Year 8 – HT4

Newsome Academy
Everyone Exceptional Everyday

Knowledge Organisers

Name:

Team:

Newsome Academy
Everyone Exceptional Everyday

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.

8.17: Linear equations with brackets and fractions

The learning outcomes for this topic are:

- Solve 1 step equations involving fractions with integer solutions
- Solve 2 step equations involving fractions with integer solutions
- Solve equations involving one set of brackets with integer solutions
- Solve equations with brackets on both sides with integer solutions
- Solve 2 step equations involving fractions with fractional or decimal solutions
- Solve equations involving one set of brackets with fractional or decimal solutions

Key Word	Definition
Equation	A formula stating that two expressions are equal
Linear	A function where the graph would be a straight line
Positive	A number with a value greater than zero
Negative	A number with a value less than zero
Coefficient	A number used to multiply a variable
Unknown	A number we do not yet know
Variable	A symbol for a number we do not yet know
Solution	A set of one or more values which make an equation true
Constant	A value which never changes in an expression
Bracket	Symbols used to group expressions together
Fraction	Part of a whole, with value 'numerator' divided by 'denominator'
Numerator	The top number of a fraction
Denominator	The bottom number of a fraction

Careers Focus – Where could this take you?

I am a **nuclear engineer** and use both linear and non-linear in my work. I have to be accurate and precise with my calculations to ensure everyone is safe.

Additional Resources

MathsWatch: A12, A17, A19a A19b

CorbettMaths: Videos 111, 111a Worksheets 111, 111a

Curriculum Links - Coherence

Required Knowledge:
8:15 Solving Linear Equations and Basic Inequalities

Applied to:
8:18 Rearranging Formulae
9F:16 Basic Algebra, Substitution, Expanding Brackets, Factorising

Links across school:
Equations may be used to solve population growth problems in Geography.

Key Concepts

When solving equations with brackets, there are normally two ways to proceed.

For the example:-

$3(2x + 4) = 30$

Way 1 –Multiply out the brackets first gives

$6x + 12 = 30$

Then follow through with methods from previous chapters

$6x = 30 - 12$

$6x = 18$

$x = 3$

Way 2 –Divide both sides by the coefficient in front of the brackets first.

$3(2x + 4) = 30$

$2x + 4 = 10$

Then follow through with methods from previous chapters

$2x = 10 - 4$

$2x = 6$

$x = 3$

Concept – what it is

When an equation has fractions in it, try to work out in your head what has happened to the unknown to form the expression and then unpick it in reverse using inverse operations.

Eg $\frac{7c + 4}{8} = 11$

Try to consider what has happened to the 'c' in the expression on the left:-

It has been multiplied by 7, then had 4 added to it, then been divided by 8.

(continued below)

Non-Concept – what it isn't

When multiplying out the brackets, make sure you remember to multiply out the second term correctly, and be careful to treat any negative parts correctly.

When solving your equation with fractions make sure you perform your inverse operations in reverse order.

When solving your equation with fractions, make sure you use inverse operations, not the same operations as in the original equation.

Standard Examples

To solve the equation we need to work backwards, performing the inverse operations to both sides

(x8)
$7c + 4 = 11 \times 8$
$7c + 4 = 88$

(-4)
$7c = 88 - 4$
$7c = 84$

(÷7)
$c = 84 \div 7$
$c = 12$

Non-Standard Examples

$-28 = -4(1 - 3x)$
Divide both sides by -4
$7 = 1 - 3x$

Add 3x to both sides

$3x + 7 = 1$

Subtract 7 from both sides

$3x = -6$

Divide by 3

$x = -2$

8.17: Linear equations with brackets and fractions

The learning outcomes for this topic are:

- Solve 1 step equations involving fractions with integer solutions
- Solve 2 step equations involving fractions with integer solutions
- Solve equations involving one set of brackets with integer solutions
- Solve equations with brackets on both sides with integer solutions
- Solve 2 step equations involving fractions with fractional or decimal solutions
- Solve equations involving one set of brackets with fractional or decimal solutions

Useful Formulae and Hints

When equations have brackets in them, you can either multiply out the brackets first and then solve as with equations from previous chapters, or divide both sides by the coefficient in front of the brackets and solve as with equations from previous chapters.

If brackets (with different coefficients) are on both sides of the equation, then you would have to multiply out the brackets and then solve as and equation with unknowns on both sides.

When an equation has fractions in it, try to work out in your head what has happened to the unknown to form the expression and then unpick it in reverse using inverse operations.

Know your inverse operations
Add : Subtract
Multiply : Divide

GCSE Questions

8 Solve $5(x-6)=65$

$x =$ .....

(Total for Question 8 is 2 marks)

9 Solve $8(m-5)=48$

$m =$ .....

(Total for Question 9 is 2 marks)

(b) Solve $24=4(2x-5)$

$x =$ .....

(2)

7 Solve $4(a-3)=22$

$a =$ .....

(Total for Question 7 is 2 marks)

13 (a) Solve $\frac{2x}{3}=6$

$x =$ .....

(2)

16 Solve $\frac{y}{3}-5=4$

$y =$ .....

(Total for Question 16 is 2 marks)

(b) Solve $\frac{d+3}{4}=5$

$d =$ .....

(2)

3 Solve $\frac{d}{2}=9.5$

$d =$ .....

(Total for Question 3 is 2 marks)

Newsome Academy
Everyone Exceptional Everyday

8.18: Rearranging formulae

The learning outcomes for this topic are:

- Rearrange 1 step formulae
- Rearrange 2 step formulae
- Rearrange formulae involving brackets
- Rearrange formulae involving indices
- Rearrange formulae involving fractions
- Change the subject of a formula where the subject occurs more than once

Key Word	Definition
Subject	A variable which has been isolated by algebraic manipulation
Rearrange	Changing the form of an equation to isolate other variables
Operation	A mathematical process, common ones being +,-,x and ÷
Inverse	An operation undoing what was done by another operation
Formula	An equation which shows the relationship between quantities
Term	The smallest part of a mathematical expression
Equation	A formula stating that two expressions are equal
Expression	A set of terms combined using the operations +, -, x or ÷
Variable	A symbol for a number we do not yet know
Unknown	A number we do not yet know
Index	A small floating number which tells you how many times a number has been multiplied by itself
Indices	More than one index

Careers Focus – Where could this take you?

As an **actuary** I am responsible for financial risk assessment. My common job duties include rearranging formulae to establish risk potential, creating reports for stakeholders and offering advice on financial decisions based on research.

Additional Resources

MathsWatch: A13a, A13b

CorbettMaths: Videos 7, 8 Worksheets 7, 8

Curriculum Links - Coherence

Required Knowledge:
8:17 Linear Equations with Brackets and Fractions

Applied to:
9F:17 Quadratic Expansion/Factorisation, Changing the subject of a Formula
9H:22 Changing the Subject

Links across school:
Used in Science when working with the SUVAT equations.

Key Concepts

The main concept of this chapter is to isolate the variable that you are asked to make the subject of the formula.
To do this, you can use any of the 4 operations, and maybe squares and square roots, and sometimes you will need to factorise.
The method is very similar to solving equations, but instead of manipulating numbers, you are doing it with variables.

Eg

Make w the subject of the formula

$a(g - w) = 5w - 3$

Multiply out the brackets

$ag - aw = 5w - 3$

Put all terms involving 'w' onto the same side and put everything else on the other side.

$ag + 3 = 5w + aw$

Factorise the right hand side to begin to isolate 'w'

$ag + 3 = w(5 + a)$

Divide both sides by 5+a to leave w on its own.

$$\frac{ag + 3}{5 + a} = w$$

Concept – what it is

The simplest examples involve just using inverse operations.

Eg

$5t = s$, so $t = \frac{s}{5}$

$\frac{c}{4} = x$, so $c = 4x$

$p + 2 = q$, so $p = q - 2$

$v - 4 = w$, so $v = w + 4$

Non-Concept – what it isn't

You are not expected to find a number answer or solve an equation with this type of question, your answer will always be given in terms of the other variables from the question.
Make sure you always do the same to both sides and when multiplying or dividing both sides, make sure you multiply and divide all parts of both sides.
If you have more than one term containing the variable that you are isolating, you will not be able to solve the problem without factorising.

Standard Examples

Rearrange $v^2 = u^2 + 2as$ to make s the subject.

The first step would be to subtract u^2 from both sides.

$v^2 - u^2 = 2as$

Divide both sides by 2a

$$\frac{(v^2 - u^2)}{2a} = s$$

Once you have s on it's own, the question is finished. It doesn't matter which side of the formula 's' is on.

Non-Standard Examples

Rearrange $w = \sqrt[3]{5y - 8}$ to make y the subject.

The first step would be to cube both sides.

$w^3 = 5y - 8$

Add 8 to both sides

$w^3 + 8 = 5y$

Divide both sides by 5

$(w^3 + 8)/5 = y$

8.18: Rearranging formulae

The learning outcomes for this topic are:

- Rearrange 1 step formulae
- Rearrange 2 step formulae
- Rearrange formulae involving brackets
- Rearrange formulae involving indices
- Rearrange formulae involving fractions
- Change the subject of a formula where the subject occurs more than once

Useful Formulae and Hints

The key to rearranging formulae is to ensure you do the same to both sides of the formula.

Try to work out what has happened to the variable that you want to make the subject to form the expression and then unpick it in reverse using your inverse operations.

Know your inverse operations
Add : Subtract
Multiply : Divide

To remove an add 5, subtract 5 from both sides.
To remove a multiply by 4, then divide both sides by 4, which usually means writing the 4 as a denominator on the other side.
To remove a divide by 2 then multiply both sides by 2, which usually means putting the other side in brackets and placing a 2 outside.
To remove a power then root both sides.
To remove a root, then raise both sides to the power taken from the root.

GCSE Questions

Make d the subject of

$$e = d + 5$$

d = ...

(1)

Rearrange $t = \frac{w}{2}$ to make w the subject.

w = ...

(1)

Rearrange this formula to make c the subject

$$a = c - w$$

Circle your answer.

$c = a - w$ $\quad$ $c = w - a$ $\quad$ $c = aw$ $\quad$ $c = a + w$

Make d the subject of the formula $c = 4d + 5$

Make g the subject of the formula:

$$a = \sqrt{g}$$

Make y the subject of the formula:

$$k = y^3 + a$$

Make w the subject of $a = \frac{w - 2}{6}$

Make x the subject of the formula $a = \frac{x + 4}{x + 2}$

8.19: Interior and exterior angles

The learning outcomes for this topic are:

- Recall the relationship between interior and exterior angles
- Find the exterior angle given the number of sides
- Find the interior angle given the number of sides
- Find the interior angle given the number of sides
- Given the interior angle find the number of sides the shape has
- Find missing angles in polygons using the sum of the interior angles

Key Word	Definition
Angle	The amount of turn between 2 lines about their common point
Interior	An object on the inside of another shape
Exterior	An object on the outside of another shape
Polygon	A closed shape made from 3 or more straight lines
Edges	A straight line joining vertices of 2D shapes
Vertex	The mathematical term for a corner
Vertices	The mathematical term for more than one corner
Sum	The total by addition of a set of values

Careers Focus – Where could this take you?

I am an **architect** who builds design plans for offices, buildings and homes. My key responsibilities include using the client's preferences, needs and ideas to create well-designed structures, providing clients with cost estimates, designing construction plans using specifications and scaled drawings.

Additional Resources

MathsWatch: G11, G19

CorbettMaths: Videos 32 Worksheets 32

Curriculum Links - Coherence

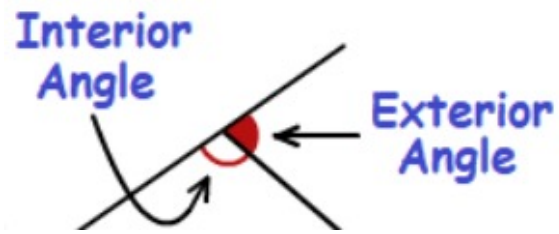
Required Knowledge:
7:20 Angles in a Triangle or Quadrilateral and Properties of
7:21 Angles on Parallel Lines

Applied to:
9F:07 Naming Polygons, Rotational and Line Symmetry, angles in a Polygon, Regular Polygons
9H15 Angles in a Polygon, Regular Polygons

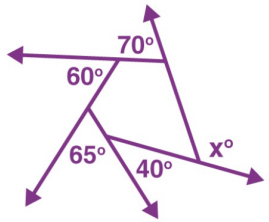
Links across school:
Knowledge of interior and exterior angles may be used in Art where regular polygons need to be drawn accurately.

Key Concepts

Interior and exterior angles of a polygon always add to 180°

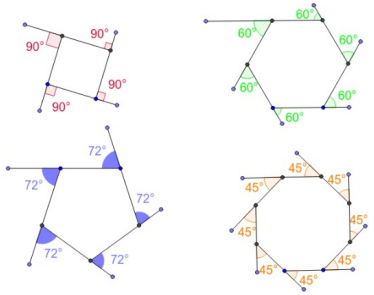


The sum of the exterior angle of any polygon is always 360°. So you can find a missing exterior angle by subtracting the sum of the other angles from 360°.



x = 360 – (70+60+65+40)
x = 125°

This means that the exterior angle of any polygon will have size 360/number of sides



The sum of the interior angles for any polygon is given by the formula
a = 180(n - 2)

Concept – what it is

The main concept is to be able to make a connection between the number of sides of a polygon and the angles in that polygon. In a regular polygon, you have the additional fact that the angles will all be equal.

Eg
Find the size of the interior angles of a nonagon.

A Nonagon has 9 sides, so 360/9 = 40° is the exterior angle

To find the interior angle take 40° from 180° = 140°

Non-Concept – what it isn't

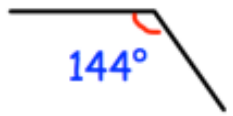
Exterior angle of a shape is not the full reflex angle outside the shape. It is just the angle between one line on the exterior of the shape to the continuation of the next line.

