br>plages - beaches<br>voitures - cars |

### Essential Phonics and Vocabulary


 **oi - (wa)**

|   |   |   |
|---|---|---|
| <b>poisson</b><br> | <b>Je dois</b><br> | <b>froid</b><br> |
|---|---|---|

#### Où habites-tu? - Where do you live?

|               |                                  |
|---------------|----------------------------------|
| J'habite      | I live                           |
| dans - in     | un village<br>une ville - a town |
| à la – in the | campagne - countryside           |
| au - at       | bord de la mer - seaside         |
| sur – on      | une île - an island              |
| en – in       | France / Suisse<br>ville (town)  |
| au – in       | Maroc<br>Portugal                |

### Pour aller .....? Asking for directions

|                   |   |                                   |   |
|-------------------|---|-----------------------------------|---|
| Allez tout droit. |  | Prenez la première rue à droite.  |  |
| Tournez à droite. |  | Prenez la deuxième rue à gauche.  |  |
| Tournez à gauche. |  | Prenez la troisième rue à droite. |  |

#### Qu'est-ce qu'on peut faire à Huddersfield? - What can you do in Huddersfield?

|                    |   |
|--------------------|---|
| On peut<br>You can | <p>manger des crêpes - eat pancakes<br/>visiter les monuments historiques - visit historic monuments<br/>visiter des grottes - visit caves<br/>aller au cinéma / à la plage / en ville - go to the cinema/beach/town<br/>faire les magasins - go shopping<br/>faire des randonnées - go for walks<br/>faire du canoë-kayak - go canoeing<br/>faire du ski - go skiing</p> |
|--------------------|---|



- describe where they and others live.
- talk about the weather.
- Explain what there is to do in their area.

- Give and ask for directions
- Pick out key information in longer texts.
- Use key French sounds accurately

| Retrieval Practice                         |   |
|--|---|
| Questions                                  | Answers   |
| Où habites-tu?                             | J'habite à <b>Huddersfield</b> dans le <b>nord</b> de <b>l'Angleterre</b> . C'est une grande ville.                                 |
| Elle est comment ta région?                | C'est très <b>joli</b> .<br>Il y a beaucoup de <b>champs</b> et il y a aussi <b>des montagnes</b> .<br>Il n'y a pas de <b>lac</b> . |
| Qu'est-ce qu'on peut faire à Huddersfield? | À Huddersfield on peut <b>visiter les monuments</b> .<br>On peut <b>voir un match de foot</b> .<br>Je pense que c'est <b>super!</b> |
| Quel temps fait-il a Huddersfield?         | En été <b>il y a du soleil</b> et <b>il fait chaud</b> .<br>En hiver <b>il fait froid</b> et <b>il pleut</b> .                      |
| Que penses-tu de ta région?                | Ma région est <b>très belle</b> . Il y a plein de <b>magasins et restaurants</b> .  |
| Pour aller en ville?                       | Tournez à gauche et allez tout droit.   |
| Pour aller au parc?                        | Prenez la première rue à gauche.  |

## Career Focus - Where could this take you?



I am a tour guide. I work with people from all over the world and travel to lots of different cities. It helps me that I can speak another language, because I can communicate with people who live in the country I am touring. I can also give tours in different languages.

## Challenge Activities

1. Research a French town or region. Where is it? What is it famous for? Find out as many details as possible.
2. Make a tourist map of Huddersfield and label things in French.
3. Complete the activities on Active Learn

| Topic Links | Additional Resources |
|-------------|----------------------|
|-------------|----------------------|

This topic links to:

- Holidays
- All about me.
- Hobbies
- Time

To further practise and develop your knowledge see:

- Active learn.



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

- say what sports people play.
- say what activities people do.
- Compare 2 or more things

- give information about daily routine
- recognise parts of the body.
- talk about injury and illness.



## Key concepts – Essential Vocabulary and Grammar.

### Talking about your daily routine.

|                             |                   |
|-----------------------------|-------------------|
| je me lève                  | I get up          |
| je prends le petit déjeuner | I have breakfast  |
| je me douche                | I have a shower   |
| je me coiffe                | I do my hair      |
| je m'habille                | I get dressed     |
| je me lave les dents        | I clean my teeth  |
| je quitte la maison         | I leave the house |
| je me lave                  | I have a wash     |
| je me couche                | I go to bed       |

|                           |                          |
|---------------------------|--------------------------|
| <b>se coucher</b>         | to go to bed             |
| je <b>me</b> couche       | I go to bed              |
| tu <b>te</b> couches      | you (singular) go to bed |
| il/elle <b>se</b> couche  | he/she goes to bed       |
| on <b>se</b> couche       | we go to bed             |
| nous <b>nous</b> couchons | we go to bed             |

### Plus ou moins? Comparing things.

|                  |                 |               |                      |
|------------------|-----------------|---------------|----------------------|
| plus.....<br>que | more<br>...than | moins.... que | Less<br>.....than... |
|------------------|-----------------|---------------|----------------------|

|                                     |   |  |
|-------------------------------------|---|--|
| Je trouve le tennis/ la gymnastique | amusant(e) - fun<br>complicqué<br>complicated<br>divertissant(e)<br>entertaining<br>fatigant(e) - tiring<br>intéressant(e)<br>interesting<br>passionnant(e)<br>exciting | relaxant(e)<br>relaxing<br>violent(e) - violent<br>ennuyeux/euse<br>boring<br>difficile - difficult<br>facile - easy |
| I find tennis / gymnastics          |   |  |

A mon avis/Pour moi, le footing est plus facile que la natation  
In my opinion/For me, jogging is easier than swimming

### Giving advice for healthy living

|                               |   |
|-------------------------------|---|
| Il faut<br>You must           | travailler dur - work hard<br>manger équilibré - eat healthily<br>boire beaucoup d'eau - drink lots of water<br>avoir de l'assurance - be confident<br>être motivé(e) et déterminé(e)<br>be motivated and determined<br>aller à la salle de fitness - go to the gym<br>dormir huit heures par nuit - sleep for 8 hours a night<br>faire d'autres activités aussi - also do other activities |
| Il ne faut pas<br>You mustn't | fumer de cigarettes - smoke cigarettes<br>consommer de drogue - take drugs  |

### Ça va?– discussing illness and injury.


|                                      |      |  |
|--------------------------------------|------|--|
| <b>Ça va?</b>                        |      |  |
| J'ai mal<br>I have a sore            | au   | bras - arm<br>jambe - leg<br>dos - back<br>genou - knee<br>nez - nose<br>pied - feet |
| je me suis blessé(e)<br>I've hurt my | à la | bouche - mouth<br>gorge - throat<br>tête - head                                      |
|                                      | à l' | épaule - shoulder<br>oeil - eye<br>oreille - ear                                     |
|                                      | aux  | yeux - eyes  |
| j'ai - I have                        |      | de la fièvre - fever<br>la grippe - flu<br>un rhume - a cold                         |



### Essential Phonics

|             |             |              |               |
|-------------|-------------|--------------|---------------|
|             | <b>eu</b>   |              | <b>ou</b>     |
| <b>bleu</b> | <b>deux</b> | <b>genou</b> | <b>bouche</b> |
|             | <b>2</b>    |              |               |



| Retrieval Practice  |  |
|--|--|
| Questions  | Answers  |
| Décris –moi ta routine.  | Je me lève <u>à sept heures</u> et <u>je m'habille.</u>  |
| Tu te couches à quelle heure?  | Je me couche à <u>onze heures.</u>   |
| Est-ce que tu fais du sport?   | Je fais <u>de l'équitation</u> parce que c'est <u>formidable.</u>  |
| Quel est ton opinion de <u>golf</u> ?  | <u>Le golf</u> est moins <u>intéressant</u> que le <u>rugby</u><br><u>Le golf</u> est plus <u>actif</u> que <u>le snooker.</u> |
| Qu'est-ce qu'il faut faire pour être en forme?   | ✓ Il faut <u>être motivé</u> et <u>bien manger</u>   |
| Qu'est-ce qu'il ne faut pas faire pour être en forme?  | ✗ Il ne faut pas <u>fumer.</u> ✗   |
| Vous allez bien?   | Non, j'ai mal <u>au bras</u> et j'ai <u>une rhume.</u>   |

## Career Focus - Where could this take you?



I am a sports journalist. Speaking a foreign language allows me to be given assignments abroad.  
I have travelled all over the world and I have reported on many international sporting events.

## Challenge Activities

1. Create a poster in French for a local sports centre. Say what sports and activities you can do there. Don't forget opening hours and prices.
2. Research what the most popular hobbies are in France for young people your age. How is this different or is this the same?
3. Complete the Active Learn activities.

## Topic Links Additional Resources

This topic links to:

- My hobbies.
- Healthy Lifestyles.
- Sports
- Food and drink.

To further practise and develop your knowledge see:

- Active Learn

Your teacher can remind you of your login.



### avoir (to have)

j'ai I have  
 tu as you (sing) have  
 il/elle/on a he/she has /we have  
 nous avons we have  
 vous avez you (plural/polite) have  
 ils/elles ont they have (m/f)

### être (to be)

je suis I am  
 tu es you (sing) are  
 il/elle/on est he/she is /we are  
 nous sommes we are  
 vous êtes you (plural/polite) are  
 ils/elles sont they are (m/f)



### Les quatre saisons

Le printemps spring  
 l'été summer  
 l'automne autumn  
 L'hiver winter

janvier  
 février  
 mars  
 avril  
 mai  
 juin  
 juillet  
 août  
 septembre  
 octobre  
 novembre  
 décembre

### The perfect (past) tense

Use this tense to talk about what you did or have done

1. j'ai or je suis                      c'était = it was
2. Past participle

Hier, j'ai bavardé avec mon meilleur ami sur mon portable. Après, j'ai bu un thé. C'était relaxant.



### Past participles

1. -er verbs → remove er + é = regarder → regard- → regardé
2. -ir verbs → remove ir + i = vomir → vom- → vomé
3. -re verbs → remove re + u = perdre → perd- → perdu

### Negatives in the perfect tense

Put **ne...pas** around the part of **avoir** or **être**

Remember **ne** shortens to **n'** before a vowel.

Je **n'ai pas** regardé la télé

Je **ne suis pas** allé(e) en vacances

### Saying "to" or "in" with countries

- Most countries are **feminine**: **en** Tunisie; **en** France; **en** Australie
- A few countries are **masculine**: **au** Canada; **au** Maroc
- A small number of countries are **plural**: **aux** États-Unis
- With **islands** use **à** Vanuatu

### Key Verbs



avoir = to have  
 être = to be

### Key irregular verbs in the past tense

J'ai bu = I drank  
 J'ai fait = I did  
 J'ai vu = I saw  
 J'ai pris = I took  
 Je suis allé(e) = I went

### The near future tense

Use this to talk about what you are **going to do**.

**aller** + infinitive

Je **vais**                      nous **allons**  
 Tu **vas**                      vous **allez**  
 Il/elle **va**                      ils/elles **vont**



### Negative expressions

ne...pas = not  
 ne...jamais = never  
 ne...rien = nothing  
 \*ne shortens to n' in front of a vowel

### Possessive adjectives

mon/ma/mes = my  
 ton/ta/tes = your  
 son/sa/ses = his/hers

### The comparative

Use the comparative to compare two or more things

- plus + adjective + que = more ... than ...
- moins + adjective + que = less... than ...