Be careful that questions don't try to confuse you by giving a mixture of interior and exterior angles. Work with one or the other.

Make sure you are clear whether a question is asking you to find an interior or an exterior angle as an answer.

Standard Examples

Calculate the number of sides a polygon has if this is one of it's vertices.



Interior angle = 144°

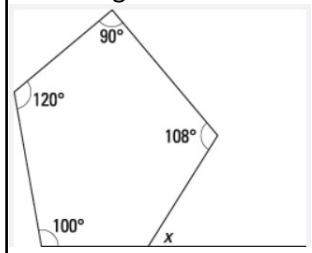
So Exterior angle = 36°

Number of sides = $\frac{360}{36}$

=10 sides

Non-Standard Examples

Find angle x



This question is asking about an exterior angle, so after finding the missing interior angle, find the exterior.
180 x (5-2) = 540
540 – (100 + 120 + 90 + 108) = 122°
Interior angle = 122°
Exterior angle = 58°

8.19: Interior and exterior angles

The learning outcomes for this topic are:

- Recall the relationship between interior and exterior angles
- Find the exterior angle given the number of sides
- Find the interior angle given the number of sides
- Find the interior angle given the number of sides
- Given the interior angle find the number of sides the shape has
- Find missing angles in polygons using the sum of the interior angles

Useful Formulae and Hints

Exterior angles of a polygon always add to 360.

The interior angle and the exterior angle sum to 180 degrees.

In a regular polygon, all exterior angles are equal, so the exterior angle is always 360 divided by the number of sides.

Finding the number of sides from an exterior angle involves seeing how many times you can turn through that exterior angle before you reach 360 degrees, so can be found from 360 divided by the exterior angle.

Finding the number of sides from an interior angle involves subtracting the interior angle from 180 to find the exterior angle and then repeating the process for the exterior angle given directly above.

GCSE Questions

1. Each exterior angle of a regular polygon is 30°.

Work out the number of sides of the polygon.

.....

(2 marks)

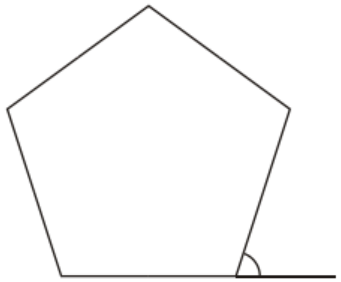


Diagram **NOT** accurately drawn

Work out the size of an exterior angle of a regular pentagon.

.....°

(2 marks)

5. The size of each interior angle of a regular polygon is 156°.
Work out the number of sides of the polygon.

.....

(3 marks)

7.

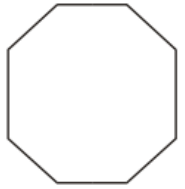


Diagram **NOT** accurately drawn

(a) Work out the size of each interior angle of a regular octagon.

.....

(3)

Diagram **NOT** accurately drawn

The diagram shows part of a **regular** 10-sided polygon.

Work out the size of the angle marked x.

8.20: Mutually exclusive outcomes and sample space diagrams

The learning outcomes for this topic are:

- Find simple probabilities for mutually exclusive events
- Draw a sample space diagram for a simple event
- Use 'not' and 'or' rules for mutually exclusive outcomes
- Find relative frequency from a set of trials
- Use a sample space diagram to calculate probabilities
- Describe how using more trials improves accuracy of relative frequency

Key Word	Definition
Mutually exclusive	Outcomes which can't occur at the same time
Exhaustive	When a set of outcomes covers all possibilities
Trial	A single event of mathematical experimentation
Outcome	The result of a trial
Sample space	A table designed to list all possible outcomes
Event	An outcome or series of outcomes from an experiment
Sample	A selection chosen from a larger group
Relative frequency	How often something happens divided by the total number of outcomes
Experimental probability	An estimate for a probability derived from an experiment
Probability	A numerical estimate for how likely something is to happen

Careers Focus – Where could this take you?

Biostatisticians like me employ their mathematical skills and data knowledge in the biology sector. We gather, analyse and evaluate data regarding living organisms and use our medical research studies to draw conclusions.

Additional Resources

MathsWatch: P3, P7

CorbettMaths: Videos 246, 248 Worksheets 246, 248

Curriculum Links - Coherence

Required Knowledge:
7:22 Probability Scales and Mixed Events

Applied to:
10F:23 Combined Events, 2-way Tables, Venn Diagrams, Tree Diagrams
10H:21 Addition Rule for Outcomes, Combined Events, Tree Diagrams.....

Links across school:
Probability may be used in Chemistry to determine how likely reactions are to happen.

Key Concepts

A sample space diagram is a tool to help you to list all possible outcomes so you can determine how likely different possibilities are.

For example, if you were spinning a 4 sided spinner, and tossing a coin, you could expect the following outcomes:- H1, H2, H3, H4, T1, T2, T3, T4. The sample space diagram is a quick way of listing these possibilities.

Coin \ Spinner	1	2	3	4
Heads				
Tails				

The probability of each outcome is the same, so the chance of getting a Head and a 1 is the same as getting a Tail and a 3 at 1/8.

To determine whether outcomes are mutually exclusive, you need to check whether outcomes can happen at the same time.

For example, the outcomes it is raining and not raining would be mutually exclusive as they can't happen at the same time, but the outcome it is raining, and it is sunny can happen at the same time, as proven by the appearance rainbows.

In a classroom you might be asked are the outcomes 'even numbers' and 'prime numbers' mutually exclusive? The answer would be 'no' as the number 2 falls into both categories so 1 throw of a dice could produce both outcomes.

Concept – what it is

There are only pink, yellow, green and blue counters in a bag.
The table shows the probability that a counter taken at random from the bag will be pink, green or blue.

Colour	Pink	Yellow	Green	Blue
Probability	0.5		0.1	0.2

(a) Work out the probability that the counter taken is yellow

The total of all of the probabilities must be 1, so the probability of yellow, must be 0.2.

There are 40 counters in the bag.

(b) Work out the number of blue counters in the bag.

Multiply the total number of counters in the bag by the probability of Blue.
40 x 0.2 = 8 blue counters

Non-Concept – what it isn't

Be clear that to be mutually exclusive, there must be no overlap between the outcomes. It must be impossible for them to happen at the same time.

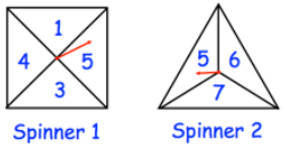
When filling in a sample space, make sure you know what you are expected to put in. is it the total, the sum, or just a list of the 2 items?

Judge each question before you jump into drawing a sample space, as in a problem with only a few outcome, it might be quicker to just list the outcomes.

Standard Examples

Two fair spinners are spun.

Spinner 1 has four equal sections labelled 1, 3, 4 and 5.
Spinner 2 has three equal sections labelled 5, 6 and 7.



Spinner 1 Spinner 2

Each spinner is spun once.
The numbers are added together to get a score.

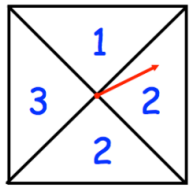
(a) Complete the table to show all possible scores.

Spinner 1

Spinner 2 \	1	3	4	5
5	6	8	9	10
6	7	9	10	11
7	8	10	11	12

Non-Standard Examples

A fair spinner has four sections.



The spinner is spun three times.
The three numbers are added together to give a score.

Find the probability the score is even.

The possible outcomes are ooo,ooe,oeo,oee,eoo,eoe,eeo,eee
Outcomes with even numbers of or no odd number will be even, so the soulution is 4/8 or ½.

8.20: Mutually exclusive outcomes and sample space diagrams

The learning outcomes for this topic are:

- Find simple probabilities for mutually exclusive events
- Draw a sample space diagram for a simple event
- Use 'not' and 'or' rules for mutually exclusive outcomes
- Find relative frequency from a set of trials
- Use a sample space diagram to calculate probabilities
- Describe how using more trials improves accuracy of relative frequency

Useful Formulae and Hints

For possible outcomes to be mutually exclusive, it must be impossible for them to happen at the same time.
It can't be both Monday and Tuesday at the same time, so these outcomes are mutually exclusive.
It can be both Monday and raining at the same time, so these outcomes are not mutually exclusive.

A sample space is a quick way to find all possibilities of a trial. Be careful to check whether you are expected to add or multiply the numbers together or just list them when completing.

To find a probability from a sample space, divide the number of possible successful outcomes by the total number of outcomes.

Relative frequency is the number of successful outcomes divided by the number of trials. The more trials, the better the results.

GCSE Questions

In a bag of marbles, there are 20 orange and 30 blue marbles. Vanessa picks out 2 marbles at a time.

a) Are the events of picking out an orange marble and blue marble mutually exclusive?

Louis picks out letters at random from the word LIGHTHOUSE.

a) Are the events of picking a vowel and picking a letter in the first half of the word mutually exclusive?

Two fair six-sided dice are rolled.
The score is **difference** between the numbers on each dice.

(a) Complete the table to show all possible scores.

Dice 2 \ Dice 1	1	2	3	4	5	6
1	0	1				
2	1					
3	2					
4						
5						
6						

(b) Find the probability of scoring a 2

David and Becky want to estimate how many yellow jelly beans are in a tub of 500 jelly beans.
A trial consists of taking a jelly bean at random, noting the colour and replacing the jelly bean in the tub.

	Number of trials	Number of yellow jelly beans chosen
David	20	3
Becky	100	11

(a) Write down the relative frequency of David taking a yellow jelly bean.

.....

(1)

(b) Write down the relative frequency of Becky taking a yellow jelly bean.

.....

(1)

(c) Whose experiment gives the more reliable estimate of the number of yellow jelly beans in the tub?
Give a reason for your answer.

.....

.....

.....

(1)

Newsome Academy
Everyone Exceptional Everyday

English

Our students will:

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

Year 8 Short Stories

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

- complete an in-depth study of a novel – show understanding of plot, characterisation and themes
- Analyse language and structure and effectiveness of meaning
- show understanding of context of novel – when and where it was written/set
- Apply their knowledge of vocabulary, grammar and text structure to their writing and select the appropriate form
- draw on knowledge of literary and rhetorical devices in their writing

Keyword	Definition/Effect
Alliteration	Using words that start with the same letter and sound, e.g. raging river rapids Gains attention through repetition of; appeals to sense of hearing, emphasises words, enhances imagery, reinforces meaning; aids memory
Assonance	Using words with the same vowel sound, e.g. a sharp, dark glance Has the same effect as alliteration
Imagery	helps visualisation of and immersion in descriptions
Onomatopoeia	words invoking sounds; appeals to sense of hearing, enhances imagery, develops an image by creating a sound – crash, ding, splat
Simile	Creates a comparison using 'like' or 'as' - as cool as a cucumber
Metaphor	a comparison between two things that are otherwise unrelated – he has a heart of gold
Personification & Pathetic Fallacy	attributes human characteristics or emotions to an inanimate thing creating a strong comparison - The weather is miserable outside
Voice	the atmosphere created by the writer's choice of tone, in order to convey a mood to a reader
Sentence length – short (Simple, Compound)	increases pace (action and dramatic lines); creates a punchy choppy rhythm; grabs attention
Sentence length – long (Compound, Multi-clause)	slow, descriptive or explanatory; can create a sense of relaxation, flow, or time dragging

Key Concepts

Description

In real life we perceive the world with our five senses; smell, touch, taste, hear and see. So too must your reader. They wish to experience your fictional world, and sensory stimulation helps transport them into your character's story. This is where the power of a writer's observation and imagination mix, with amazing results.
Successful description conveys important information to the reader in strategic places about:

- place/background
- emotion and mood
- tension/atmosphere
- action

This can elicit emotions within your reader, creating tension, atmosphere, and a sense of immediacy (being there with the character).

Characters 2

Characters are the lifeblood of creative writing, driving the plot and representing the human interest element for the reader to care about. There are two forms of characterisation:
Direct – the narrator explicitly tells the reader details about the character; i.e.:

'Mr. Ramsay – he is absorbed in himself, he is tyrannical, he is unjust…'

Indirect – the narrator implicitly reveals (shows) the reader the character's traits

'He dragged the last smoke from his ravelling cigarette and then, with callused thumb and forefinger, crushed out the glowing end.'

Indirect is always preferable because it involves the reader, forcing them to draw their own conclusions

Indirect Characterisation

Indirect characterisation can help readers infer or deduce things about a character's personality in five different ways (represented by the acronym **STEAL**):

1. **Speech (dialogue)**
   Personality is revealed through language choices (intelligence and education); speed, hesitations and length (temperament); accents (origins); and topics (status).
2. **Thoughts (& feelings)**
   Understanding personality through inner thoughts and feelings can reveal rationality, confidence, mood, intentions, motivations and other characteristics, as well as discrepancies between their inner and outer personas.
3. **Effect (on others)**
   How do they handle themselves socially? What about the relationships they can or cannot form with others? Revealing the emotional response other characters have towards this one shows what explicit aspects of the character's personality are expressed to others.
4. **Actions (& behaviours)**
   Behaviours are a product of inner feelings, revealing a character's drives and motivations. How they physically and verbally interact with others can demonstrate their social standing and their innate nature, i.e.: good, mean, sympathetic, aggressive or selfish.
5. **Looks (appearance)**
   Personal hygiene, clothing, body language and facial expressions are the non-verbal cues representing 80% of communication. They may be genuine pointers to how the character feels about them self, their education, wealth, or even their natural state. It could however, be a deception at odds with their true character.

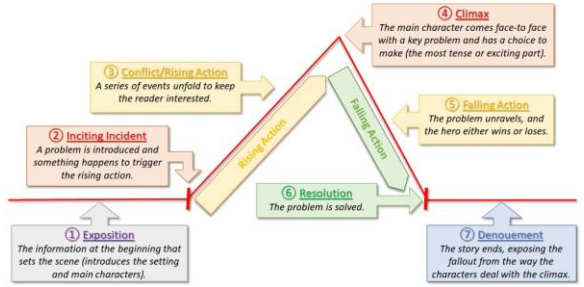
Paragraphing

Paragraphs are just a group of sentences sharing the same idea. They structure your writing to make it easier for readers to follow. Always start a new paragraph when you change the focus of your writing.