Le ski est plus amusant que le cyclisme  
 Skiing is more fun than cycling

• The adjective must agree with (match) the first noun  
 La voile est plus fatigante que le tennis  
 Sailing is more tiring than tennis

- With plural nouns use **sont** (are) and not **est** (is)

### Present tense

d'habitude = usually  
 normalement = normally

### Present tense

d'habitude = usually  
 normalement = normally

### Narrative words

d'abord firstly  
 puis then  
 ensuite next  
 après afterwards  
 finalement finally

### Perfect tense

hier yesterday  
 le week-end  
 dernier last weekend  
 l'année dernière last year

### Intensifiers

assez quite  
 très very  
 trop too  
 un peu a little/bit  
 complètement completely  
 vraiment really

### Connectives

et and  
 aussi also  
 ou or  
 mais but  
 avec with

Use the QR codes to revise key vocabulary



The year



-er past tense



Irregular past



Questions



Key verbs



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

- Recognise some differences between school in Germany and the UK.
- Express simple opinion
- Pick out opinions from short reading texts

- Use key German sounds accurately
- Pick out opinions from short listening passages
- Translate short sentences from English to German including adjectives

| Key question                       | Translation                           |
|------------------------------------|---------------------------------------|
| Was lernst du in der Schule?       | What do you learn at school?          |
| Wie heißt deine Schule?            | What is your school called?           |
| Was hast du heute?                 | What do you have today?               |
| Wie findest du.....?               | What do you think about.....?         |
| Was ist dein Lieblingsfach?        | What is your favourite subject?       |
| Was gibt es in der Schule?         | What do you have at school?           |
| Wie findest du deine Schuluniform? | What do you think about your uniform? |
| Wie spät ist es?                   | What time is it?                      |

## Telling the time

- Um **neun** Uhr - at **9** o'clock
- Um Viertel nach **neun** – at **9.15**
- Um halb **zehn** – at 9.30 ( half to **10**)
- Um Viertel vor **zehn** – at **9.45**

## Essential vocabulary and grammar









School subjects. Ich lerne..... I learn.....

|   |  |  |   |
|---|--|--|---|
| <br>a<br>Deutsch    | <br>b<br>Englisch | <br>c<br>Mathe      | <br>d<br>Naturwissenschaften |
| <br>e<br>Informatik | <br>f<br>Erdkunde | <br>g<br>Geschichte | <br>h<br>Sport               |
| <br>i<br>Kunst      | <br>j<br>Musik    | <br>k<br>Theater    | <br>l<br>Technik             |

## Expressing opinions.

Ich mag / ich lerne gern..... ♡♡

Ich mag nicht / ich lerne nicht gern ❌❌ ...

|  |   |   |  |
|--|---|---|--|
| <br>a<br>toll    | <br>b<br>furchtbar | <br>c<br>interessant | <br>d<br>langweilig |
| <br>e<br>einfach | <br>f<br>schwierig | <br>g<br>nützlich    | <br>h<br>nutzlos    |

## Essential Phonics


| sch - sshh  | eu - oy                 | ie- ee                 |
|---|-------------------------|------------------------|
| <b>Deutsch</b><br> | <b>neun</b><br><b>9</b> | <b>Wie</b><br><b>?</b> |

## In der Schule • In school

|                            |                         |
|----------------------------|-------------------------|
| die Lehrerin(-nen)         | teacher (female)        |
| die Deutschlehrerin(-nen)  | German teacher (female) |
| der Lehrer(-)              | teacher (male)          |
| der Sportlehrer(-)         | sports teacher (male)   |
| Was gibt es?               | What is there?          |
| Es gibt einen/eine/ein ... | There is a ...          |
| Es gibt viele ...          | There are lots of ...   |
| das Klassenzimmer(-)       | classroom               |
| der Tisch(-e)              | table                   |
| der Stuhl(-e)              | chair                   |
| der Computer(-)            | computer                |
| das Whiteboard(-s)         | whiteboard              |
| das Poster(-)              | poster                  |
| das Fenster(-)             | window                  |
| die Wand(-e)               | wall                    |
| die Tür(-en)               | door                    |
| der Korridor(-e)           | corridor                |

- Recognise some differences between school in Germany and the UK.
- Express simple opinion
- Pick out opinions from short reading texts

- Use key German sounds accurately
- Pick out opinions from short listening passages
- Translate short sentences from English to German including adjectives

| Questions                          | Model Answers  |
|------------------------------------|--|
| Was lernst du in der Schule?       | Ich lerne <u>Mathe und Englisch.</u>  |
| Wie heißt deine Schule?            | Meine Schule heißt Newsome Academy.  |
| Was hast du heute?                 | Heute ist <u>Montag.</u><br>Ich habe <u>Sport</u> und <u>Biologie.</u>   |
| Wie findest du.....?               | Ich mag <u>Mathe.</u> ♥♥<br>Ich lerne nicht gern <u>Spanisch.</u> ✖✖   |
| Was ist dein Lieblingsfach?        | Meine Lieblingsfach ist <u>Deutsch.</u> Es ist <u>nutzvol.</u>   |
| Was gibt es in der Schule?         | In der Schule gibt es <u>viele Klassenzimmer</u>   |
| Wie findest du deine Schuluniform? | Ich finde meine Uniform <u>cool.</u>   |
| Wie spät ist es?                   | Es ist <u>zwei</u> Uhr.  |
| Wann hast du Mathe?                | Um <u>zehn</u> Uhr.  |

## Career Focus - Where could this take you?




I am a fashion designer. I design and make clothing.  
I use languages to communicate with customers overseas and I do research to see what sells abroad. I can also travel to the fashion fairs throughout the world.

## Challenge Activities



1. Create a graffiti wall about your likes and dislikes at school.
2. Research some differences and similarities about German and British schools.
3. Design your timetable in German. Don't forget the days in German too.


## Topic Links



This topic links to:

1. Colours ( describing pets)
2. Numbers
3. Days of the week
4. Expressing opinions

## Additional Resources



To further practise and develop your knowledge see

- Active Learn

Your teacher can remind you of your login.



# Computing

Our students will:

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



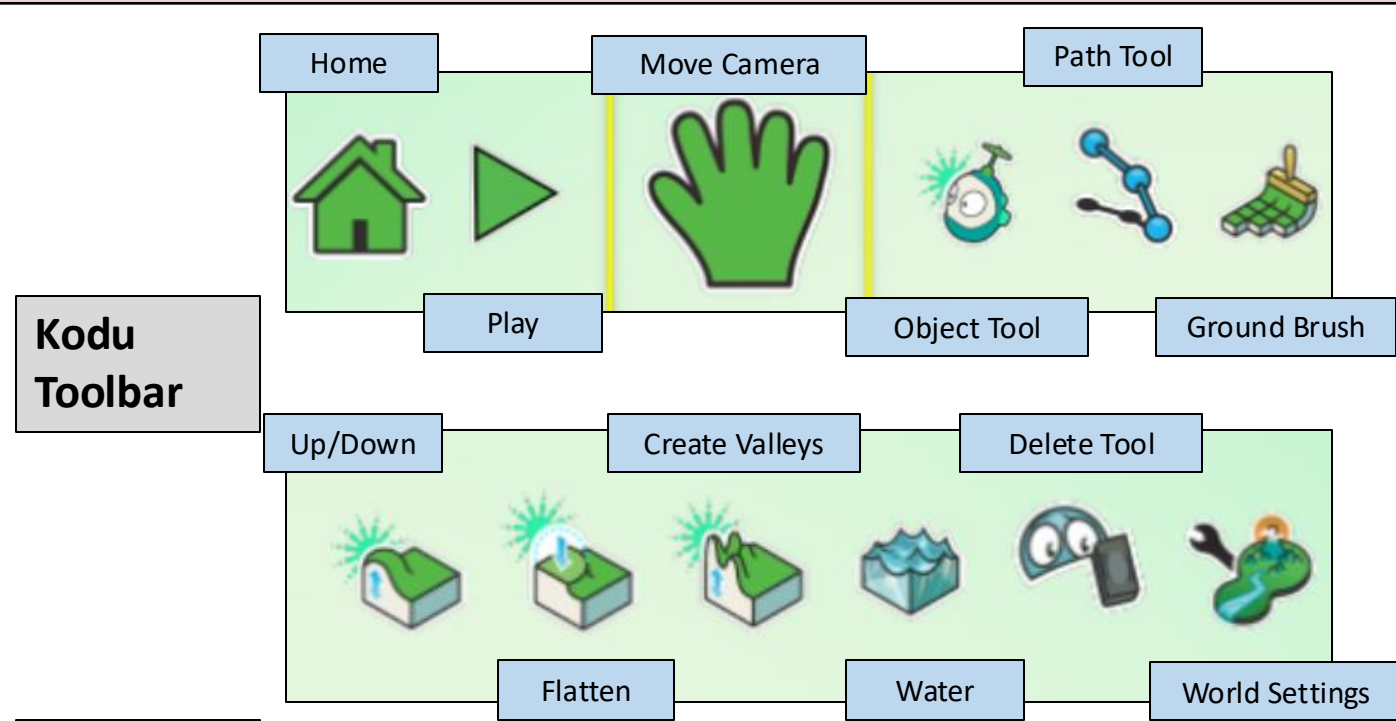
The aims of the sequence of learning are to ensure that all students:

- Demonstrate knowledge of the Kodu tool bar by describing what each button does
- Demonstrate knowledge of using Kodu by describing how to accurately use a range of different features

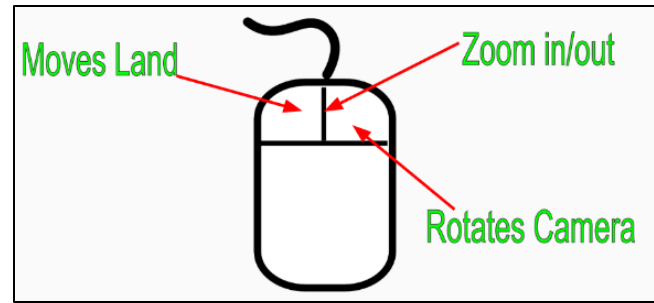
- Apply knowledge of creating rules and using tools in Kodu to develop a range of games
- Apply knowledge from this unit to accurately describe some keywords

| Keyword                 | Definition  |
|-------------------------|---|
| <b>Script</b>           | The set of instructions used to program in Kodu, usually presented as a collection of tiles that connect with one another using "rules".                                    |
| <b>Rule</b>             | Each line of a Kodu program is called a rule. Every rule has a WHEN part and a DO part.   |
| <b>Action</b>           | The first tile in the DO part of a rule is the action. Examples include "move" and "eat".   |
| <b>Object</b>           | A 3D graphic that can be programmed in the Kodu world.  |
| <b>Tile</b>             | Each rectangle that appears in a rule is called a tile. A tile contains a picture and an associated word or phrase.   |
| <b>Sequencing</b>       | The specific order in which instructions are performed in a program. If the sequence is incorrect it may cause errors in a program.   |
| <b>Variable</b>         | A variable represents a location in memory. It is used to hold a value which you assign to it. This can change as you play your game e.g. 'Points' = 10                     |
| <b>Creatable</b>        | Characters that do not exist when you start the game. Instead, they are programmed and spawned by other characters as needed.   |
| <b>Iteration (Loop)</b> | The repetition of a sequence of instructions e.g. use of 'Always' tile in 'WHEN' part of a rule.  |
| <b>Condition</b>        | The first tile in the WHEN part of a rule is the condition. Examples include "see" and "bump". Conditions can either be true or false, depending on the state of the world. |