When writing about a new **TIME** period or about a different **PLACE**.

When writing about a new **TOPIC** or about or as a new **PERSON**.

Freytag's Pyramid of Dramatic Structure



Narrator

Every narrative must have a narrator: someone who exists as the voice of the story or description, the reader's lens to observe the characters and events.
1st person perspective
written as if the narrator is a character, observing or taking part in the story.
2nd person perspective
written as if the narrator is talking directly to the reader.
3rd person perspective
written as if the narrator is talking about the characters and events, but not necessarily a character in them.

Newsome Academy
Everyone Exceptional Everyday

Year 8 Short Stories

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

- complete an in-depth study of a novel – show understanding of plot, characterisation and themes
- Analyse language and structure and effectiveness of meaning
- show understanding of context of novel – when and where it was written/set
- Apply their knowledge of vocabulary, grammar and text structure to their writing and select the appropriate form
- draw on knowledge of literary and rhetorical devices in their writing

Retrieval Practice

Questions	Answers
What is the difference between tension and suspense?	Tension is a feeling produced by a conflict that has not been resolved, while suspense is a feeling of wanting to know what happens next.
What are genre conventions?	Genre conventions are **elements, themes, topics, tropes, characters, situations, and plot beats** that are common in specific genres.
What is a genre?	a style or category of art, music, or literature
What is the name given to the process of creating a character in fiction?	Characterisation
What is an embedded quotation?	Put the quotation inside your own sentence, rather than putting it in the middle of a page and then commenting on it.
What is characterisation?	Characterisation is the way writers create characters and make them believable. When writing about texts, it is easy to treat characters as real people. Try to remember that the author is creating characters using language.
Which narrative style usually creates more distance between the reader and characters?	Third person narration

Career Focus - Where could this take you?

I am a novelist. I write stories for books. To be a successful novelist, you need to have a great imagination and a love for writing. You should be able to come up with interesting characters and plot lines and be able to write in a way that keeps readers interested. You also need to have patience, because writing a novel can take a long time.

Challenge Activities

Use the picture as a stimulus to write a story.

- Include as many figurative devices as you can

Falling into the tunnel

Now it's your turn to write a story. Imagine that you have fallen, accidentally, into a dark tunnel, like the one above. You fall quite a long way down and land - on what? What can you smell? What can you hear?

Complete the following table to help you plan. Try to think of as many ideas as possible.

What do you see?	What do you smell?	What do you hear?	What can you touch?	What emotions do you feel?
silhouettes	stagnant water	drips of water	crumbling earth of the tunnel	fear
nothingness	sweat			
darkness like a blanket				

Topic Links

This topic links to:

- Literacy
- Higher-order thinking
- Creativity

Additional Resources

To further practise and develop your knowledge see:

- BBC bitesize

https://www.bbc.co.uk/bitesize/topics/z43dwnb/articles/zk972v4

Newsome Academy
Everyone Exceptional Everyday

Science

Our students will:

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

Year 8 Waves

Newsome Academy
Everyone Exceptional Everyday

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

- Describe light and sound waves
- Draw wave diagrams
- Explain reflection and refraction
- Calculate the angle of refection and refraction

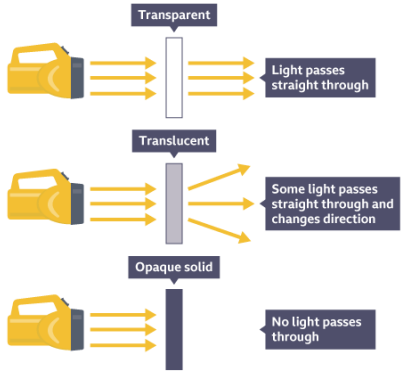
Keyword	Definition
Sound wave	A vibration that travels through a medium such as a gas, liquid or solid.
Longitudinal wave	When a wave moves in parallel to the direction that the wave travels.
Amplitude	Maximum distance a wave varies from its rest position.
Wavelength	The distance from two corresponding (or the same) parts of a wave.
Frequency	How many waves can pass a given point per second, measured in Hertz (Hz)
Compression	The part of a longitudinal wave where the partides of the medium are close together.
Rarefraction	The part of a longitudinal wave where the partides of the medium are farther apart.
Transparent	When all of the light can pass through.
Translucent	When only some of the light can pass through.
Opaque	When all the light cannot pass through because is absorbed or reflected.
Reflection	When light bounces off a surface. The angle of reflection is always the same as the angle of incidence.
Refraction	When light passes through a material of different density and changes direction.
Electromagnetic spectrum	A continuous spectrum of waves with different wavelengths, frequencies and uses.

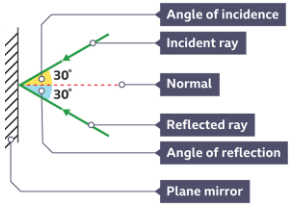
Key Concepts

Light

Light travels as waves. These are transverse waves, like ripples in water. The direction of vibration in the waves is at 90° to the direction that the light travels.
Unlike sound waves, light waves can travel through a vacuum – they do not need a substance to travel through.

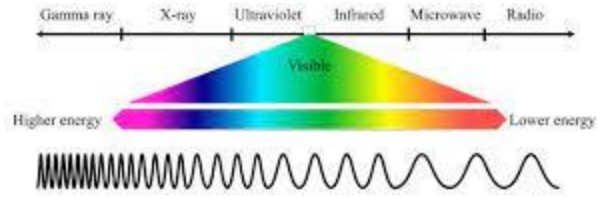
Light can pass straight through transparent materials like water and glass.
Translucent materials allow some light to pass through them. For example, ice and tracing paper.
Opaque materials are substances which light cannot pass through, like stone, metal or wood.





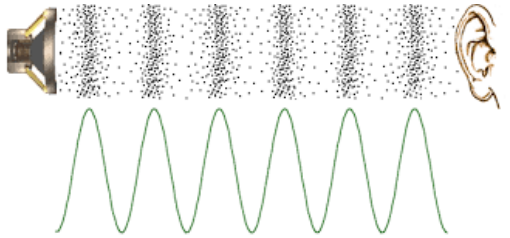
The Law of Reflection - The angle the ray is reflected is always the same as the angle the light hits the mirror, with both angles being measured from the normal.

Electromagnetic Spectrum



Sound

When something shakes, scientists call it a vibration. All sounds are made by something that is shaking or vibrating.
When there is a sound wave, the air particles don't travel directly from the object making the sound to your ear. Sound waves are vibrations being passed on between particles.

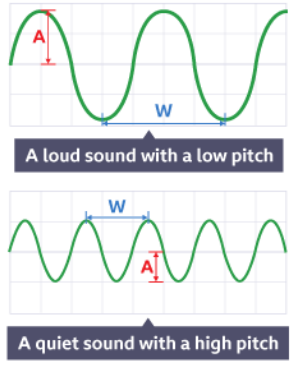


The air particles start vibrating and push on the air particles next to them, so the vibrations are passed on. The particle moves one way and then moves back in the opposite direction, so ends up back where it started. The particles vibrate in the same direction as the wave travels. Sound is an example of a longitudinal wave.

Wave Traces

To record or analyse a sound, scientists and musicians use a microphone to turn the sound into an electrical signal. The electrical signal can then be displayed on a device called an oscilloscope and it produces a graph called a wave trace.

Wave traces appear on an oscilloscope graph as a transverse wave, but it is important to remember that because they are a sound, they are actually a longitudinal wave.



Newsome Academy
Everyone Exceptional Everyday

Year 8 Waves

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

- Describe light and sound waves
- Draw wave diagrams
- Explain reflection and refraction
- Calculate the angle of refection and refraction

Retrieval Practice

Questions	Answers
What is a sound wave?	Energy that travels through matter.
How are sound waves made?	When an object vibrates.
What is a longitudinal wave?	A wave that oscillates (moves) parallel to the wave (in the same direction that it travels).
Sound waves have areas of compression. What does this mean?	Regions where particles are close together.
Sound waves have areas of rarefaction. What does this mean?	Regions where particles are spread out.
What does the amplitude of a sound wave show?	The loudness
What does the frequency of a sound wave show?	The pitch of a sound.
What is frequency measured in?	Hertz
How does light travel?	In straight lines (transverse wave) at right angles to the direction of travel
What is a transverse wave?	A wave that oscillates (moves) at right angles to the direction of travel.
What is the law of reflection?	The angle of incidence is the same as the angle of reflection.
Define refraction.	When light waves change direction when going through a material with a different density.
What happens when light passes through a denser material?	It slows down and changes direction (angle of incidence decreases towards the normal).

Career Focus - Where could this take you?

I am a lighting technician. I set up and operate lighting for concerts, conferences, theatres as well as sometimes working on film and TV sets. My day-to-day tasks include interpreting designers plans, running wires, health and safety plans, taking cues from directors, checking equipment and putting it away.
In order to this job well I need a variety of skills such as ability to stay calm under stress, attention to detail, understanding of machines and tools, leadership skills and ability to use computers.

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. Describe and explain what happens when a light ray is shone at a mirror, a glass block and a prism.
4. Research the electromagnetic spectrum; name the waves and give a use for each.
5. Find out about a famous scientist that helped us understanding more about light or sound and list the

Topic Links

This topic links to:

- Energy
- Space
- Organisation

We will also be practising how to

- Draw ray diagrams
- Measure angle using a protractor
- Construct an argument using evidence/data

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/zw982hv
YouTube Cognito - https://www.youtube.com/watch?v=aCu4VRKMstA

Year 8 Chemical Reactions

Newsome Academy
Everyone Exceptional Everyday

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

- Write chemical reactions using words/symbols
- Describe combustion and thermal decomposition
- Identify endothermic and exothermic reactions
- Calculate the rate of a reaction

Keyword	Definition
Chemical Formula	Chemical symbols with numbers to show the number of atoms of each element in the molecule.
Chemical Reaction	A process in which one or more substances are changed into new substances (the rearrangement of atoms).
Combustion	A reaction between fuel and oxygen that transfers energy to the surroundings.
Incomplete combustion	When there is not enough oxygen for a fuel to fully react in a combustion reaction.
Oxidation	A reaction in which a substance combines with oxygen.
Reactant	A starting substance in a chemical reaction.
Product	A substance that is made during a chemical reaction.
Thermal Decomposition	A chemical change (substance breaking apart) caused by heating.
Exothermic	A chemical reaction that gives out energy, causing the surroundings to heat up.
Endothermic	A chemical reaction that takes in energy, causing the surroundings to cool.
Energy transfer	The passing of energy from one energy store to another.
Rate of Reaction	A measure of the speed of a reaction, for example measuring the amount of product produced over a set period of time.
Catalyst	A substance that speeds up a chemical reaction

Key Concepts

Chemical Equations

In a chemical reaction, reactants are the substances that react together, and products are the substances formed.

Word equations always take the form, reactants → products. A + sign separates two or more reactants or products.

Chemical symbols and formulae can be used to represent elements and compounds in the reaction. This helps us to understand the atoms involved in the reaction

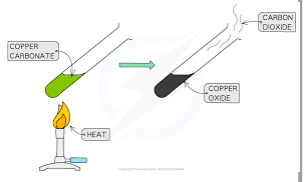
$$\underset{CuSO_4\ (aq)}{\text{COPPER SULFATE}} + \underset{Mg\ (s)}{\text{MAGNESIUM}} \longrightarrow \underset{Cu\ (s)}{\text{COPPER}} + \underset{MgSO_4\ (aq)}{\text{MAGNESIUM SULFATE}}$$

Combustion

Burning is an example of a chemical reaction. The scientific name for burning is combustion.
During combustion, a fuel reacts with oxygen to make carbon dioxide and water. The reaction releases energy.
When there is not enough oxygen available to react with all the fuel, incomplete combustion takes place. This can also produce extra products = carbon (soot) and carbon monoxide

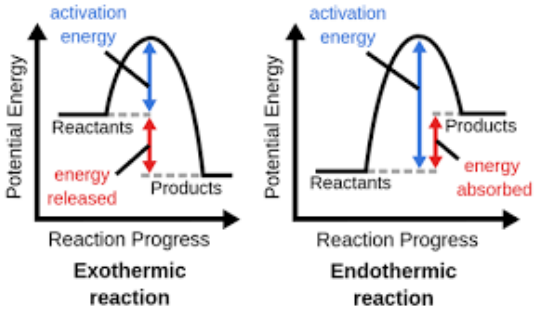
Thermal Decomposition

These reactions happen when some substances are heated and break down into simpler substances.
When carbonates decompose they produce a metal oxide and carbon dioxide.



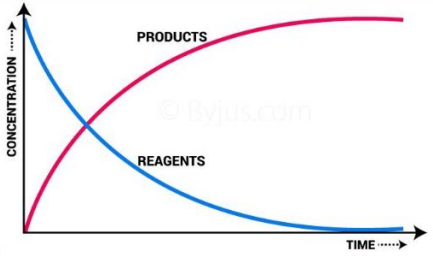
Exothermic and Endothermic Reactions

.



Rates of Reactions

The rate of a reaction can be measured by either the rate a reactant is used up or by the rate a product is produced. This can be done by measuring a change in mass, volume of gas produced or cloudiness of solution (precipitate).



Catalyst

A catalyst is a substance that is added to a chemical reaction to make the reaction faster. Catalysts are not changed during the reaction, they only alter the rate.
Most catalysts provide an alternative pathway for the reaction to happen with less energy i.e. the activation energy needed for the reaction to occur is lower.