## Key Concepts



## Mouse Controls



**Object**  
**Who**







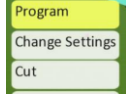



The aims of the sequence of learning are to ensure that all students:

- Demonstrate knowledge of the Kodu tool bar by describing what each button does
- Demonstrate knowledge of using Kodu by describing how to accurately use a range of different features

- Apply knowledge of creating rules and using tools in Kodu to develop a range of games
- Apply knowledge from this unit to accurately describe some keywords



## Retrieval Practice

| Questions   | Answers  |
|---|--|
| Describe how to add more land (terrain) on the Kodu world   |  Find the tool bar at the bottom of the screen and click on the 'Ground Brush' tool. Select the land type and then left-click to add land.  |
| Describe how to add objects on to your terrain  |  Find the tool bar at the bottom of the screen and click on the 'Object Tool'. Click on terrain where you would like to add the object before selecting the object.                           |
| Describe how to program an object in Kodu   |  Make sure you have clicked on the 'Object Tool' before right-clicking on the object that you would like to program. The press the 'esc' key on the keyboard to return back to the Kodu world |
| Describe how to play the game that has been created in Kodu                                       |  Find the tool bar at the bottom of the screen and click on the 'Play' tool.  |
| Describe what the 'Path tool' can be used for on Kodu   | The path tool can be used to create different types of paths on the Kodu terrain or alternatively an invisible path that moving objects can be programmed to follow  |
| Describe what is meant by the term 'iteration' and how to add iteration (loops) in a Rule.        |  When programming an object click on the '+' button on the 'WHEN' section of a Rule (programming line). Select the 'Always' tile to create a loop.  |
| Describe how to program what happens when objects touch a specific type of land on the Kodu world |  When programming an object click on the '+' button on the 'WHEN' section of a Rule. Select the 'On Land' tile and land type before adding tiles to the 'DO' section of a Rule.             |

## Career Focus - Where could this take you?



I am a **Gameplay designer** and work in a team that is responsible for the central part of the game experience – how it plays. My job involves defining the game's structure, its rules, characters, and different modes of play, like story mode or multi-player.

## Challenge Activities



1. Create a multiplayer game in Kodu that uses all of the tiles, scripts and techniques you have covered in this unit. Also, research the internet and include the use of new tiles and scripts that have not been covered in this unit.
2. Create a poster on MS PowerPoint that includes one or all of the following details: how to use variables, iteration, and conditional statements on Kodu to create games
3. Create a short vlog about the types of careers you could get into within the gaming industry. Explain what you would need to study at college and university to pursue these career paths

## Topic Links



This topic links to:

- Computing Curriculum: Understand how instructions are stored and executed within a computer system
- Mathematics: use of logical inference, problem-solving skills and simple algebra

## Additional Resources



To further practise and develop your knowledge see:

- <https://www.kodugamelab.com/>
- <https://www.youtube.com/@KoduTeam>

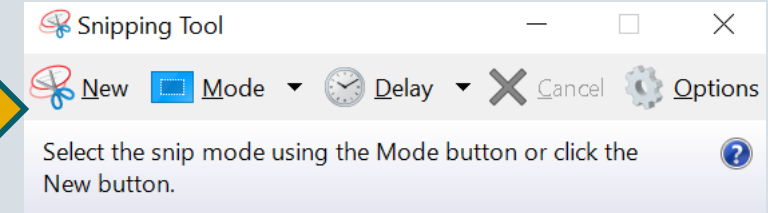
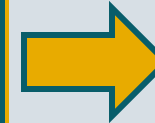
# Computing

## KEYBOARD SHORTCUTS FOR WINDOWS

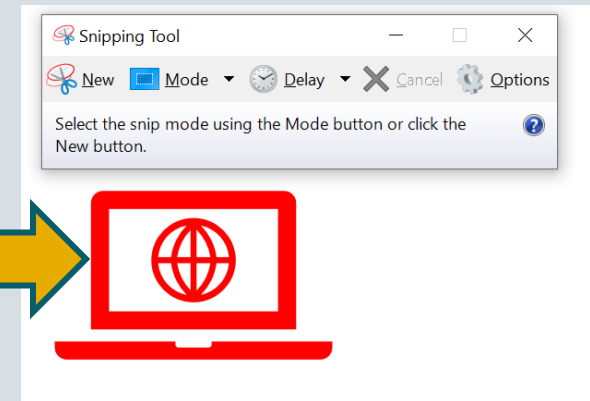
### PROGRAM KEY COMBINATIONS

|   |  |
|---|--|
|  +  = <b>SAVE</b>  |  +  = <b>PRINT</b>     |
|  +  = <b>CUT</b>   |  +  = <b>BOLD</b>      |
|  +  = <b>COPY</b>  |  +  = <b>UNDERLINE</b> |
|  +  = <b>PASTE</b> |  +  = <b>ITALIC</b>    |
|  +  = <b>UNDO</b>  |  |

**1** Windows Key + "Snipping Tool"



**2** New: Select the area

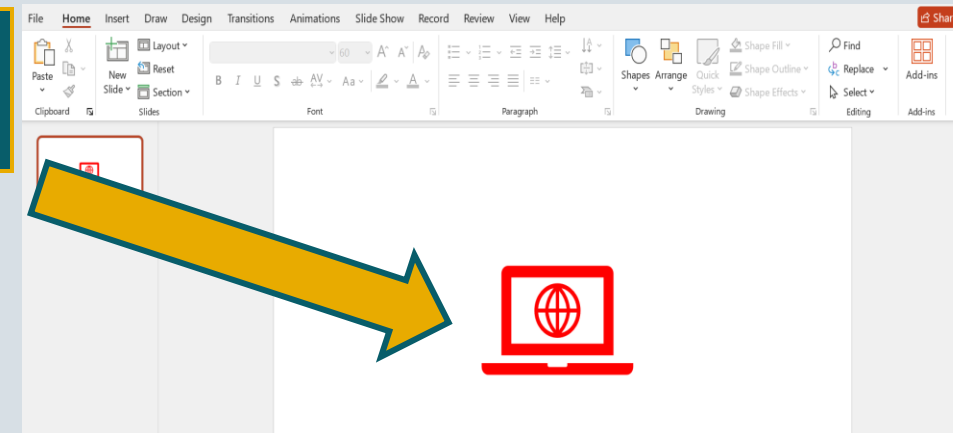
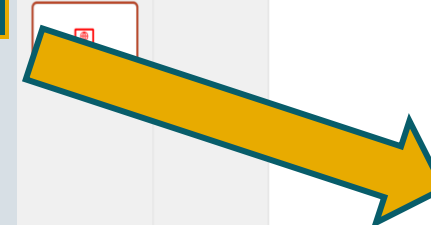


## WINDOWS SYSTEM KEY COMBINATIONS

|  |
|--|
|  = <b>HELP!</b>  |
|  +  = <b>OPEN START MENU</b>              |
|  +  = <b>SWITCH BETWEEN OPEN PROGRAMS</b> |
|  +  = <b>QUIT PROGRAM</b>                 |



**3** CTRL + V



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.

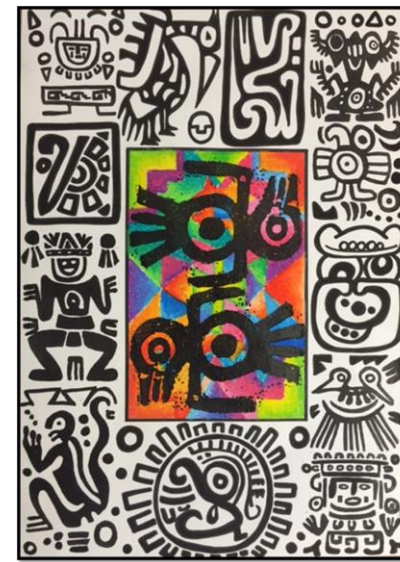


- The aims of the sequence of learning are to ensure that all students:
- have an understanding of what happened to the Aztec Empire
  - develop their observational drawing skills
  - are able to describe the characteristics of Aztec textile designs

- Understand how to produce a relief printing block
- Are able to produce a mixed media background
- produce a repeat print of an Aztec symbol
- are able to talk about their work using subject specific language

| Keyword       | Definition   |
|---------------|--|
| Aztecs        | The Aztecs were a Mesoamerican culture that flourished in central Mexico in the post-classic period from 1300 to 1521. |
| Polytheist    | Someone who believes in many Gods.   |
| Belief        | Trust, faith, or confidence in someone or something.   |
| Symbol        | A mark or character used to represent of an object, function, or process.  |
| Textile       | Any fabric or cloth.   |
| Geometric     | Characterized by or decorated with regular lines and shapes.   |
| Poly printing | A method of relief printing that doesn't use sharp tools.  |
| Repetition    | The act of doing, saying, or writing something again.  |
| Mixed media   | In visual art, mixed media describes artwork in which more than one medium or material has been employed.              |

## Key Concepts



## THE GODS OF THE AZTECS







- The aims of the sequence of learning are to ensure that all students:
- have an understanding of what happened to the Aztec Empire
  - develop their observational drawing skills
  - are able to describe the characteristics of Aztec textile designs

- Understand how to produce a relief printing block
- Are able to produce a mixed media background
- produce a repeat print of an Aztec symbol
- are able to talk about their work using subject specific language



## Retrieval Practice

| Questions  | Answers  |
|--|--|
| Where did the Aztecs live?                                       | The Aztecs were the Native American people who dominated northern Mexico at the time of the Spanish conquest in the early 16th century. A nomadic culture, the Aztecs eventually settled on several small islands in Lake Texcoco where, in 1325, they founded the town of Tenochtitlan, modern-day Mexico City. |
| What food products did the Aztecs introduce to the Spanish?      | Corn, tomatoes, chocolate and vanilla.   |
| Name 3 man-made structures the Aztecs introduced to the Spanish. | Suspension bridges, pyramids, sewage system.   |
| What is relief printing?   | A printing methods where a printing block which has had ink applied to its non-recessed surface, is brought into contact with paper. The non-recessed surface will leave ink on the paper, whereas the recessed areas will not.  |
| Why should you do a test print?                                  | Doing a test print means you have the chance to make sure that your printing block is as you want it to be, and that the ink is loaded enough to leave a good print.   |
| Why does your mixed media background need to be flat?            | So that your printing block will make contact with the surface of the paper, and leave a perfect print.  |

## Career Focus - Where could this take you?



My job is a textile technician. I work in a controlled laboratory doing flammability tests and physical and routine chemical tests on textile products and operation of special mechanical equipment

## Challenge Activities



- Make an Aztec inspired relief painting.  
[Art Attack! - Time Travel - Aztec Art! - Disney Junior UK HD - YouTube](#)
- Make an Aztec symbol/God weaving.  
[Aztec Suns | theMESSYartroom \(wordpress.com\)](#)

## Topic Links



- This topic links to:
- History – Spanish conquest of the Aztec Empire.
  - Geography – Location of the Aztec and Mayan Empires.
  - Mathematics – geometric shapes.

## Additional Resources



To further practise and develop your knowledge see:

[How Hernán Cortés Conquered the Aztec Empire | HISTORY](#)

[See How Indigenous Weaving Styles Are Preserved in Guatemala | National Geographic - YouTube](#)

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

- Demonstrate safe use of tools and equipment.
- Explain a range of Regenerated fibre properties
- Rank Fibers in order of environmental impact.

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

| Keyword           | Definition  |
|-------------------|---|
| <b>Conductive</b> | Having the property of conducting something (especially heat or electricity):   |
| <b>Fabric</b>     | Cloth or other material produced by weaving or knitting fibres:   |
| <b>Synthetic</b>  | Made by chemical synthesis, especially to imitate a natural product:  |
| <b>Fibres</b>     | A thread or filament from which a vegetable tissue, mineral substance, or textile   |
| <b>Electric</b>   | Worked by, charged with, or producing electricity:  |
| <b>Textiles</b>   | A type of cloth or woven/ knitted fabric:   |
| <b>Aesthetics</b> | A set of principles concerned with the nature and appreciation of beauty  |
| <b>Solder</b>     | Solder is a fusible metal alloy used to create a permanent bond between metal   |
| <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>Diode</b>      | Electronic component that conducts current primarily in one direction   |
| <b>Positive</b>   | Electric charge of a positive point charge  |
| <b>Negative</b>   | Electric field of a negative point charge   |
| <b>Laser</b>      | A laser is a device that emits light through a process of optical amplification   |
| <b>Equipment</b>  | Equipment most commonly refers to a set of <u>tools</u> or other objects  |
| <b>Battery</b>    | A device that provides electrical power   |

## Key Concepts

# Types of Fibres



## ACCESS FM

**A AESTHETICS** WHERE DID THE DESIGNER GET THEIR INSPIRATION? COULD THE PRODUCT LOOK BETTER? DO YOU THINK IT LOOKS ATTRACTIVE OR UGLY, WHY? WHAT DOES THE PRODUCT LOOK LIKE? THINK SHAPE, FORM, MATERIALS, SIZE, BEAUTY, UGLINESS

**C COST** IS IT AFFORDABLE TO YOUR CUSTOMER? WILL IT MAKE A PROFIT? IS IT VALUE FOR MONEY? HOW MUCH DOES IT COST?

**C CUSTOMER** WHAT IMPACT WOULD IT HAVE ON A CUSTOMERS LIFE? WHY WOULD A CUSTOMER BUY IT? WHAT MAKES IT SUITABLE FOR THEM? WHO WOULD BUY IT? WHO WOULD USE IT?

**E ENVIRONMENT** WHAT IS THE PRODUCTS IMPACT ON THE ENVIRONMENT? THINK BATTERIES, RETHINK, REFUSE, REDUCE, REUSE, RECYCLE, LIFE-CYCLE. HOW WOULD THE PRODUCT BE DISPOSED OF? IS THE PRODUCT NEEDED OR WANTED? HOW LONG WILL IT LAST?

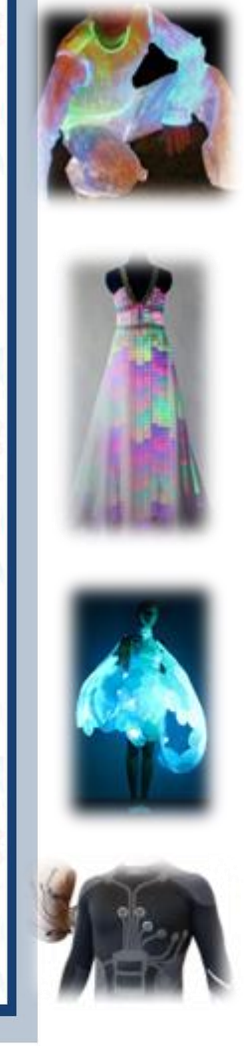
**S SAFETY** IS THE PRODUCT HIGH QUALITY? DOES IT MEET SAFETY STANDARDS? HOW HAS THE DESIGNER CONSIDERED SAFETY? COULD THE PRODUCT HURT ANYONE? ARE THERE ANY SHARP EDGES?

**S SIZE** IS IT AN APPROPRIATE SIZE? WOULD IT WORK BETTER IF IT WAS BIGGER OR SMALLER? DOES IT COME IN DIFFERENT SIZES? HOW BIG IS IT?

**F FUNCTION** DOES THE PRODUCT WORK? COULD THE PRODUCT WORK BETTER? HOW DOES THE PRODUCT WORK? WHY IS THE PRODUCT NEEDED? WHAT DOES THE PRODUCT DO? IS IT EASY TO USE?

**M MATERIALS** WHAT IMPACT COULD THE DESIGNERS CHOICE OF MATERIAL HAVE ON THE ENVIRONMENT? WOULD A DIFFERENT MATERIAL MAKE IT BETTER? WHAT MATERIAL HAS IT BEEN MADE FROM?

# Smart Textiles





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

- Demonstrate safe use of tools and equipment.
- Explain a range of Regenerated fibre properties
- Rank Fibers in order of environmental impact.

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

## Retrieval Practice



| Question  | A1                         | A2                 | A3                      | A4                                      | A5   |
|---|----------------------------|--------------------|-------------------------|---|--|
| A. What is a regenerated fibre?   | Made from a plant          | Made in a factory  | Coal & oil              | A fibre made from cellulose (wood pulp) | A fibre made from Animals                    |
| B. Which fibres are Regenerated?<br>(select more than 1)                  | Wool                       | Lyocell            | Acetate                 | Cotton                                  | Polyester                                    |
| 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. Which fibres are Synthetic?<br>(select more than 1)                    | Polyester                  | Nylon              | Cotton                  | Bamboo                                  | Viscose                                      |
| E. What is a light emitting Diode?  | A type of disco ball       | A Type of switch   | A type of resistor      | LED Light                               | A type of battery                            |
| F. What advantages are they in using a laser cutter? (select more than 1) | Fast                       | Accurate           | Less material wastage   | Cuts multi materials (except metal)     | Cuts complex shapes and fine detail          |

## Career Focus - Where could this take you?



A Lab Technician performs tests and analyses in a laboratory. Lab technicians work in a variety of different fields such as medicine, textiles and Engineering.

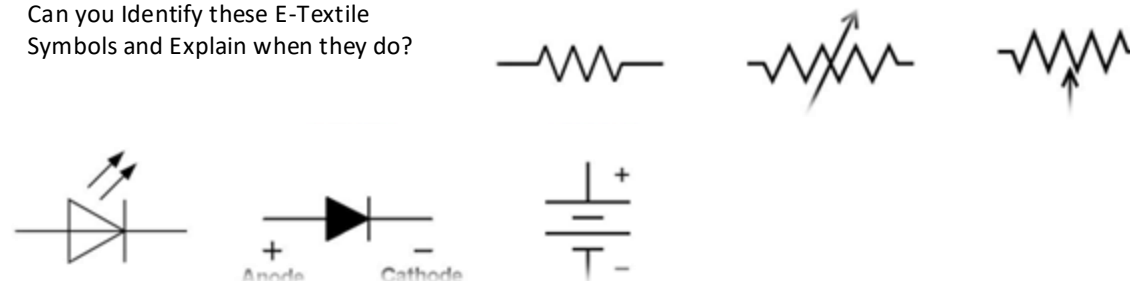
Huddersfield University offer an MA degree in Textile Technology, and you will need an Honours degree (2:2 or above) in a relevant subject or an equivalent professional qualification.

Salaries usually range from £18,000 - £38,000

## Challenge Activities



Can you Identify these E-Textile Symbols and Explain when they do?



## Topic Links



- This topic links to:
- Science- How electronics can be used within textiles and the development of Smart Fibres
  - English- Subject specific Vocabulary knowledge, understanding and spelling.

## Additional Resources



To further practise and develop your knowledge see:



## Questions you got wrong


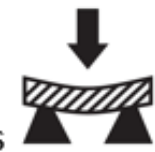



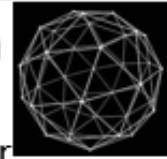
## Quick Corrections (bridge learning gaps & misconceptions)

|  |  |
|--|--|
|  |  |
|  |  |

| Keyword              | Definition  |
|----------------------|---|
| Gears                | One of a set of toothed wheels that work together to alter the relation between the speed of a driving mechanism  |
| Compression          | The action of compressing or being compressed.  |
| Tension              | The state of being stretched tight:   |
| Pinewood             | An evergreen coniferous tree that has clusters of long needle-shaped leaves   |
| PVA                  | Polyvinyl acetate used to glue materials  |
| Scroll saw           | A scroll saw is a small electric or pedal-operated <u>saw</u> used to cut intricate curves in wood,   |
| Shear                | is a process that cuts stock without the formation of chips or the use of burning or melting  |
| Laser                | A laser is a device that emits <u>light</u> through a process of <u>optical amplification</u>   |
| Safety Goggles       | Protective eyewear to stop fragments entering the eye.  |
| Timber               | Timber is wood that has been processed into uniform and useful sizes  |
| Specification        | A design specification is a detailed document that sets out exactly what a product or a process should present  |
| 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.          |
| Iconic Design        | someone or something that is seen as a <u>cultural icon</u>   |
| Product Lifecycle    | is the process of managing the entire lifecycle of a product from its inception through the <u>engineering</u> , <u>design</u> and <u>manufacture</u> , |
| Corrugated Cardboard | is a type of packaging material consisting of a <u>fluted corrugated</u> sheet and one or two flat linerboards  |

## Key Concepts

### FORCES

|  |   |
|--|---|
| <b>Tension</b><br>Being stretched                        |    |
| <b>Bending</b><br>A motion or action that bends          |    |
| <b>Compression</b><br>Putting pressure on an object      |    |
| <b>Torsion</b><br>Twisting                               |    |
| <b>Shear</b><br>Cutting                                  |  |
| <b>Triangulation</b><br>Forming rigid triangles together |  |