Newsome Academy
Everyone Exceptional Everyday

Year 8 Chemical Reactions

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

- Write chemical reactions using words/symbols
- Describe combustion and thermal decomposition
- Identify endothermic and exothermic reactions
- Calculate the rate of a reaction

Retrieval Practice

Questions	Answers
What is a chemical change?	When chemical reactions occur to form new substances (new chemical elements or compounds).
What does a word equation show?	The chemical reaction that has occurred between reactants and products.
What is a combustion reaction and what 3 things does it need?	Burning of a fuel in oxygen. Requires a fuel, heat and oxygen.
What is the word equation for combustion?	Fuel + Oxygen = Carbon dioxide + Water
Define thermal decomposition.	A chemical reaction when a substance is broken down when heated.
What are the product of the thermal decomposition of calcium carbonate?	Calcium oxide + Carbon dioxide
What is an exothermic reaction?	A reaction that gives out heat so the surroundings become warmer.
What is an endothermic reaction?	A reaction that takes in heat so the surroundings become colder.
How do you measure the rate of a reaction?	How fast a reactant is used up or how fast a product is made.
How does temperature affect the rate of a reaction?	The higher the temperature the faster the rate of a reaction.
How does concentration affect the rate of a reaction?	The higher the concentration the faster the rate of a reaction.
Why do you only need a small amount of a catalyst?	The catalyst isn't used up so can be used again and again.

Career Focus - Where could this take you?

I am a chef. I am responsible for cooking food for people in places like pubs, restaurants and hotels. I have learnt to cook lots of different food from all over the world.
There are many different types of chef, but it is common to start as a commis or junior chef.
I use chemical reactions to cook food and improve its flavour.
The Mailard reaction when cooking causes the browning effect and was discovered by a French chemist called Louis-Camille Mailard. This reaction produces the flavours in cooked meats, onions and roasted coffee..
My average wage is £15,000-30,000 and I work unsociable hours usually in the evenings.

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. Write definitions of endothermic and exothermic reactions and give examples for both.
4. Draw a poster, using particle diagrams, to explain the mixing and reaction of sulphur and iron.
5. Find out more about Chemists and what they do. What qualifications would you need for this career? What current research is being done? What is the salary?
6. Research the use of catalysts in the production of ammonia. What catalysts is used and how does the catalysts help with the production of ammonia

Topic Links

This topic links to:

- Energy
- Atoms and Molecules
- Photosynthesis and Respiration

We will also be practising how to

- Draw energy profiles
- Calculate the rate of a reaction
- Construct a method for carrying out a practical

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=GCR5xeduq2o

Newsome Academy
Everyone Exceptional Everyday

Year 8 Photosynthesis & Respiration

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

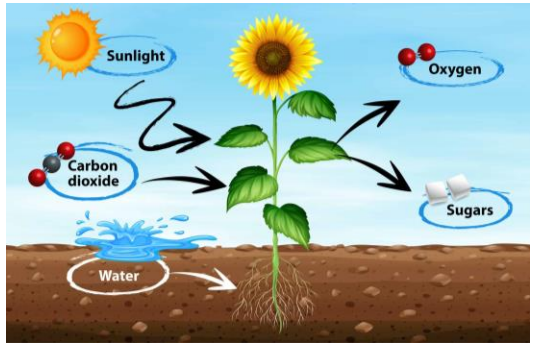
- Write word equations for photosynthesis and respiration
- Describe the process of photosynthesis
- Describe the process of respiration
- Compare aerobic and anaerobic respiration

Keyword	Definition
Photosynthesis	A process carried out by green plants that uses carbon dioxide, water and sunlight to produce glucose.
Chloroplasts	Organelles found in plant cells that contain chlorophyll
Chlorophyll	The green pigment in plants that traps sunlight
Palisade Cell	A cell in a leaf that is long and narrow that is packed with chloroplasts.
Stomata	A very small pore in the lower surface of a leaf.
Phloem	A tissue made up of cells forming long tubes that transport sugars around the plant.
Xylem	A tissue made up of cells forming long tubes that transport water and minerals up the plant from roots to leaves.
Aerobic Respiration	Respiration involving oxygen.
Anaerobic Respiration	Respiration without using oxygen.
Mitochondria	An organelle found in animal and plant cells where respiration is carried out.
Lactic acid	The substance produced during anaerobic respiration in animals.
Fermentation	A type of anaerobic respiration that occurs in plants and some microbes such as yeast.
Glucose	A simple sugar molecule produced during photosynthesis and used during respiration.

Key Concepts

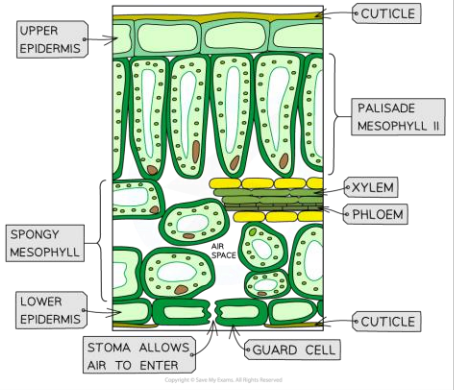
Photosynthesis

Photosynthesis is a process that occurs in the leaves of a plant and needs both chlorophyll and light energy.
During photosynthesis, the chlorophyll in leaves help convert carbon dioxide and water into the products oxygen and glucose.
The product glucose acts as a vital source of food for the plant.
Carbon dioxide, water and light are all needed for photosynthesis to take place.



Leaf adaptations

Leaves are adapted for photosynthesis and gaseous exchange.
They are adapted for photosynthesis by having a large surface area, and contain openings, called stomata to allow carbon dioxide into the leaf and oxygen out.



Aerobic Respiration

Respiration involves chemical reactions that break down nutrient molecules in living cells to release energy.
Aerobic respiration needs oxygen. It is the release of a relatively large amount of energy in cells by the breakdown of food substances in the presence of oxygen.
It mostly occurs in tiny parts of your cells called mitochondria which are found in the cytoplasm. Cells which need more energy like sperm cells, which swim, or muscle cells which contract and relax, have more mitochondria.

GLUCOSE + OXYGEN → CARBON DIOXIDE + WATER

$C_6H_{12}O_6 + 6O_2 \rightarrow 6CO_2 + 6H_2O$

Anaerobic Respiration

During vigorous exercise your body cells may not have enough oxygen for aerobic respiration to take place and anaerobic respiration occurs instead. Anaerobic respiration releases less energy than aerobic respiration but it does this more quickly.
Anaerobic respiration in microorganisms such as yeast is called fermentation. This can be used for baking and brewing.

GLUCOSE → LACTIC ACID

GLUCOSE → CARBON DIOXIDE + ETHANOL

Year 8 Photosynthesis & Respiration

Newsome Academy
Everyone Exceptional Everyday

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

- Write word equations for photosynthesis and respiration
- Describe the process of photosynthesis
- Describe the process of respiration
- Compare aerobic and anaerobic respiration

Retrieval Practice

Questions	Answers
What is made during photosynthesis?	Glucose – food for the plant which is stored as starch.
What is the word for photosynthesis?	Carbon dioxide + Water → Glucose + Oxygen
What four things are needed for photosynthesis to occur?	Sunlight, Carbon dioxide, Water and Chloroplasts
Where in the leaf does most of the photosynthesis take place?	Palisade cells.
What is the function of the large air spaces in leaves?	Allow gases to diffuse into (carbon dioxide) and out of (oxygen) the cells in the leaf.
How is water transported to the leaves?	Through the xylem.
How is glucose transported around the plant?	Through the phloem.
In which organelle does respiration take place?	Mitochondria
What is the purpose of respiration?	Releases energy from glucose for cells to use.
What is the word equation for aerobic respiration?	Glucose + Oxygen → Carbon dioxide + Water
What is the word equation for anaerobic respiration in animals?	Glucose → Lactic acid
What is oxygen debt?	The oxygen needed after exercise involving anaerobic respiration. Needed to break down lactic acid.
What is the word equation for anaerobic respiration in yeast?	Glucose → Carbon dioxide + Ethanol

Career Focus - Where could this take you?

I am a wine maker. I oversee the entire wine process from grape harvesting to grape crushing, fermentation and bottling.
I use my understanding of the fermentation to alter a wines composition and taste.
Yeast is used in this process to turn the sugars in fruit into carbon dioxide and ethanol.
My salary is variable and I can work in small vineyards/factors or even once I have experience work on a massive scale across many vineyards and breweries.

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. Create a Venn to compare aerobic and anaerobic respiration.
4. Describe and explain the changes that happen in the body when a person plays tennis. 4. Draw a picture of a plant and explain the features it has to allow for photosynthesis to occur.
5. Research the different chemical reactions that happen when food is cooked.

Topic Links

This topic links to:

- Energy
- Organisation
- Cells

We will also be practising how to

- Construct flow diagrams
- Calculate the rate of photosynthesis
- Carry out pre-topic research

Additional Resources

To further practise and develop your knowledge see:

Educake - https://www.educake.co.uk/
BBC Bitesize - Photosynthesis and respiration in plants - Respiration and gas exchange - KS3 Biology - BBC Bitesize - BBC Bitesize
YouTube Cognito - https://www.youtube.com/watch?v=X81OIkeuHJw

Newsome Academy
Everyone Exceptional Everyday

Humanities

Our students will:

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

Year 8 Horn of Africa

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

- Name the countries, and their capitals of the Horn of Africa
- Describe the Horn of Africa's main physical features
- Describe the climate patterns in the Horn of Africa.
- Explain how people live and earn money in the Horn and be able to give facts on jobs people do
- Explain how Djibouti's location has supported its development

Keyword	Definition
Agriculture	The practice of growing crops or animals
Civilisations	The society, culture, and way of life of a particular area
Conflict	An extended struggle or battle
Economy	All the business activity going on in a country
Depression	An area of sunken land
Fair trade	Trade between companies in developed countries and producers in developing countries in which fair prices are paid to the producers.
Grazing	Land with vegetation on where animals feed
Hostile	Unfriendly and not liking something
Nomadic	People with no fixed home who travel to find grazing land
Region	An area having definable characteristics but not always fixed boundaries
Relief	The difference in height from the surrounding terrain
Rural	Countryside, where people live in farms or in small villages
Semi-nomadic	People living usually in portable or temporary housing who farm animals and crops

Key Concepts

The Horn of Africa is a region and it has 4 countries

Coffee and Salt

Ethiopia is the home of coffee, around 15 million Ethiopians depend on it (farming or involved in the selling of it) for a living. Around £50 billion is spent on it globally a year

Salt is mined in the Danakil Depression; in the past the Red Sea flooded the area. When the waters fell the water in the Depression slowly evaporated leaving thick beds of salt. You might have had some on your food?

Horn of Africa's physical geography.

The Ethiopian Highlands are the largest area of highland in Africa

The Danakil Depression is 100m below sea level

Lake Assal in the Afar Triangle is the lowest point in all Africa

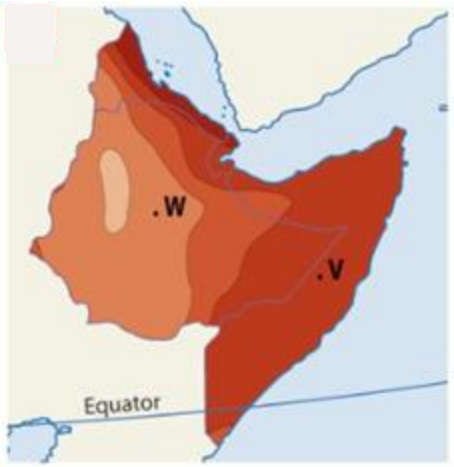
Year 8 Horn of Africa

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

- Name the countries, and their capitals of the Horn of Africa
- Describe the Horn of Africa's main physical features
- Describe the climate patterns in the Horn of Africa.
- Explain how people live and earn money in the Horn and be able to give facts on jobs people do
- Explain how Djibouti's location has supported its development

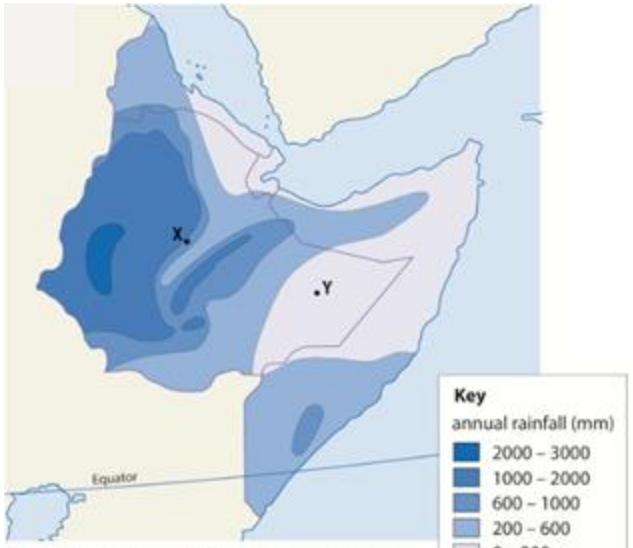
Key Concepts

Horn of Africa Climate



Key
average July temperature °C
30 – 35
25 – 30
20 – 25
15 – 20
10 – 15

◀ Temperature in the Horn of Africa.



Key
annual rainfall (mm)
2000 – 3000
1000 – 2000
600 – 1000
200 – 600
0 – 200

▲ Rainfall in the Horn of Africa. The two palest areas have least rain, and are mostly semi-desert.

Nomads

In the Horn of Africa nomads live in the dry areas where there is too little rain for crops. They follow the rains to find grass and vegetation.
There are at least 10 million nomads in the region and over half of the population of Somalia are nomadic.

Djibouti

Djibouti is a tiny country, with a population of only 1.1 million. It has few natural resources but it is in a great location. It sits at the entrance to the Red Sea, so half the world's container ships pass it on journeys from Africa, Asia and Europe. The port is where ships unload and load cargo as well as refuel, Ethiopia uses its port because it is landlocked. It is a hub for phone and internet connections in Africa and has many foreign military bases.

	Djibouti	Eritrea	Ethiopia	Somalia	UK
Population (millions)	0.9	5.9	85.2	9.8	64
% aged 14 or under	34	41	44	44	17
% living in towns and cities	77	21	17	38	80
How long a new baby is likely to live for (years)	62	63	60	51	80
% of population with access to clean safe water	92	61	44	29	100
What % of workforce are farmers?	under 30	80	85	71	1.4
GDP per person (PPP) (in dollars)	$2700	$800	$1200	$600	$37 500

Year 8 Horn of Africa

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

- Name the countries, and their capitals of the Horn of Africa
- Describe the Horn of Africa's main physical features
- Describe the climate patterns in the Horn of Africa.
- Explain how people live and earn money in the Horn and be able to give facts on jobs people do
- Explain how Djibouti's location has supported its development

Retrieval Practice

Questions	Answers
Name the 4 countries in the Horn of Africa	Djibouti, Ethiopia, Eritrea and Somalia
What is the capital city of Ethiopia?	Addis Ababa
Name 2 rivers in the Horn of Africa	Blue Nile and Awash
How far below sea level is the Danakil Depression	100m
Which area of the Horn of Africa receives most rainfall and why?	The Ethiopian Highlands because the higher you go the air cools causing precipitation (rain) to develop
How does Djibouti earn money?	The port with ships loading and unloading cargo and it has foreign military bases
Why do nomads move around?	To follow rainfall and find grazing land for their animals
How was salt formed in the Danakil Depression?	The Red Sea flooded the area. When the waters fell the water in the Depression slowly evaporated leaving thick beds of salt
What % of people in Somalia have access to safe, clean water?	29%

Career Focus - Social Researcher

I am a social researcher. I study people and the way they interact with each other. I might ask questions, observe behaviour, or do experiments to learn more about how people behave in different situations. I use this information to try to understand why people do the things they do and how we can make the world a better place for everyone. It's kind of like being a detective, but instead of solving crimes, I try to solve puzzles about how people think and act.

Challenge Activities

- Write a song, poem or rap about nomads and their lifestyle. You can then perform and film/record this
- Create a poster or information leaflet about Fairtrade products and why people should buy them
- Research and write travel guide to Ethiopia - Include details on the the climate, physical features, cities, population and what people could see or do there

Topic Links

This topic links to themes in:

- History - slavery and empire
- Music - African music
- Science - Biomes

Additional Resources

Horn of Africa

Africa

Year 8: The Slave Trade

Newsome Academy
Everyone Exceptional Everyday

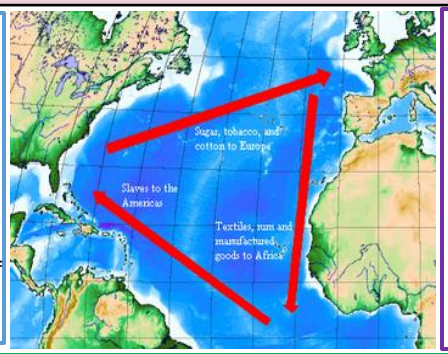
The aims of the sequence of learning are to ensure that all students:

- Explore the Triangular Trade and the impact this had on Britain.
- Evaluate all aspects of life for Slaves, including Capture and Transport, Auction and Life on a Plantation.
- Analyse various reasons for the abolition of the Slave Trade, including; Campaigners, Slave Resistance and Economic Concerns.
- Explain why the Slave Trade was abolished through the evaluation of sources and the use of own knowledge to support.

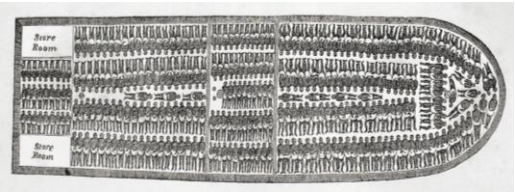
Keyword	Definition
Slave	A person owned by another person. They are forced to work and are not paid.
The Trade Triangle	The system of trade between Europe, West Africa and the Americas.
Trade	The buying, selling and exchanging of goods and services.
Capture	To take hold or gain control by force or through 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 *(middle)* 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.

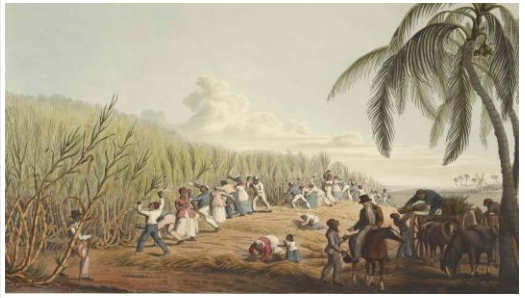


Capture and Transport:
Early slave traders from Europe occasionally raided the coast of Africa in order to capture slaves but this was both dangerous and often ineffective. Instead European slave traders formed allegiances with African rulers to trade goods for slaves. Africans who became slaves therefore 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.

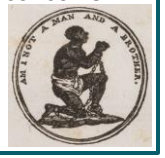
Auction:
The auction block was where slaves were sold to the highest bidder. Children and babies would often be taken away from parents, and families would never see each other again. Slaves were sold in cattle-like auctions to Europeans looking for labour to work on their plantations.
A strong, healthy 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'.



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.

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.



Newsome Academy
Everyone Exceptional Everyday

Year 8: The Slave Trade

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

- Explore the Triangular Trade and the impact this had on Britain.
- Evaluate all aspects of life for Slaves, including Capture and Transport, Auction and Life on a Plantation.
- Analyse various reasons for the abolition of the Slave Trade, including; Campaigners, Slave Resistance and Economic Concerns.
- Explain why the Slave Trade was abolished through the evaluation of sources and the use of own knowledge to support.

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 theirs 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 25th March 1807 and later slavery was abolished on 28th 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

Year 8 Ethics – Environment

Newsome Academy
Everyone Exceptional Everyday

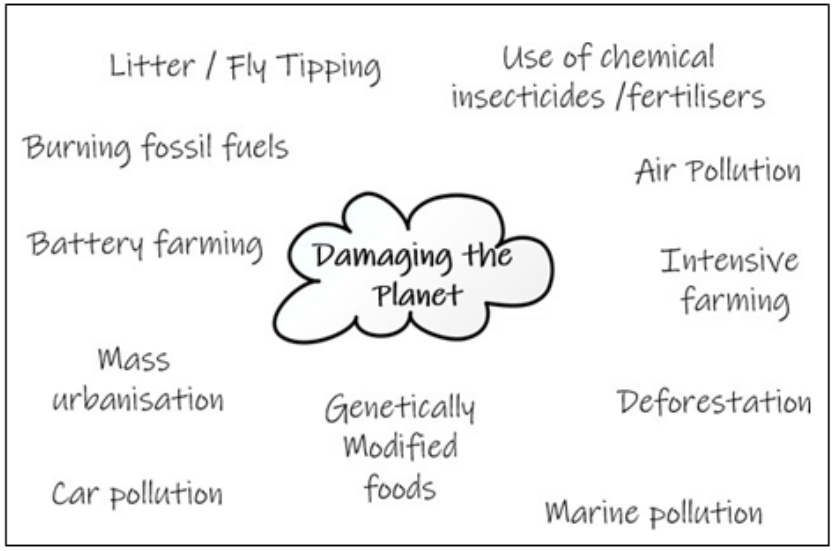
The aims of the sequence of learning are to ensure that all students can:

- Identify a range of feelings about the natural world
- Explain what creation myths are & their purpose
- Explain religious teachings relevant to the care of the planet
- Express & evaluate religious responses to environmental damage
- Explain & evaluate two different views about the effect of religion on care of the environment and ways we can look after the environment

Keyword	Definition
Environment	The surroundings or conditions in which a person, animal, or plant lives
Environmental	Environmental means relating to or caused by the surroundings in which someone lives.
Pollution	Pollution is anything that has harmful or poisonous to the environment.
Awe/Wonder	Awe is the feeling we get in the presence of something vast that challenges our understanding of the world, like looking up at millions of stars in the night sky. When people feel awe, they may use other words to describe the experience, such as wonder, amazement, surprise, or transcendence.
Sustainable	Sustainability is the idea that humans must interact with the environment in a way that ensures there will be enough resources left for future generations.
Stewardship	Stewardship means to have responsibility of looking after the world. Christians believe that God gave this word as a gift to look after and to take care of it.
Khalifah	Muslims believe that Allah (God) has given this world to look after, similar to the belief in Christianity.
Creation Myths	A story that is used to explain the creation of the world or the role of people in it. They are often colourful sometimes including supernatural beings like gods and goddesses

Key Concepts - Stewardship

	**Stewardship** Looking after something for it's real owner. Caring for the Earth on behalf of God.
	**Environment** Everything around us in the natural world. The environment includes people, animals, plants and resources.
	**Sustainability** Using the Earths' resources in a way which protects the environment for present and future generations.
	**Wants** Luxuries. Things that humans desire but that are not needed for survival.
	**Needs** Necessities Things that we must have in order to survive and thrive.



All religions believe that we have a responsibility to care for the world and the environment (including the animals, plants and resources on the Earth). These beliefs are often at the very centre of religious teachings – for example one of the reasons Muslims follow a halal diet is to help to maintain the natural balance or 'fitrah' in the world.

However, believing that we should care for the world is not only a religious belief. Many people who do not follow a particular religion – for example Humanists – believe strongly that we should protect the earth and its' environment.

Beliefs about the Earth

Christianity
God made the Earth and gave Christians the special responsibility as **Stewards** to look after it. They can use the Earth but cannot abuse it.

Judaism
Jews believe that God created the world and gave human beings a special responsibility within creation to **cultivate** it, **guard** it and use it wisely. This is known as **stewardship**.

Buddhism
Buddhists believe in the **interconnectedness** of all things. Humans depend on nature and nature depends on humans. Harming one part of this whole is the same as harming all of it. Therefore, if people learn to live simply and in **harmony** with the world, the whole of the environment will benefit.

Humanists
Because there is no God or supernatural force, human beings must take sole responsibility for solving the **world's** environmental problems. Only humans are capable of finding the solutions that can lead to a **sustainable** existence.

Sikhism
The Guru Granth Sahib teaches that Sikhs show **respect and responsibility** towards creation and bear in mind the needs of future generations, as well as their own current needs.

Islam
Allah made the Earth and humans have the duty as **Khalifahs** to care for it and maintain **fitrah** (natural balance) in the world.

Hinduism
Everything around us is part of the Earth and nature. We should practice **Ahimsa** – the principle of **non**-violence – with the Earth. Also, all living things in the natural world are sacred because they are part of **God**.

Newsome Academy
Everyone Exceptional Everyday

Year 8 Ethics – Environment

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

- Identify a range of feelings about the natural world
- Explain what creation myths are & their purpose
- Explain religious teachings relevant to the care of the planet
- Express & evaluate religious responses to environmental damage
- Explain & evaluate two different views about the effect of religion on care of the environment and ways we can look after the environment

Key Concepts

New Word

DOMINION

Having a form of **control** and **responsibility** which was given to humans by God.

Kingship; being in charge of the world for God.

Because of dominion, believers can use what is on the planet, from plants to animals. Dominion does not, however, give humans the right to exploit or abuse these resources.

Islam and Stewardship

- All Muslims believe that **Allah** created, owns and sustains the world.
- The survival of the planet depends upon Muslims maintaining the natural ***fitrah*** (balance).
- Muslims see it as their **duty** to use their skills to help keep the balance in the world.
- When they die, Muslims will have to prove how well they have looked after the world and whether they have been a good ***khalifah*** (guardian) in order to get into **paradise**.
- **Muhammad** set a good example by showing kindness to animals (a part of Allah's **creation**).

IFEES: The Islamic Foundation for Ecology and Environmental Sciences

IFEES is a UK based charity dedicated to the maintenance of the Earth as a healthy habitat for all living beings. Since the mid 1980s their efforts have been directed towards **creating mass awareness** and include **research**, the **production of teaching materials**, **training** and **project development** and we offer this work as a gift to our fellow humans whoever and wherever they may be. Their work is also a call to Muslims to **live up to their responsibilities as guardians or Khalifah's** of Allah's creation and work towards **leaving a liveable earth for future generations**. They work world-wide and invite collaboration from organizations and individuals of all religions and faiths who agree with this vision.

"Corruption has appeared in land and sea caused by the hands of people so that they may taste the consequences of their actions and turn back"
The Qur'an- 30:41

ifees ecoIslam

Christianity and Stewardship

- Christians believe that if they live sensibly and in partnership with the earth, that it will bring them closer to **God** (in fact, it will get them into **heaven**).
- Celebrations and **worship** remind Christians of their duty as **stewards** (e.g.: harvest festival).
- Caring for the world and the environment is one of the **purposes** or main jobs of humans on earth.
- Humans have a special **responsibility** as **stewards** to look after the planet for God. They do, however, have **dominion** (power) over animals. This means that they can use animals, but not abuse them.

Buddhism and Stewardship

- Everything is **interconnected**. Harming one part is the same as harming all of it. If people learn to live simply and in harmony with the world, the whole of the environment will benefit.
- The teaching of **ahimsa** means that we should not do harm to others, and this includes any form of life.
- We should show **metta** and **compassion** to all creatures as all life-forms are special, not just human beings.
- We should try to stop living a life where we **crave** things, as this only leads to unhappiness. Our actions affect the planet in a harmful way because we are selfish and we crave things. By being compassionate, we will improve our ourselves and the environment.

A Rocha

A Rocha is an international Christian environmental and conservation movement. The name is Portuguese for 'the rock' – because the organisation's first project was a field study centre in Portugal. A Rocha believes that there needs to be more than talk about the environment – there needs to be action. As a Christian organisation it believes that being different and making a difference is an important part of being a Christian. This is something that they're passionate about.

'**If everyone waits for someone else to act, nothing will change**. Our aim is to help you to do something practical as an individual, living in your local community, perhaps as a member of a local church, and as part of the global community.'