### Tools

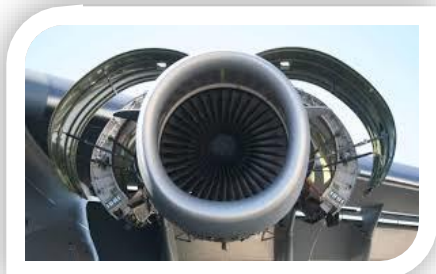


### Materials & End Products

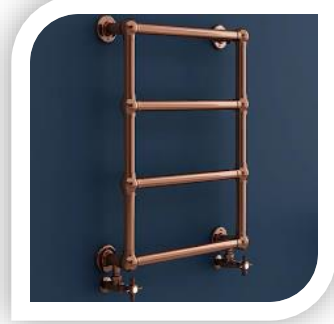
#### Stainless Steel Spoon



#### Aluminium Aircraft Fitting








#### Copper Tubing





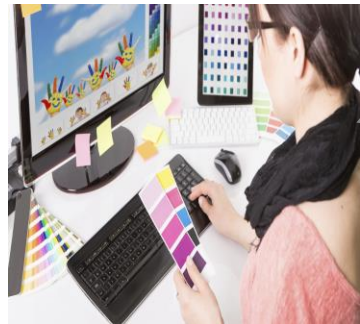
## Retrieval Practice

| Question  | A1  | A2  | A3  | A4   | A5  |
|---|---|---|---|--|---|
| A. What is a Acrylic?                               | Wood  | Metal   | Plastic   | LED  | Film  |
| B. What is a product analysis?                      | A Detailed look at a specification  | A quick look at a product   | A Detailed look at a shoe   | A Detailed look at a car   | A Detailed look at a product  |
| C. What is Shear referring to?                      | Sewing  | Drawing   | Jumping   | Cutting  | Dancing   |
| D. Which are iconic designs? (select more than one) |  |  |  |  |  |
| E. What is a scroll saw ?                           | A bladed machine for cutting wood.  | A drill part  | A paper cutter  | A saw for cutting Glass  | A machine for drilling holes  |
| F. What is Timber?                                  | A type of wood  | A type of plastic   | A type of metal   | A type of glass  | A type of Fabric  |

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

|  |  |
|--|--|
|  |  |
|  |  |

## Career Focus - Where could this take you?



Engineers, as practitioners of engineering, are professionals who invent, design, analyse, build and test machines, complex systems.

Kirklees College offer a Engineering and Manufacturing course level 2 and you will need A minimum of 4 GCSEs with the following grades: English at 3 or above and maths at 3 or above and 2 other GCSEs at 3 or above including a science or technology course.

Salaries usually range from £36,000-£48,000

## Challenge Activities- Match the Product to the Designer.

**Charles Rennie Macintosh**





**Phillipe Starck**



**James Dyson**





**Tesla**

## Topic Links Additional Resources

This topic links to:

- History- Iconic Design
- English- Subject specific Vocabulary knowledge, understanding and spelling.
- Math's- Measurements in cm.

To further practise and develop your knowledge see:

<https://youtu.be/9wHlJXnx0bM>

<https://youtu.be/b36Lt9bXFsk>

<https://youtu.be/qHzlWl7CS8E>

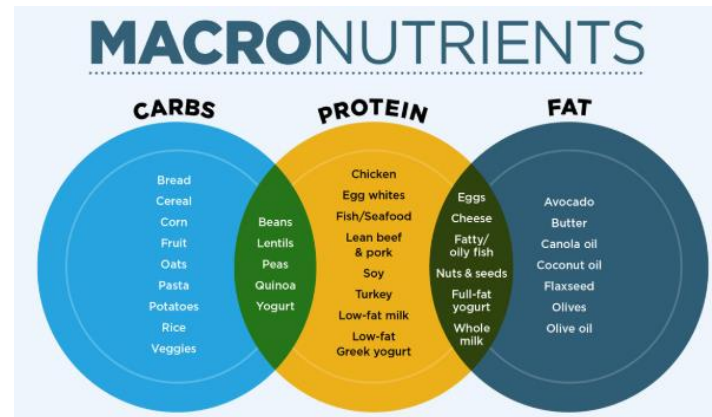
The aims of the sequence of learning are to ensure that all students:

- Apply knowledge of food legislation in the UK
- Demonstrate knowledge of food provenance and food manufacturing

- Explain what a macronutrient is and their sources and functions

| Keyword                    | Definition  |
|----------------------------|---|
| <b>Food origin</b>         | Where the food originated in the world  |
| <b>Food provenance</b>     | Whether the food was grown, caught or reared  |
| <b>Transportation</b>      | How food is transported from one place to another   |
| <b>Food processing</b>     | Changing food in some way e.g washing, chopping, pasteurising, freezing, fermenting, packaging  |
| <b>Food manufacturing</b>  | Food manufacturing refers to transforming raw ingredients into edible products such as using wheat, oat, and sugar to make cereals, desserts, and pet food.   |
| <b>Farming</b>             | Farming is the activity of growing crops or keeping animals on a farm.  |
| <b>Calcium</b>             | Calcium is a mineral your body needs to build and maintain strong bones and to carry out many important functions.  |
| <b>Carbohydrate</b>        | Carbohydrates provide energy for the body. The body breaks carbohydrates down into glucose, which is the primary energy source for the brain and muscles.   |
| <b>Protein</b>             | 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.  |
| <b>Fibre</b>               | 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. |
| <b>Fat</b>                 | 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.  |
| <b>Cross-contamination</b> | Cross-contamination is the physical movement or transfer of harmful bacteria from one person, object or place to another.   |
| <b>Nutrient</b>            | a substance that provides nourishment essential for the maintenance of life and for growth.   |
| <b>Healthy</b>             | In a good physical or mental condition; in good health.   |

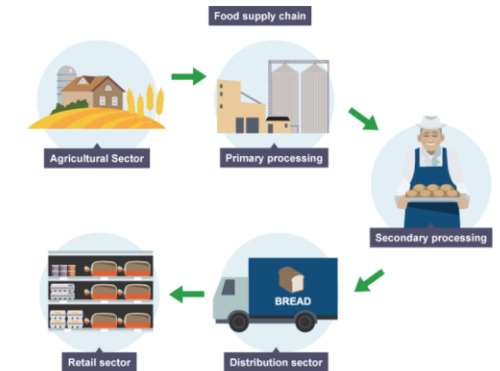
## Key Concepts



“  
The food supply chain represents the steps that your food goes through from it leaves the farm, until it reaches your fork.

— Source: From Farm to Fork

The food supply chain looks like this:



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

## Food Safety Act 1990

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

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

## Food Standards Act 1999

The Act was introduced in the House of Commons in 1999.

It sets out our main goal to protect public health in relation to food. It gives us the power to act in the consumer's interest at any stage in the food production and supply chain.

## 1. FRUIT SCONES

- 85g butter
- 350g self-raising flour
- ¼ tsp salt
- 1 ½ bicarbonate of soda
- 4 tbsp caster sugar
- 200ml milk
- Sugar cubes (to decorate)
- CONTAINER WITH A LID**

## 4. FLATBREADS AND TZAZIKI

- 200g plain flour
- ½ cucumber
- 150g Greek yoghurt

**School will provide:**  
**Salt, oil garlic, mint**

## 2. CHICKEN/VEG CURRY

- 2 chicken breasts
- 1 red onion
- ½ red/green pepper
- 1 tin chopped tomatoes
- 2 tsp curry powder or paste
- 1tbsp tomato puree
- 4 button mushrooms
- 25g natural yoghurt or single cream (optional)
- 2 tsp vegetable oil
- Container with a lid**

For veg curry replace chicken with either: 100g green/red lentils, Quorn pieces, potato, spinach or mushroom combination

## Ingredients Lists - Rotation 2 Year 8

### 3. LAMB KOFTA BALLS

- 200g lamb/beef mince
- 1 small onion
- 1/2 red chilli
- 1 clove of garlic
- 30g grated cheese
- Freezer safe container with a lid**

**School will provide:**

**1 tsp cumin, 1 sprig of parsley, mint and coriander**

### 5. FUDGE BROWNIE CUPCAKES

- 100g dark chocolate
- 100g margarine
- 100g SR Flour
- 50g brown sugar
- 2tbsp Syrup
- 50ml milk
- 1 egg
- 2 tbsp cocoa powder
- 12 bun cases

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





## FRUIT SCONES



### Method:

1. Heat oven to 200C/180C fan/gas 6.
2. Whizz butter into flour.
3. Tip into a bowl and stir in salt with bicarbonate of soda and sugar.
4. Using a cutlery knife, quickly stir in milk – don't over-mix.
5. Tip out onto a lightly floured surface and turn over a couple of times to very gently bring together with your hands.
6. Gently pat to about 1in thick, then stamp out rounds with a floured cutter.
7. Pat together trimmings to stamp out more.
8. Brush the tops with a splash more milk, then scatter with crushed sugar cubes.
9. Bake on a baking sheet for 10-12 mins until risen and golden.

### Equipment

- Baking tray
- Cutlery
- Mixing bowl
- Rounded knife
- Fork
- Measuring bowl
- Weighting scales

### Adaptations:

Choose 2 from:

- 10 glace cherries
- 50g raisins/sultanas/dates,
- 50g coconut
- 1 eating apple
- 1tsp cinnamon

### Ingredients:

- 85g diced butter
- 350g self-raising flour
- ¼ tsp salt
- 1 ½ tsp bicarbonate of soda
- 4 tbsp caster sugar
- 200ml milk, warmed to room temperature, plus a splash extra
- Crushed sugar cubes, to decorate.

\*\*\* Container with a lid \*\*\*



# RECIPE





## Chicken / Vegetable Curry



### Equipment:

- Chopping board
- Vegetable knife
- Large pan
- Wooden spoon
- Cutlery

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

### Ingredients:

- 2 chicken breasts
  - 1 red onion
  - ½ red or green pepper
  - 1 tin of chopped tomatoes
  - 2 tsp curry powder or paste
  - 1 tbsp. tomato puree
  - 4 button mushrooms
  - 25g natural yoghurt or single cream (optional)
  - 2tsp vegetable oil
- Replace chicken with either: 100g green or red lentils, Quorn pieces, potato, spinach or mushroom combination.

### Method:

1. Chop any vegetables and place in pan with vegetable oil.
2. Put pan on low heat stir with wooden spoon.
3. Chop chicken into pieces.
4. Add chicken to pan being careful to avoid cross contamination.
5. Stir chicken with wooden spoon and turn to medium heat.
6. Add curry powder and continue to cook ensuring chicken doesn't stick to pan.
7. Once chicken is cooked through (no longer pink in the middle) stir in tin tomatoes and puree.
8. Continue to cook on medium heat to low heat (simmer).
9. Stir in yoghurt or cream.
10. Turn off heat and transfer to container.

### Skills:

### Meaning:

- | 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.                        |
| 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   |

curry, (from Tamil *kari*: “sauce”), in Western usage, a dish composed with a sauce or gravy seasoned with a mixture of ground spices that is thought to have originated in India and has since spread to many regions of the world.