Newsome Academy
Everyone Exceptional Everyday

Year 8 Ethics – Environment

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

- Identify a range of feelings about the natural world
- Explain what creation myths are & their purpose
- Explain religious teachings relevant to the care of the planet
- Express & evaluate religious responses to environmental damage
- Explain & evaluate two different views about the effect of religion on care of the environment and ways we can look after the environment

Retrieval Practice

Questions	Answers
What is a creation myth?	A creation myth is a story that is used to explain the creation of the world or the role of people in it. A creation myth is a traditional, ancient story that is fictional, that explains or describes the beginning of humanity, earth, life and the universe.
What is one Christian belief about looking after the world?	One Christian belief about looking after the world is Stewardship, this means that humans have a responsibility to look after the world.
Name 2 charities who support looking after the world.	Two charities that support looking after the world and the environment are A Rocha and Islamic Aid.
Who is David Attenborough?	David Attenborough is an English broadcaster, writer and naturalist. He is a steward and looks after the natural environment which shows in his documentaries.
What are the effects of air pollution in the world?	Air pollution in both cities and rural areas is causing many issues in human health, such as strokes, heart disease, asthma etc. Pollution in the air also causes the natural environment to decline.
What does the Buddhist belief of 'interconnectedness' mean?	Humans depend on nature and nature depends on humans – harming one means harming all.
How does the Islamic term fitrah connect with caring for the Earth?	When we follow the fitrah of things, we're living in a way that's in harmony with nature and with what's best for us as human beings.
How does the term 'khalifah' connect to the environment?	In Islam, it refers to the role of human beings as caretakers or stewards of the Earth, entrusted by Allah to look after His creation.

Career Focus - Where could this take you?

I am an environmental manager. I help take care of our planet by making sure that people and companies are doing things in a way that doesn't harm the environment. I help make plans to reduce pollution, protect wildlife, or conserve resources like water and energy. I believe we have a duty to care for the Earth.

Challenge Activities

- Watch the documentary of David Attenborough and write down how David Attenborough started off.
- Research a creation myth and create a poster.
- Does everyone have a responsibility in looking after the world? Explain your answer in more detail.
- Create a leaflet for someone to explain the key beliefs about looking after the world.

Topic Links

This topic links to other topics and subjects such as:

- Ethics – Animal Rights
- Geography
- Science

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/zkyk8hv

https://www.bbc.co.uk/bitesize/topics/zkdk382/articles/z729vk7

https://www.christianaid.org.uk/our-work/about-us/accountability-and-transparency/our-carbon-footprint

Newsome Academy
Everyone Exceptional Everyday

MFL

Our students will:

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

Year 8 Le monde est petit

Newsome Academy
Everyone Exceptional Everyday

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

- describe where they and others live.
- talk about the weather.
- Explain what there is to do in their area.
- talk about helping at home
- Use reflexive verbs to describe their daily routine

Keyword	Definition
Où habites-tu?	**Where** do you live?
Elle est **comment** ta région?	**What** is your area like?
Qu'est-ce qu'on peut faire à Huddersfield?	What can you do in Huddersfield?
Quel temps fait-il a Huddersfield?	What is the weather like in Huddersfield?
Qu'est-ce qu'on doit faire pour aider à la maison?	What do you have to do to help at home?
Tu te lèves à quelle heure?.	What time do you get up at?
Qu'est-ce que tu fais le matin?	What do you do in the morning?
Que penses-tu de ta région?	What do you think about your area?

J'habite I live	dans - in	un village - a village une ville - a town le désert - the desert
	à la - in the	campagne - countryside
	au - at	bord de la mer - the seaside
	sur - on	une île - an island
	en - in	France /Suisse - France/Switzerland
	au - in	Maroc - Morocco

Key Concepts

Saying where I live

Elle est comment, ta région?

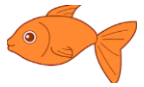
Dans ma région In my region	il y a there is/are	plein de plenty of peu de little, not many trop de too much/many	touristes tourists magasins shops
		un *a*	champ - field lac - lake jardin public - park
		une *a*	montagne - mountain plage - beach rivière - river
	il y'a pas de there are no		bâtiments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

Qu'est-ce qu'on peut faire à Huddersfield?

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

Phonics and Vocabulary

oi - (wa)

poisson	Je dois	froid
		

Ma 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

Qu'est-ce qu'on doit faire pour aider à la maison?

Je dois
– *I must*
Tu dois –
you must
Il doit
– *he must*

faire la cuisine - do the cooking
faire la vaisselle - do the washing up
faire la lessive - do the washing
nourrir les animaux - feed the animals

garder ma soeur - look after my sister
garder mon frère - look after my brother
ranger ma chambre - tidy my room

Year 8 Le monde est petit

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

- describe where they and others live.
- talk about the weather.
- Explain what there is to do in their area.
- talk about helping at home
- Use reflexive verbs to describe their daily routine

Retrieval Practice

Questions	Answers
Où habites-tu?	J'habite à Huddersfield dans le nord de l'Angleterre. C'est une grande ville.
Elle est comment ta région?	C'est très **joli**. Il y a beaucoup de **champs** et il y a aussi **des montagnes**. Il n'y a pas **de lac.**
Qu'est-ce qu'on peut faire à Huddersfield?	À Huddersfield on peut **visiter les monuments** ou on peut **voir un match de foot**. Je pense que c'est **super!**
Quel temps fait-il a Huddersfield?	En été **il y a du soleil** et **il fait chaud.** En hiver **il fait froid** et **il pleut.**
Qu'est-ce qu'on doit faire pour aider à la maison?	Je dois **faire la vaisselle** tous les jours. C'est **nul!**
Tu te lèves à quelle heure?.	Normalement, je me lève à **sept heures.**
Qu'est-ce que tu fais **le matin?**	Je me lève et puis **je prends le petit déjeuner**. À huit heures **je vais au collège.**
Que penses-tu de ta région?	Ma région est **très belle**. Il y a plein de **magasins et restaurants.**

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 Language nut.

Topic Links

This topic links to:

- Holidays
- All about me.
- Hobbies
- Time

Additional Resources

To further practise and develop your knowledge see:

- Language nut
- Active learn.

Newsome Academy
Everyone Exceptional Everyday

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

Year 8 - 8.2: Kodu

Newsome Academy
Everyone Exceptional Everyday

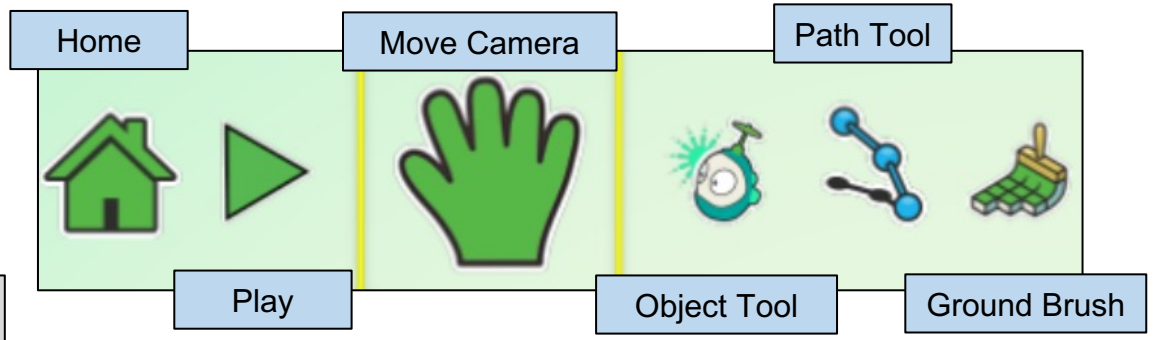
The aims of the sequence of learning are to ensure that all students:

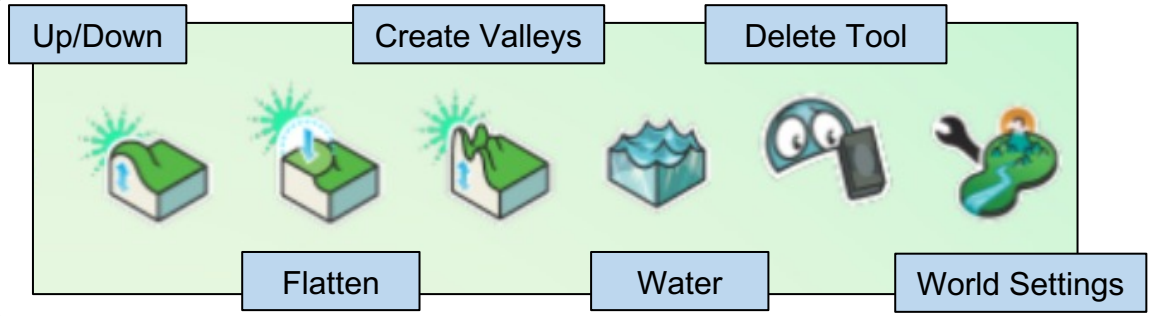
- Describe the Kodu tool bar
- Describe the meaning of a range of different tiles, rules and scripts in Kodu
- Describe the appropriate use of tiles, rules, scripts and settings in Kodu
- Evaluate the use of tiles, rules, scripts and settings used to create a range of games in Kodu
- Describe the definitions of some keywords in Kodu

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

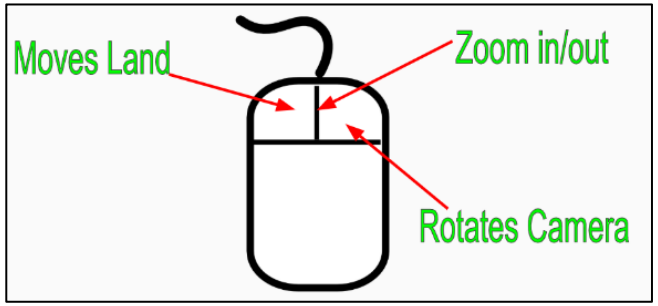
Key Concepts

Kodu Toolbar





Mouse Controls



Object Wheels

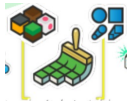
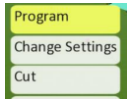
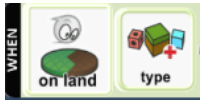
Newsome Academy
Everyone Exceptional Everyday

Year 8 - 8.2: Kodu

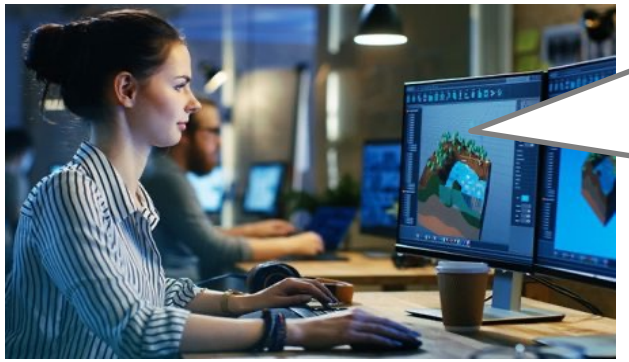
The aims of the sequence of learning are to ensure that all students:

- Describe the Kodu tool bar
- Describe the meaning of a range of different tiles, rules and scripts in Kodu
- Describe the appropriate use of tiles, rules, scripts and settings in Kodu
- Evaluate the use of tiles, rules, scripts and settings used to create a range of games in Kodu
- Describe the definitions of some keywords in Kodu

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

Newsome Academy
Everyone Exceptional Everyday

CAPE

Our students will:

- produce creative work, exploring their ideas and recording their experiences
- become proficient in drawing, painting, sculpture and other art, craft and design techniques
- evaluate and analyse creative works using the language of art, craft and design
- know about great artists, craft makers and designers, and understand the historical and
- cultural development of their art forms.

- develop competence to excel in a broad range of physical activities
  are physically active for sustained periods of time
  engage in competitive sports and activities
- lead healthy, active lives.

Newsome Academy
Everyone Exceptional Everyday

Year 8 Art Day of the Dead

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

- Describe the day of the dead festival
- Produce and refine new ideas
- Apply techniques to develop drawing skills
- Synthesise a personal response to art work

Keyword	Definition
Muertos	Spanish for ‘dead’
Dia	Spanish for ‘day’
Festival	a day or period of celebration, typically for religious reasons
Symbol	a thing that represents or stands for something else, especially a material object representing something abstract.
Printmaking	the activity or occupation of making pictures or designs by printing them from specially prepared plates or blocks.
Tone	the relative lightness or darkness of a colour
Colour	an element consisting of hues, of which there are three properties: hue, chroma or intensity, and value
Composition	Arrangement of elements within a work of art
Personal Response	Creating your own piece of artwork in response to a theme/artists/style

Key Concepts

The Day of the Dead (Spanish: Día de Muertos) is a Mexican holiday celebrated throughout Mexico, and by people of Mexican heritage elsewhere. The multi-day holiday involves family and friends gathering to pray for and remember friends and family members who have died, and helping support their spiritual journey. In Mexican culture, death is viewed as a natural part of the human cycle. Mexicans view it not as a day of sadness but as a day of celebration because their loved ones awaken and celebrate with them

It is colourful, bright and cheery but with a theme of skulls and skeletons. The shapes, colours, forms and patterns of the Day of Dead provide us with lots of inspiration to make our textile art.

SCAN ME

Scan the QR Code to take you to the National Geographic websites Top 10 things to know about the Day of the Dead.

Newsome Academy
Everyone Exceptional Everyday

Year 8 Art Day of the Dead

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

- **Describe the day of the dead festival**
- **Produce and refine new ideas**

Retrieval Practice

Questions	Answers
When is the day of the dead?	A Mexican holiday traditionally celebrated on November 1st and 2nd.
What are calaca and calavera?	These are representations of a human skeleton and skull
What is tone?	Tone refers to how light or dark something is. Tones could refer to black, white and the grey tones between. It could refer to how light or dark a colour appears.
What is block colour?	A colour in a single tone, with no variation
What is block print?	This is the process of carving patterns, shapes and designs into a 'block'. The 'block' could be made of wood, lino, metal or polystyrene
What is composition?	This is the arrangement of elements within a work of art

Career Focus - Where could this take you?

I am a **graphic novelist** so I get to spend my day creating new ideas and stories before bringing them to life with my illustrations and storyboards.

Challenge Activities

Scan the QR Code and watch the video about how the film Coco has honoured the day of the dead celebration. Once you have watched the video make a list of the main aspects of the day of the dead celebration and put into your own words how Coco has portrayed the celebration.

SCAN ME

Topic Links

This topic links to:

- MFL – cultural holidays and celebrations
- RE – cultural holidays and celebrations

Additional Resources

To further practise and develop you knowledge see:

the QR Code to take you to a video from The British Museum about the Day of the Dead celebration.

SCAN ME

Year 8 Working with a theme and Stimulus

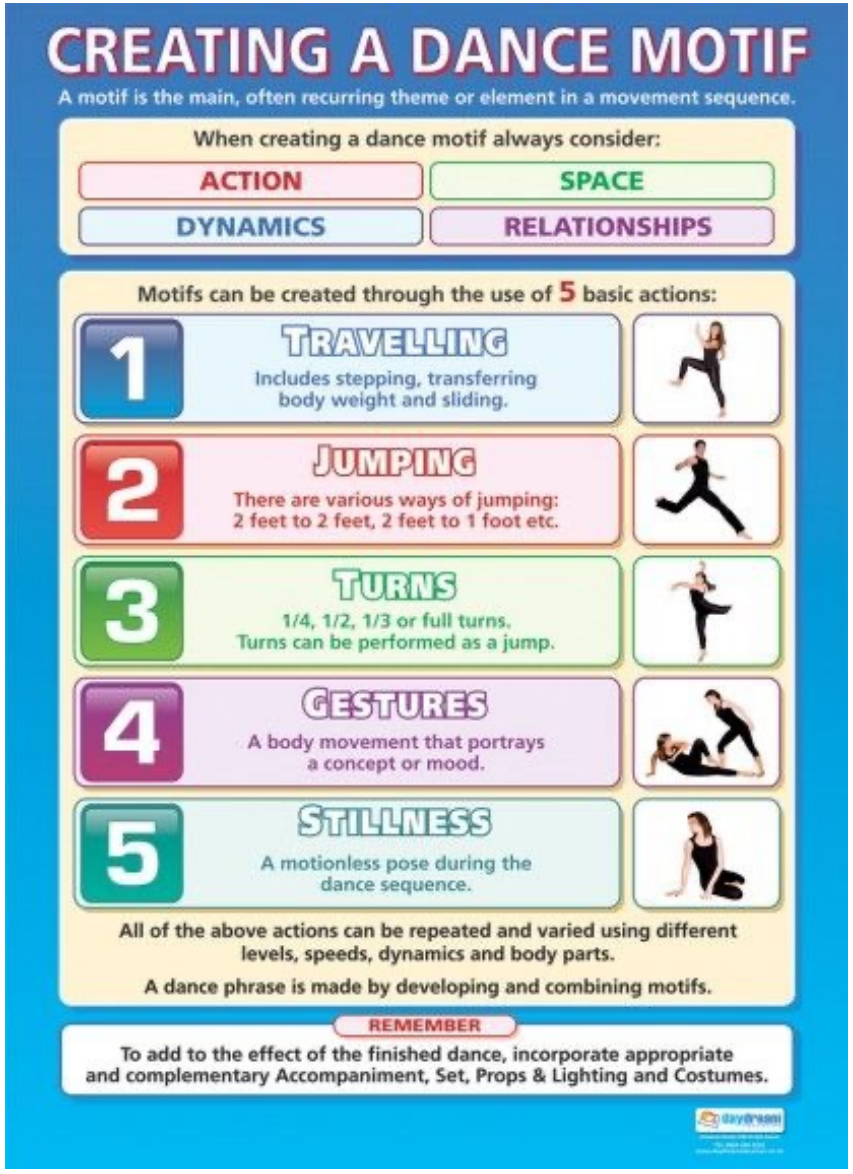
Newsome Academy
Everyone Exceptional Everyday

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

- Replicate a set phrase of movement
- Select and apply a formation to my performance
- Recognise key dance elements in a performance.
- Recognise elements in a performance and describe them.
- Apply choreographic devices to enhance my choreographed routines

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

Key Concepts



Newsome Academy
Everyone Exceptional Everyday

Year 8 Working with a theme and Stimulus

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

- Replicate a set phrase of movement
- Select and apply a formation to my performance
- Recognise key dance elements in a performance.
- Recognise elements in a performance and describe them.
- Apply choreographic devices to enhance my choreographed routines

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

Dance Quiz

Choreography - Jay Revell

Choreography - Kyle Hanagami

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

Newsome Academy
Everyone Exceptional Everyday

Year 8 School of Rock

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

- Be able to replicate a set phrase.
- Be able to develop my dance using different choreographic devices

Keyword	Definition
Six basic Actions	Travel , Turn, Jump, Gesture, Stillness, Transfer of weight.
Choreographic Intention	T make the audience think see and feel.
Gesture	A movement that doesn't transfer weight.
Dynamics	Quality of movement. How you move.
Unison	All together at the same time.
Cannon	One movement after the other.
Speed	How fast or slow a movement is.

Key Concepts

Performance Skills

Performance Skills -: Performance skills are those used during a performance they set dancing apart from mechanical movement they draw the audience's attention and helps to show mood and meaning.

Timing : Moving to the beat of the movement.

Confidence : Showing you know what you are doing and where you should be.

Energy: Performing all movements with as much effort as possible.

Accuracy: Making sure movements are they way they were taught.

Focus: Where the dancer looks. Into space, at the audience, Another dancer, A body part.

Facial Expression : Showing the mood of the character.

Dynamics : The quality of the movement.

Speed : How fast or slow a movement is.

Physical skills

Physical skill: A Physical skill is a skill that can be developed over time.

Stamina: The ability to keep energy going over time.

Flexibility : The range of movement around a joint.

Strength :A combination of maximum speed and power.

Coordination : The ability to move two or more body parts at the same time to create a movement.

Balance: The ability to maintain a centre of mass over a base whilst stationary (Static) or during movement (dynamic)

Power : Is a combination of using speed and strength

Reaction time: The time it takes for you to respond to a stimulus.

Newsome Academy
Everyone Exceptional Everyday

Year 8 School of Rock

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

- Be able to replicate a set phrase.
- Be able to develop my dance using different choreographic devices

Retrieval Practice

Questions	Answers
What is musical Theatre?	A story told through Music dance and drama.
What is a theme ?	A reoccurring idea that runs through the dance.
What is a Stimulus ?	An initial idea or starting point.
What is choreography?	The art of making dancers.
What is a motif ?	A motif is a movement phrase (a short dance) that can be repeated and developed throughout the dance.

Career Focus - Where could this take you?

I am a **camera man**. I use my knowledge of performance and choreography to ensure I take the best shots and my angles highlight the best features of the performance.

Challenge Activities

Stick it to the man

School of rock trailer.

School of rock worksheet

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 your knowledge see:

- https://www.onedanceuk.org/

Year 8 Traditional Theatre

The aims of the sequence of learning are to ensure that all students:
- develop knowledge of Pantomime elements
- develop Pantomime skills and techniques
- use appropriate skills in performance/presentation

Keyword	Definition
Direct address	When an actor speaks directly to the audience, e.g. in pantomime.
Body Language	The way our bodies communicate a character's attitudes. Using your body to show emotions or hidden feelings.
Facial expression	Using the face to express that character's feelings and emotions.
Stock characters	Fictional characters that rely on stereotypes and appear in all pantomimes.
Slapstick	A style of physical comedy used in films, drama and pantomime.
Levels	How the actors sit, kneel or stand on stage, to show status.
Gesture	An expressive movement of the body, or something that is said or done to show a feeling, i.e. a wave.
Projection	Speaking loud enough for the audience to hear you.
Pause	Pausing lines to create dramatic effect such as tension
Pace	The speed in which an actor delivers their lines.

Key Concepts

STOCK CHARACTERS

HERO

ANIMAL

DAME

VILLAIN

These characters appear in all pantomimes but have different names to suit the individual pantomime story they are in.

CONVENTIONS OF PANTOMIME

- Main boy usually played by a woman
- Main woman 'dame' usually played by a man
- Fairy enters stage right
- Villain enters stage left
- Music/ singing/dance
- Comedy/humour - 'slapstick'
- Audience participation
- Based on a fairytale
- Good always beats evil
- Costumes/set are OTT

ACTING SKILLS

Facial expression

Voice

Gesture

Stance

Reacting

Movement

Levels

Motivation

Newsome Academy
Everyone Exceptional Everyday

Year 8 Traditional Theatre

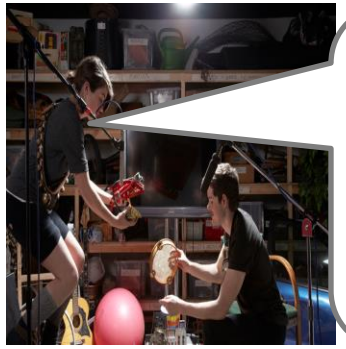
The aims of the sequence of learning are to ensure that all students:

- develop knowledge of Pantomime elements
- develop Pantomime skills and techniques
- use appropriate skills in performance/presentation

Retrieval Practice

Questions	Answers
What are pantomimes based on?	Pantomimes are based on fairy stories and traditional folk tales.
When are pantomimes usually performed to audiences?	In England, pantomimes are usually performed around the Christmas period.
What is audience participation?	When a character on stage asks or invites the audience to make a response to a question or instruction. For example: 'Where is he?' - 'He's behind you!'
What is 'slapstick'?	A style of physical comedy used in films, drama and pantomime.
Who are the stock characters in an English pantomime?	The Hero. The Dame. The Animal. The Villian. The love interest (leading female character).
Which sides of the stage do the good characters and the evil characters enter from?	Good characters enter from stage right and Evil characters enter from stage left.
What is a monologue in a pantomime?	A speech delivered by one character. In pantomime it is used to introduce a character, explain a situation or develop the plotline (story)
What is Commedia del arte?	Commedia del arte is a traditional form of theatre that originates in Italy.

Career Focus - A Foley Artist - Where could this take you?



In the world of film, a foley artist reproduces everyday sounds that are added to films, videos and other media in post-production to enhance audio quality. These reproduced sounds, named after sound-effects artist Jack Foley, can be anything from the swishing of clothing and footsteps to squeaky doors and breaking glass. Foley sounds are used to enhance the auditory experience of the movie. Foley can also be used to cover up unwanted sounds captured on the set during filming.

Challenge Activities

- Using your knowledge of pantomimes and stock characters, write an opening monologue for a main character in a pantomime of your choice.
- Write a scene for a pantomime of your choice.
- Design a stage set for a scene from a pantomime, or a costume for a pantomime character.

Topic Links

This topic links to:

- English language and Literature
- History
- Dance
- Music
- Art and Design
- Geography

Additional Resources

To further practise and develop your knowledge see:

- Watch the Drama Pantomime workshop on this youtube link

https://youtu.be/jm0Zw5pLfxI

Newsome Academy
Everyone Exceptional Everyday

Year 8 Food Tech

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

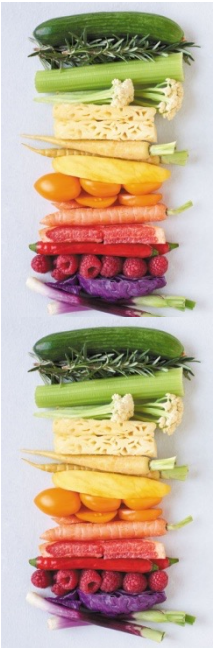
- Define the terms nutrient, macronutrient and micronutrient
- Describe the function of nutrients in the body
- Describe the consequences of an unbalanced diet

Keyword	Definition
Nutrition	The study of what people eat and how nutrients in foods work together in the body
Nutrients	Natural chemical substances in food that are essential for body growth, function and health
Macronutrient	Nutrients that are required in large quantities by the body
Micronutrient	Nutrients that are required in small quantities by the body
Malnutrition	Malnutrition refers to deficiencies, excesses or imbalances in a person's intake of energy and/or nutrients
Mineral	a solid, naturally occurring inorganic substance.
Vitamin	any of a group of organic compounds which are essential for normal growth and nutrition and are required in small quantities in the diet because they cannot be synthesized by the body.