- Use safe and hygienic practices in a working kitchen environment
- Safely use a range of cooking techniques, appropriate to the task

- Demonstrate confidence and accuracy in their practical work

## LAMB KOFTA BALLS

### Method:

1. Heat oven to 220°C
2. Peel the onion and cut in half.
3. Peel the garlic.
4. Cut off the top of the chilli and remove the seeds.
5. Put the onion, chilli and garlic into the food processor and blitz.
6. Add the mince, cumin and herbs and blitz together.
7. Sprinkle a little flour onto a chopping board, then divide and shape the mixture into 8 balls.
8. Put the balls onto a lined baking sheet and into the oven for 20 minutes.
9. Thoroughly wash and dry your hands after touching the raw meat.
10. Serve with a flat bread, rice, sour cream and salad

### Equipment

- Baking tray
- Cutlery
- Mixing bowl
- Rounded knife
- Fork
- Measuring bowl
- Weighting scales

### Ingredients:

- 1 small onion
- 1 clove of garlic
- 1/2 red chilli
- 200g lamb/beef mince

### School will provide:

- 1 x 5ml spoon cumin
- 1 sprig of parsley, mint and coriander

\*\*\* Freezer safe Container with a lid \*\*\*



We will freeze these to serve with the flatbreads and tzatsiki next week





- Use safe and hygienic practices in a working kitchen environment
- Safely use a range of cooking techniques, appropriate to the task

- Demonstrate confidence and accuracy in their practical work

## Flatbreads and Tzaziki

### INGREDIENTS

- 200g plain flour

School will provide:

- $\frac{1}{4}$  tsp salt
- 100ml/ $3\frac{1}{2}$ fl oz warm water
- 2 tbsp oil (olive, sunflower or vegetable), plus extra for cooking

### Method

1. Place the flour and salt in a large bowl and trickle on the water bit by bit.
2. Mix the water and flour mixture together. . Add the oil and knead the dough – you are aiming for a soft dough. If it is too sticky, add a little more flour or if it is too dry, add a splash of water.
3. Knead the dough for 5 minutes
4. You can cook the breads straight away or leave the dough to stand for about 30 minutes. This is a good time to make your tzaziki. Divide the dough into four balls (or six if you have a smaller frying pan).
5. On a clean surface, roll each ball of dough one at a time using a rolling pin . If you pick up and move round the flatbread often you know it hasn't stuck. (You may need to sprinkle a little flour on the surface but only use a little as too much will dry out the dough.) Don't worry if they aren't perfect circles!
6. Heat a large frying pan over a medium heat. Take a sheet of kitchen paper and rub a little oil onto the surface of the pan. Cook each flatbread for about 2 minutes on one side – it should puff up a little. Flip the flatbread over using tongs and then cook for a couple of minutes on the other side. The flatbread should have turned lighter in colour and may have a few spots of brown. Keep the cooked flatbreads warm, wrapped in foil or a clean tea towel, until the others are cooked.

**To serve:** Reheat your koftas from last week until they are piping hot. Serve in the flatbreads with salad and tzaziki



### TZAZIKI INGREDIENTS

- $\frac{1}{2}$  cucumber
- 150g greek yoghurt

School will provide:

- 1 tsp cheats garlic
- Chopped mint

**Method:** Coarsely grate the cucumber, sprinkle with a pinch of salt and squeeze out all the liquid. Tip into a bowl with the yogurt, garlic and mint, and mix well.

**Tip!** Doughy hands can be cleaned by rubbing a little more flour onto the hands over another bowl or the bin – resist the urge to wash doughy hands as you will block the drain!



- Use safe and hygienic practices in a working kitchen environment
- Safely use a range of cooking techniques, appropriate to the task

- Demonstrate confidence and accuracy in their practical work

## FUDGE BROWNIE CUP CAKES



### Ingredients

- 100g dark chocolate
- 100g margarine
- 100g self-raising flour
- 50g brown sugar
- 2tbsp hot water
- 2tbsp syrup
- 50ml milk
- 1 egg
- 2 tbsp cocoa powder
- 12 cake cases

### Equipment






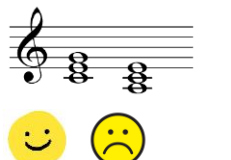
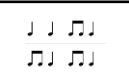

- Sieve
- Mixing bowl
- Tablespoon
- Wooden spoon
- Small pan
- Wire cooling tray
- Small bowl
- Table knife
- Teaspoon

1. Preheat the oven to 180°C and line the bun tin with 12 paper cases.
2. Melt margarine, sugar, chocolate, syrup and water together in a pan until melted. Leave to cool for 2 minutes
3. Add milk and egg.
4. Beat in the sieved flour and cocoa carefully. Add any extra ingredients you may be using at this stage.
5. Use a jug to pour the mix into the cake cases
6. Half fill the paper cases with the mixture and bake for around 20 mins until firm and well cooked
7. Place on a cooling rack to cool down.



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


- To apply in depth - appropriate musical vocabulary.
- To be able to aurally identify musical features of music from the Baroque period.
- To be able to compose and perform an original piece of Baroque music.

| Keyword(s)  | Definition (Meanings)   |
|---|---|
| <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<br><b>Legato</b> – Long and smooth<br><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.<br><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.<br><b>Diatonic Harmony</b> – Chords and scales that blend well together.<br><b>Dissonant Harmony</b> – Chords and scales that clash with each other.<br><br><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 or voices</b> used to perform a piece.   |
| <b>Rhythm</b>              | The <b>note values and patterns</b> used  |
| <b>Tempo</b>               | The <b>speed</b> of the beat  |

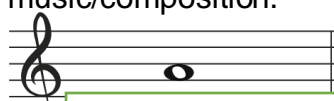
## Key Concepts – Baroque

|  |  |
|--|--|
| <b>Baroque Music</b><br>The Baroque period was between <b>1600-1750</b> . Some of the most famous composers of the time were <b>Handel</b> and <b>Bach</b> . The music reflected the buildings, art and clothes of the time and it was very decorated and 'fancy'.     | <b>Ground Bass</b><br>A <b>repeating bass line</b> that repeats all the way through a piece of music.  |
| <b>Melody in Baroque</b><br>Melodies in Baroque music are often decorated with <b>ornaments (Trills and Turns)</b> .   | <b>Articulation in Baroque</b><br>Baroque music uses both <b>staccato</b> and <b>legato</b> articulation.  |
| <b>Dynamics in Baroque</b><br>Baroque music uses a <b>variety of different dynamics</b> . One moment the music might be incredibly <b>quiet</b> and later it could be <b>very loud</b> to create impact.   | <b>Texture in Baroque</b><br>A lot of Baroque Music begins with a <b>monophonic</b> texture. Gradually, as layers other melodies are added the texture becomes <b>polyphonic</b> .     |
| <b>Structure in Baroque</b><br>Pachelbel's Canon uses a <b>ground bass</b> all the way through, and different melodies are gradually added on top.   | <b>Harmony in Baroque</b><br>Baroque music is usually <b>diatonic</b> but there might be <b>some dissonant notes</b> . The Baroque piece you are composing with be <b>diatonic</b> .   |
| <b>Instrumentation/Performance Forces in Baroque</b><br>Common instruments in Baroque Music are:<br><b>Violin, Viola, Cello</b> and <b>Double Bass (String Instruments)</b> .<br><b>Harpichord</b> – a keyboard instrument that existed before the piano was invented. | <b>Pachelbel's Canon: Tonality in Baroque</b><br>Pachelbel's Canon is in a <b>Major key</b> .<br><br>Other pieces of Baroque Music could use either <b>Major</b> or <b>minor</b> keys. |


**Rhythm and Pitch Notation – Writing out your music/composition.**




**Every Green Bus Drives Fast – On the lines**




**Semibreve – 4 beats**




**Minim – 2 beats**



**FACE – in the space.**



**Crotchet – 1 beat**



**Quaver – ½ beat**

- To show deepened understanding of appropriate musical vocabulary.
- To be able to identify musical features of music from the Western Classical Tradition.
- To be able to perform Ode To Joy on the keyboard.


## 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   |
|--|---|
| Identify the <b>tonality</b> of Pachelbel's Canon                        | Major.  |
| Describe the <b>texture</b> of Baroque Music.                            | A lot of Baroque Music begins with a <b>monophonic</b> texture. Gradually, as layers other melodies are added the texture becomes <b>polyphonic</b> .   |
| What is a <b>Ground Bass</b> ?   | A <b>repeating bass line</b> that repeats all the way through a piece of music.   |
| <b>When</b> was the Baroque period?                                      | The Baroque period was between <b>1600-1750</b> .   |
| <b>Describe</b> the <b>music</b> of the Baroque period.                  | Some of the most famous composers of the time were <b>Handel</b> and <b>Bach</b> . The <b>music</b> reflected the buildings, art and clothes of the time and it was very decorated and 'fancy'. |
| What instruments/performance forces are commonly heard in Baroque Music? | Violin, Viola, Cello and Double Bass (String Instrument).<br>Harpsichord – a keyboard instrument that existed before the piano was invented.  |
| Fill in the <b>notes</b> underneath.                                     |   |

## Career Focus - Where could this take you?



I am an event planner. I organise events. I handle details like, venues, musicians, décor and timings to ensure that the event runs smoothly and the audience enjoy it.

## Challenge Activities

Try this additional lesson Baroque Music:

- 1) Introduction (prepare)
- 2) Watch the lesson video – make notes and learn!
- 3) Try the exit quiz.

Link to the lesson is [here](#)

## Topic Links

[Art – Baroque Art and Architecture.](#)

## Additional Resources

- Read more about the Baroque period of music – [BBC Bitesize](#).
- Watch a live performance of Baroque Music [here](#) - BBC

- Can identify at least four core skills required for net and wall games
- Demonstrate core skills in a game situation
- Demonstrate core skills in a practice situation

| 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                                 |
| Drop shot     | The shuttle or ball is hit gently so it falls just over the net  |
| Clear shot    | A defensive shot where the shuttle is placed to the back of the court                                    |

**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

### Volleyball dig shot

The dig shot requires players to get low and to stop the ball touching the ground. When completed successfully the shot provides accurate and consistent passing, which is essential to create a multiple attack

#### Teaching points.

Hands together thumbs pointing down.  
Forearms horizontal and straight.  
Knees bent into squat position.  
Contacting the ball gently so it goes vertically in the air.



### badminton serve

The serve is the start of the game. The performer must hit the shuttle so that it travels over the net to the oppositions rectangle section area that they are standing in.

#### Teaching points.

Contact the shuttle at a higher point but still below your waistline. Push the shuttle with the racket maintaining an extended elbow, driving the shuttlecock over the net at a low trajectory. The racket head will follow through pointing towards the target, with the face parallel to the ceiling.



### Table tennis forehand drive

A forehand shot is essentially hitting the ball with your hand's most natural position. For instance, a right-hander would hit the ball from the right side of his body, while a left-hander would hit from the left side.

#### Teaching points.

Start with bat around waist height. Close the bat angle slightly. Rotate backwards from the waist. As the ball approaches, rotate forwards and move your bat forwards and up. Contact the ball just in front of your body. The contact should be quite flat, roughly in the middle of your bat



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

- Can identify at least four core skills required for net and wall games
- Demonstrate core skills in a practice situation

- Demonstrate core skills in a game situation



## Retrieval Practice

| Questions   | Answers   |
|---|---|
| What are some of the core skills needed for attacking in badminton and why are they important?    | <ol style="list-style-type: none"> <li>1. 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 floor so they are unable to return the shot .</li> <li>2. The long serve is a core skill for attacking in badminton. The aim is to send the opponent to the back of the court so they find it more difficult to return the shuttle back to you.</li> </ol>  |
| What are some of the core skills needed for defending in badminton and why are they important?    | <ol style="list-style-type: none"> <li>1. The overhead clear shot is used in a rally situation so that you force your opponent to move to the back of the court. This then allows you time to get prepared into a better court position .</li> <li>2. The drop shot is a gentle forehand or backhand shot that applies little force to the shuttle so it drops just over the net. This is usually a defensive shot as it slows down the speed of the rally.</li> </ol>  |
| What are some of the core skills needed for attacking in table tennis and why are they important? | <ol style="list-style-type: none"> <li>1. 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 through the air and recoils off the table.</li> <li>2. Back spin forehand or backhand shot is a skill that is designed to slow down the speed of a rally in table tennis. It forces the ball to gently land just over the net and stop dead.</li> </ol> |
| What are some of the core skills needed for defending in badminton and why are they important?    | <ol style="list-style-type: none"> <li>1. 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 professional badminton racket maker. My main job is to repair and re-string professional athletes rackets. I work at the major Olympic and world series badminton tournaments around the world.**

## Challenge Activities



### Design a skill card:-

This can be used in a PE lesson to help a student to assess their current ability level. The skill card should have basic key instructions. Skills can include, serve, overhead clear, forehand, backhand shot, push shot, drive shot.

### 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.

## Topic Links



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

## Additional Resources



To further practise and develop your knowledge see:

<https://www.badmintonengland.co.uk/>

<https://www.tabletennisengland.co.uk/>

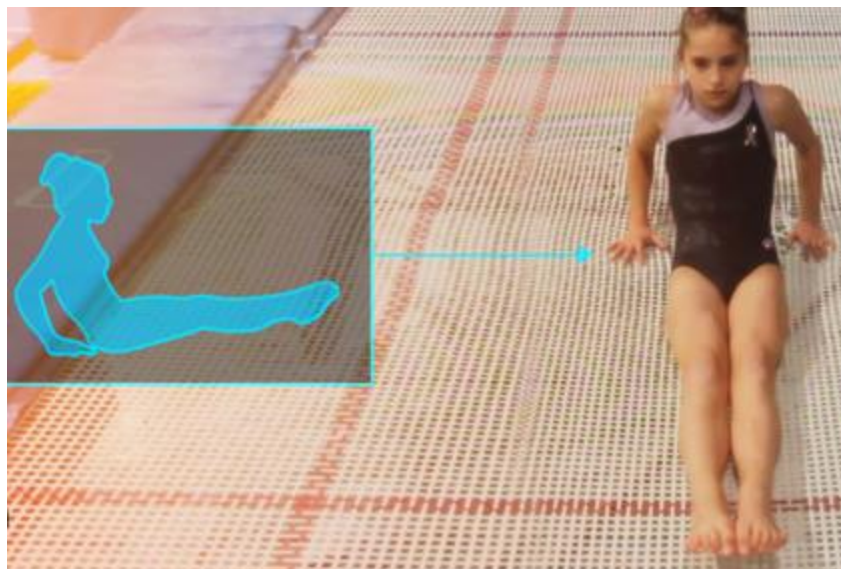


- Show knowledge and understanding
- Demonstrate more advanced core skills in isolation or practice
- Demonstrate more advanced skills in a routine.

| Keyword      | Definition   |
|--------------|--|
| Spotting     | Standing around the trampoline to help prevent the performer from falling. |
| Aesthetic    | The way something looks/something looking artistic.                        |
| Flexibility  | The range of motion allowed at a joint.                                    |
| Pike         | Jumping with the legs extended out in front of the body and toes pointed.  |
| Tuck         | Jumping with the knees flexed and toes pointed down.                       |
| Straddle     | Jumping with the legs extended diagonally from the hips.                   |
| Feedback     | Information given to an individual/team about their performance.           |
| Bounce count | The amount of times the bed is touched during a routine.                   |
| Parallel     | Straight lines that do not intersect.                                      |

## Key Concepts

### SEAT LANDING TEACHING NOTES!



As you begin to lose height, bring your arms down to make contact with the bed just behind your bottom. At the same time, extend your feet forwards. Ensure you land with your back close to upright and hands tucked in just behind your bottom with the fingers pointing forwards in the same way as your toes.



**Plantar-flexion** occurs at the ankle to allow you to point your toes. Why do your toes need to be pointed when performing on the trampoline?

Peer feedback sentence starters:

- I really liked how you...
- For your next performance try to...
- To improve your aesthetics try to...
- You showed great...



What you should already know:

- At least 4 core trampolining skills.
- Demonstrate a 5 bounce routine.

- Demonstrate knowledge and understanding
- Demonstrate more advanced core skills in isolation and in practice.
- Demonstrate more advanced skills in a routine.

## Retrieval Practice. Recall routines for your performance.



### Routine #3:

Full twist jump  
Tuck jump  
Seat landing  
To feet  
Straddle jump

### Routine #4

Full twist  
Straddle jump  
Seat landing  
½ twist to feet  
Tuck jump

### Routine #5:

½ twist jump  
Straddle jump  
½ twist to seat landing  
To feet  
Pike jump

## Career Focus - Where could this take you?



**Trampoline testers** work together to test the safety and bounce of trampoline beds.

## Challenge Activities



### Create:

- Create an 8 bounce routine using the correct trampolining terminology. You can use this routine in class so make sure it only has skills in which you can perform. Try to include at least 2 different shapes.
- Research Olympic trampolinist Bryony Page and create a fact file page on her.

## Topic Links



### This topic links to:

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

## Additional Resources



### To further practise and develop your knowledge see:

- <https://www.bbc.co.uk/bitesize/guides/z39ck7h/revision/1>
- [https://en.wikipedia.org/wiki/Trampolining\\_terms](https://en.wikipedia.org/wiki/Trampolining_terms)

## Questions

## Answers

Why does a trampolinist require good flexibility?

Without flexibility, a trampolinist will struggle to perform their moves aesthetically due to a lack of pointed toes and straight body lines.

Explain the importance of an aesthetic performance.

An aesthetic performance is important as it allows people to fully enjoy the performance and ensures the performance looks good to the audience.

Why does a seat landing require good core strength?

Because without good core strength, the body will not stay tense and upright.

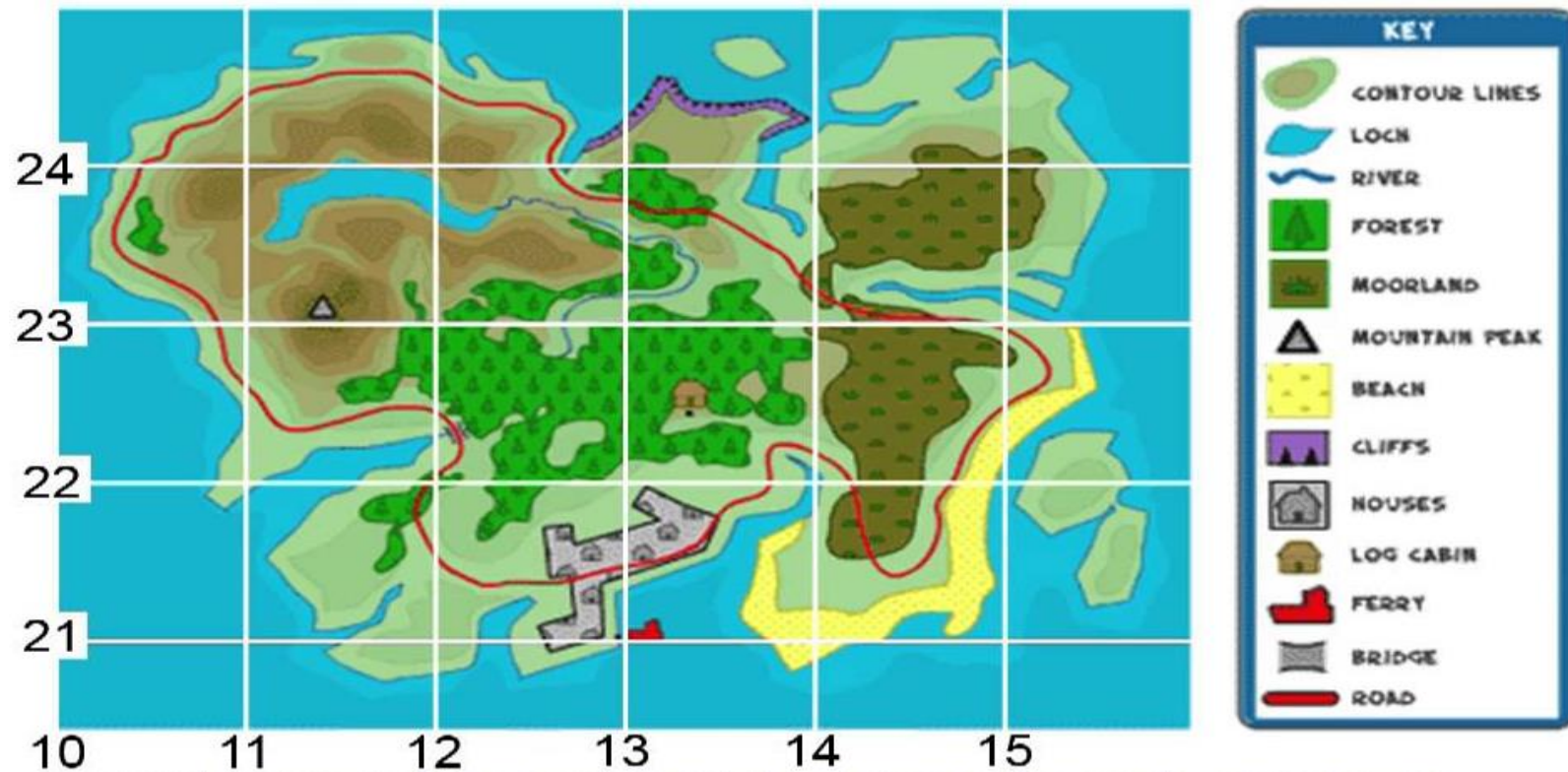
Give 3 safety points for trampolining.

All jewellery removed, hair tied back, socks worn.  
Are you able to explain why?

- Identify at least 4 skills required to work well as a team.
- Demonstrate the ability to work well as a team.
- Demonstrate basic map reading ability.

| Keyword           | Defin   |
|-------------------|---|
| Teamwork          | The combined actions of a group that promotes success from a problem or task  |
| Communication     | Exchanging information via speaking or writing that is aimed to be positive or constructive.  |
| Map Orientation   | Holding a map correctly so that the North of the map is directed North and you can locate your position on the map.                 |
| Problem Solving   | Finding solutions to issues by working together and trying out different ideas to a set or given task by making a strategy or plan. |
| Grid reference    | Numbers which indicate the exact location of features on a map.   |
| Leadership        | The action of an individual showing positive actions that aim to leading a group of people in a set task or role.                   |
| Hand holes        | Wall markers of different sizes and shapes to allow the climber to grip and push off from.  |
| Route reading     | Ability to recognise patterns on the wall in order to navigate and climb.   |
| Muscular strength | The ability for the working muscles to develop power so the performer can climb, hold or descend on the wall safely.                |

## Key Concepts




Use the image above to practice using grid references by writing the grid references for the features listed below: Mountain peak, Ferry, Log cabin

- ! What you should already know: !
- The key skills required for teamwork
  - Why grid references are used on maps





- Identify at least 4 skills required to work well as a team.
- Demonstrate the ability to work well as a team.
- Demonstrate basic map reading ability.

| Retrieval Practice  |  |
|--|--|
| Questions  | Answers  |
| Why is muscular-strength important in climbing?  | This health-related fitness component is important so the performer can grip and balance to rest on the wall. To help them climb upwards and climb downwards safely. |
| How do you know if a team is working together successfully?  | They can achieve their shared goal and show good qualities such as listening to all team members and valuing all team members opinions.                              |
| What is the difference between 4 and 6 figure grid references?   | 6 figure grid references are more accurate for locating features and can show a more refined location on the map in a smaller area.                                  |
| Why is problem solving important?  | It allows us to think logically and discuss with others how to best overcome challenges. This also saves time and helps to avoid mistakes in challenges or tasks.    |

## Career Focus - Where could this take you?



**Video game creators** often need to create maps for in the game. Having knowledge of how to read and use maps will allow you to create effective maps for use in video games.

## Challenge Activities

- Create:
- Draw a map of your local park including a key to identify the key features.
  - Answer the following question:  
Explain why leadership is important when working as a team.
  - Evaluate the importance of muscular strength for rock climbing.

## Topic Links Additional Resources

|  |   |
|--|---|
| <p>This topic links to:</p> <ul style="list-style-type: none"> <li>• Geography – Map reading.</li> <li>• Maths – Using numbers to read grid references.</li> <li>• Voice 21 – Communicating with team mates.</li> <li>• English – understanding and defining key terminology.</li> </ul> | <p>To further practise and develop your knowledge see:</p> <ul style="list-style-type: none"> <li>• <a href="https://getoutside.ordnancesurvey.co.uk/guides/beginners-guides-map-reading/">https://getoutside.ordnancesurvey.co.uk/guides/beginners-guides-map-reading/</a></li> <li>• <a href="https://careertrend.com/list-6390984-professions-employ-use-maps.html">https://careertrend.com/list-6390984-professions-employ-use-maps.html</a></li> </ul> |
|--|---|



- Describe key elements and techniques
- Apply isolated dance skills and techniques with increased accuracy
- Apply skills in a performance with increased accuracy

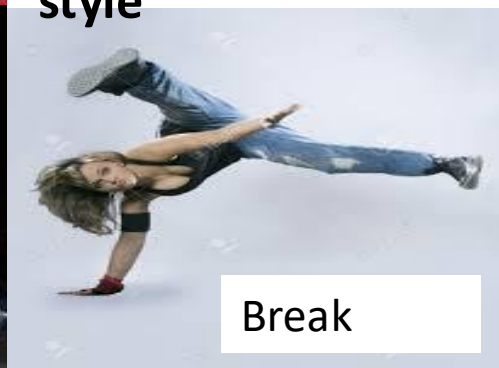
| Keyword                        | Definition   |
|--------------------------------|--|
| <b>Choreographic Intention</b> | What it makes the audience think, see and feel   |
| <b>Projection</b>              | The energy the dancer uses to connect with and draw the audience in                          |
| <b>Dynamics</b>                | The quality of the movement  |
| <b>Focus</b>                   | Where the audience looks   |
| <b>Cannon</b>                  | One after the other  |
| <b>Facial Expression</b>       | Shows the mood of the character  |
| <b>Physical Skill</b>          | Is a skill that can be developed over time   |
| <b>Retrograde</b>              | Perform the movements backward, like a film on rewind  |
| <b>Repetition</b>              | To repeat part of the motif. Either straight after it is performed or later on in the dance. |
| <b>Accumulation</b>            | Dancers gradually joining in with a phrase of movement                                       |
| <b>Levels</b>                  | Dancers change the level a movement is performed on  |
| <b>Direction</b>               | Performing or travelling the movement facing a different way                                 |
| <b>Size</b>                    | To change the size of a motif or movement (small becomes large, large becomes small)         |
| <b>Juxtaposition</b>           | Half the group performs one part of the motif while the others perform something different   |
| <b>Canon</b>                   | Dancers performing the same movements or phrase of movement with a time delay                |
| <b>Mirroring</b>               | Like a mirror image. Movement is performed on the left by some and the right by others       |

## Key Concepts

### Styles of dance




**Stylistic Features**  
**Movements and gestures that are typical of the style**



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

- Describe key elements and techniques
- Apply isolated dance skills and techniques with increased accuracy
- Apply skills in a performance with increased accuracy

| Retrieval Practice  |  |
|--|--|
| Questions  | Answers  |
| What is a motif?   | A motif is a movement phrase (A small dance) with an idea that is repeated and developed through the piece.                        |
| What is motif development?   | Motif development is where you use one of the below to change the original movement. This will allow it to become more interesting |
| What are the three action developments?  | Retrograde, repetition and accumulation  |
| What are the three space developments?   | Levels, direction and size   |
| What are the three relationship developments?  | Juxtaposition, canon and mirroring   |

## Career Focus - Where could this take you?



My job is fight choreographer. I use movement and motifs to choreograph different scenes to ensure they look believable and are engaging whether on screen or in the theatre.

## Challenge Activities

Watch the below choreographers:

- Jay Revell

<https://www.youtube.com/watch?v=VHM-KaLCMuI>

- Kyle Hanagami

<https://www.youtube.com/watch?v=-yGsSVKAVxM>

## Topic Links

This topic links to:

- Drama Performance skills
- PE - Physical skills
- English - Understanding terminology and verbs.
- Maths - Problem solving

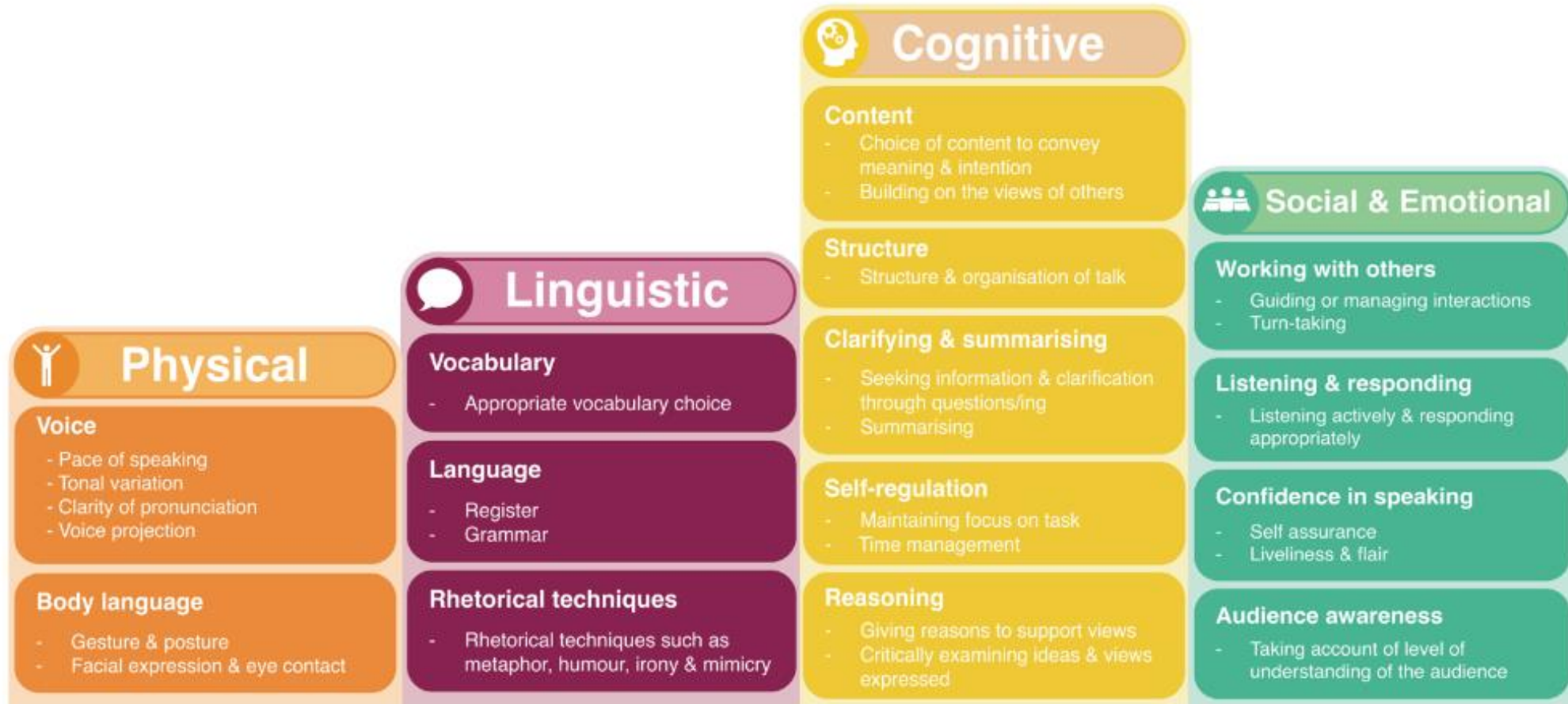
## Additional Resources

To further practise and develop you knowledge see:

- <https://www.aqa.org.uk/resources/dance/gcse/dance/teach/subject-specific-vocabulary>
- <https://www.onedanceuk.org/wp-content/uploads/2016/03/Motif-and-development-for-NDTA.pdf>



# The Oracy Skills Framework and Glossary



# Student Talk Tactics



**Instigate** 


Present an idea or open up a new line of inquiry

“ I would like to start by saying \_\_\_\_

“ I think \_\_\_\_

“ We haven't yet talked about \_\_\_\_

Instigate

**Probe** 


Dig deeper, ask for evidence or justification of ideas

“ Why do you think \_\_\_\_?

“ What evidence do you have to support X idea?

“ Could you provide an example?

Probe

**Challenge** 


Disagree or present an alternative argument

“ I disagree because \_\_\_\_

“ To challenge you X, I think \_\_\_\_

“ I understand your point of view, but have you thought about \_\_\_\_?

Challenge

**Clarify** 


Asking questions to make things clearer and check your understanding

“ So are you saying \_\_\_\_?

“ Does that mean \_\_\_\_?

“ Can you clarify what you mean by \_\_\_\_?

Clarify

**Summarise** 


Identify and recap the main ideas

“ So far we have talked about \_\_\_\_

“ The main points raised today were \_\_\_\_

“ Our discussion focused on \_\_\_\_

Summarise

**Build** 

Develop, add to or elaborate on an idea.

“ Building on X's idea \_\_\_\_

“ I agree and would like to add \_\_\_\_

“ X's idea made me think \_\_\_\_

Build

**Voice 21 discussion guidelines:**

- ✓ You are challenging the ideas not the person.
- ✓ Only one person in the discussion should be talking at any time.
- ✓ We must be respectful of the views of others.
- ✓ When a member of the discussion is speaking the other members should be actively listening.
- ✓ Active listening involves thinking deeply about what other members of the discussion are saying and asking questions to deepen the discussion when appropriate.



# Username and Passwords

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