Key Concepts

Micronutrients

Vitamin	Role in the body	Food examples
A	Helps to keep the eyes healthy and strengthen the immune system	Dark green leafy vegetables, carrots, liver
B.	Helps to release the energy from the food we eat	Bread, milk, cereals, fish, meat
C.	Help with skin healing and healthy skin. Help with the absorption of Iron	Fresh fruit, broccoli, tomatoes
D.	Important for absorbing calcium and help with healthy bone structure.	Oily fish, eggs, butter, Sunshine



Nutrients

Macro Nutrient	Role in the body	Food Example
Carbohydrate	The main source of energy for the body	Bread, rice, pasta, potatoes
Protein.	Provides the body with growth and repair	Meat, poultry, beans, eggs, lentils, tofu, fish
Fat	Provides the body with insulation and a small amount protects vital organs. Provides essential fatty acids for the body.	Butter, oil, cheese, cream, nuts, oily fish, crisps

The allergen could be identified in **bold**, highlighted, <u>underlined</u> or in *italics.*

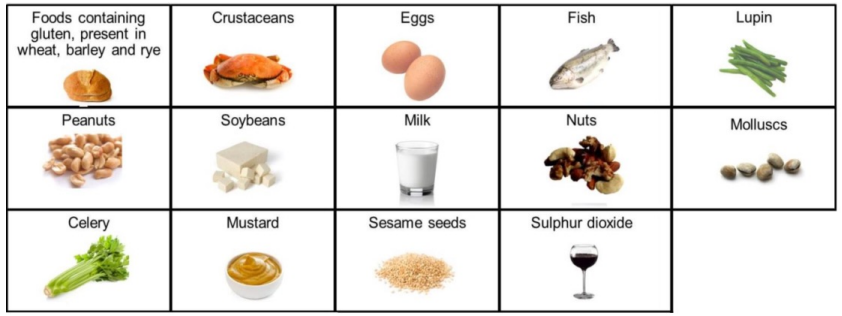
Newsome Academy
Everyone Exceptional Everyday

Year 8 Food Tech

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

- Define the terms nutrient, macronutrient and micronutrient
- Describe the function of nutrients in the body
- Describe the consequences of an unbalanced diet

Retrieval Practice

Questions	Answers
What are nutrients?	Nutrients are the building blocks that make up food and have specific and important roles to play in the body. Some nutrients provide energy while others are essential for growth and maintenance of the body.
What do vitamins do?	They help to keep our immune system up and help our body to stay healthy – they are important for body maintenance
What do minerals do?	Help to keep our immune system up and help our body to stay healthy. Vitamins and minerals are Micronutrients.
What is a food allergy?	Food Allergy is an immune reaction by the body against a particular food. Symptoms of a person having an allergic reaction can include: Rash Itchiness Vomiting Swelling of ; lips/face/throat Difficulty breathing If untreated, a person can go into anaphylactic shock and can die from an allergic reaction.
What should you do if someone has an allergic reaction?	If you suspect someone is having an allergic reaction you must seek help. They will either need to take antihistamine if the reaction is mild (e.g. just a skin rash) OR they will need to have adrenaline administered by injection (e.g. by EpiPen) if their reaction is severe - in which case an ambulance must be called.
What are the most common foods that cause allergies?	

Career Focus - Where could this take you?

In my role as a **nutritionist** I use nutrition to promote health and manage disease. I help people to plan their diet and nutritional programmes to help them lead healthy lives.

Challenge Activities

Produce an information leaflet to encourage teenagers to eat a wide range of nutrients, include information on malnutrition.

Topic Links

This topic links to:
Science - to be curious about how to maintain a healthy, balanced diet, in both a theoretical and practical context.

PE - to promote lifelong participation in physical activity alongside leading creative and healthy active lifestyles. Understanding how your body works, working with others and being physically active are a crucial part of leading a healthy happy life

Additional Resources

To further practise and develop you knowledge see:

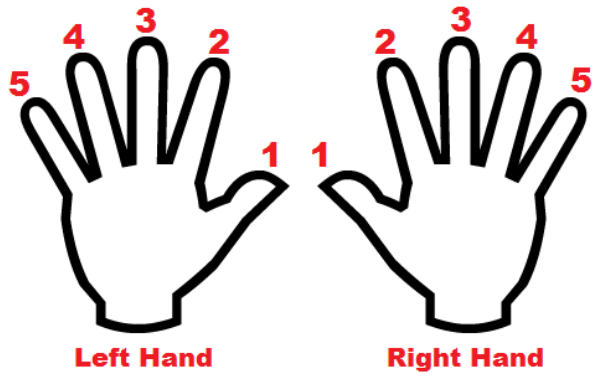
Nutrition, digestion and excretion

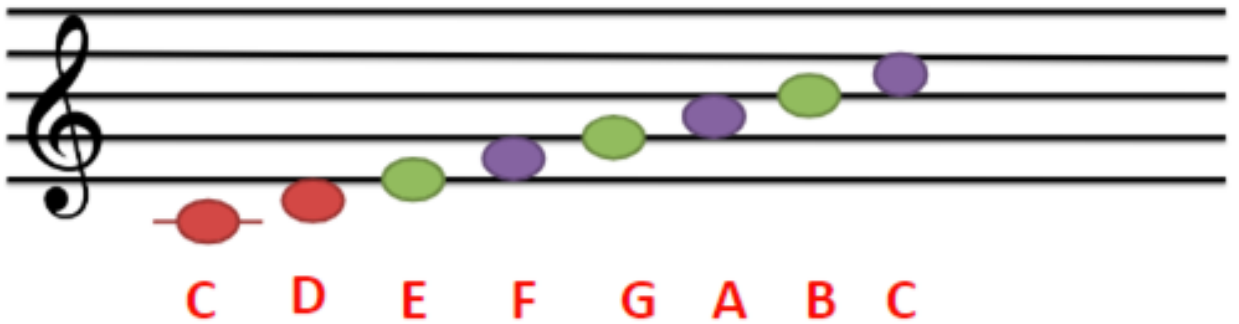
Healthy diet

Balanced Diet

Year 8 Keyboard Skills and Blues Music

Keyword	Definition
Stave	Five lines and four spaces on which we write musical notes
Treble Clef	A musical symbol that indicates the pitches of notes above middle C
Barline	A vertical line that separates bars in music
Pitch	How high or low a sound is
Rest	When we do not play on a beat
Technique	The way in which we play the musical instrument
Fluent	To perform without hesitation
Accuracy	To perform with accurate pitches, rhythms and technique
Walking bassline	A bass pattern used in Blues music where the notes walk up and down the instrument
Improvisation	To make something up as you go along
Work song	A song that is sung whilst people work
Guitar	A string instrument with six strings, used in Blues music
Chord	Two or more pitches at the same time
Minor	A sad sounding chord
Triad	A chord with three notes
Major	A happy and bright sounding chord





Learning Objectives

Keyboard Skills

What a stave is and how to read basic notation

Keyboard technique including 5 finger position, scales and fingerings

What a chord is a how they are built – the three main Primary chords C, F and G as well as A minor

To perform either the bass line, chords or melody of Stand By me using keyboard technique

The Blues

Learn and understand how Blues music developed, the typical instruments used and some of the musical features.

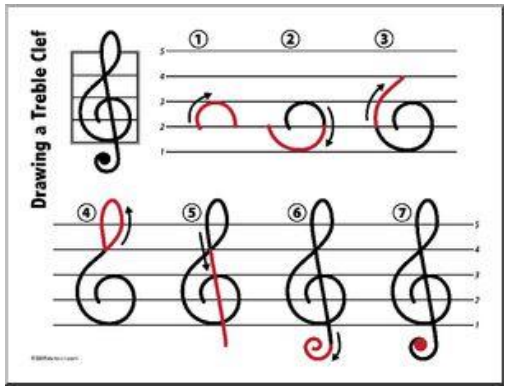
Identify musical features within Blues music and explain the musical features that make it Blues music

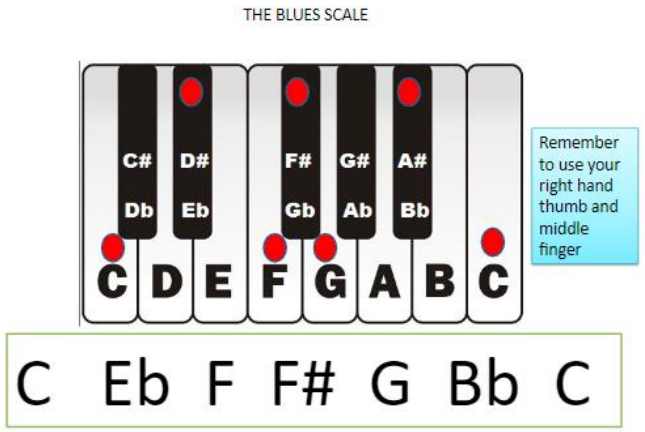
Perform the 12 bar blues chord sequence accurately, fluently and confidently. I can repeat the 12 bar blues.

Learn how to perform a blues style bass line

Learn what improvisation is and how to do this using the blues scale

Year 8 Keyboard Skills and Blues Music





12 Bar Blues with a walking bass line

Play the chord with your right hand

Play the bass line with your left hand

C = C E G

F = F A C

G = G B D

C C E G A	C Bb A G E	C C E G A	C Bb A G E
F F A C D	F Eb D C A	C C E G A	C Bb A G E
G G B D B	F F A C A	C C E G E	G G B D B

Career Focus - Where could this take you?

I am a professional musician, being proficient on a musical instrument is essential. This comes through lots of practice, and making sure technique is excellent. The ability to read music makes it easier to play different pieces of music more quickly. Otherwise you have to copy what you hear. Some musicians do play by ear, however and many Blues Musicians will have never read music.

Challenge Activities

Work through this worksheet to help you learn the notes on a stave
KEYBOARDSKILLSTHEORY1.docx

And now have a go at this quiz!
Keyboard Topic Quiz

Read this information on a piece of music and listen to it using the following link:
Debussy - La cathédrale engloutie
Think about how Debussy has used the piano to create the *impression* of a sunken cathedral. You can write up your thoughts as a mind map.

Topic Links

Band Skills
Rhythm & Pulse
Geography - understanding the movement of people from Africa to America and other parts of the world
History - learning about the Slave Trade
Literacy - keywords and spellings
Numeracy - Counting, rhythm, understanding patterns

Additional Resources

Listen to these songs:
Stormy Monday - BB King
Crossroad Blues – Robert Johnson
Bessie Smith - Nobody Knows You When You're Down and Out
Billie Holiday - Lady Sings The Blues

Year 8 Exploring World Music Theory

The learning outcomes for this topic are:
- **Explore a wide range of music from different cultures.**
- **Understand scales and be able to use them when composing music**

Keyword	Definition
Scale	A pattern of notes increasing or decreasing in pitch. **T = Whole Tone S = Semitone**
Major Scale	The pattern for the major scale is: T, T, S, T, T, T, S
Minor Scale	The pattern of the minor scale is: T – S – T – T – T – T – S
Pentatonic scale	A scale that uses only five notes. The pentatonic scale uses the root, second, third, fifth, and sixth of a scale
Enharmonic	relating to or denoting notes which are the same in pitch (in modern tuning) though bearing different names (e.g. F sharp and G flat or B and C flat).
Off Beat	When beats 2 and 4 are accented/emphasised.
Drone	A note that is sustained for a long time. Usually quite low in pitch.
Melody	The main tune of a piece of music
Raga	A type of Indian scale
Reggae	A popular style of music from Jamaica

Every culture developed an understanding of music independently. Because of this, some cultures make music differently to the way we do in It's similar to translating a foreign language into one we can understand.

Further Listening

'Norwegian Wood' The Beatles – A western, pop interpretation of a raga.

'Work' (Freemasons Remix) Kelly Rowland – Includes elements of Indian Raga and traditional Indian instruments

'Buffalo Soldier' by Bob Marley and the Wailers

Career Focus - Where could this take you?

At Newsome, British values are the school values. Respect and tolerance are one of those core British values. We can only scratch the surface of some of the unique and vibrant music from different cultures around the world in one unit of work. It is still important that we learn as much as we can. Different people around the world have many different ideas for how to make music. This unit will open you up to a wide variety of different musical styles and challenges and will improve your ability to adapt and improvise.

Topic Links

This topic links to other topics such as:
- Geography
- RSHE – Learning about the cultural, historical and religious background of India, Jamaica and China.
- Drama
- Maths – sequences and patterns in scales

Additional Resources

BBC Bitesize – https://www.bbc.co.uk/bitesize/guides/z6ch8xs/revision/4

Free online djembe lessons and information: https://afrodrumming.com/

Year 8 World Music Theory - Chinese

The learning outcomes for this topic are:
- Explore a wide range of music from different cultures.
- Understand scales and be able to use them when composing music

Popular Chinese Instruments:

YANGQIN

SHENG

TEMPLE BLOCKS

DIZI

ERHU

SUONA

GONG

PIPA

The Eb and Gb pentatonic scales are the most common scales in traditional Chinese music.

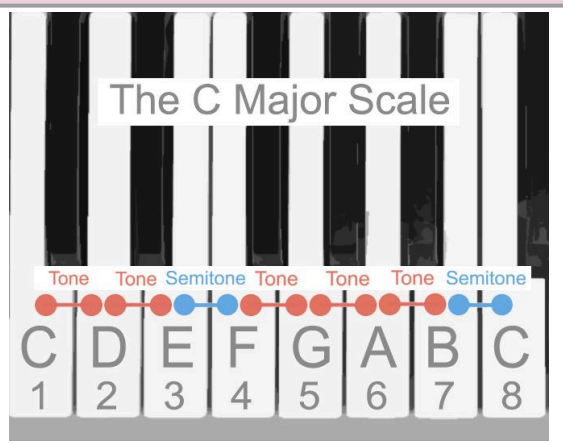
Challenge Activity

Above are some traditional Chinese instruments. Do your own research and see how many more you can discover.

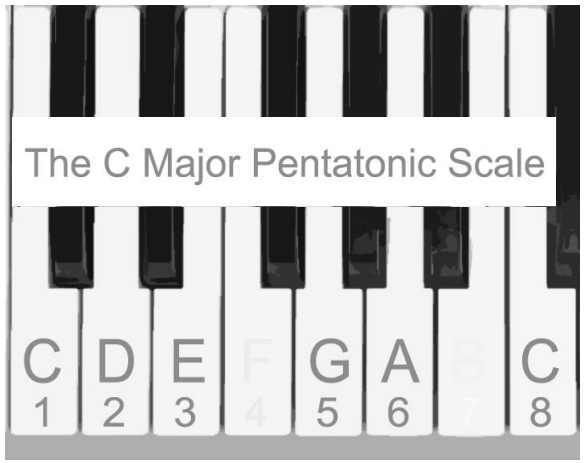
Challenge Activity

Choose a random letter between A and G. Using the major scale pattern (T,T,S,T,T,T,S) try and figure out the major scale for that note.

Key Concepts - Scales



A scale is a sequence of notes that go up in pitch. Every scale follows a pattern of steps. The pattern for a major scale is: T, T, S, T, T, T, S



Each step in a scale is called a scale degree. A pentatonic scale is a scale that misses out the 4th and 7th scale degree

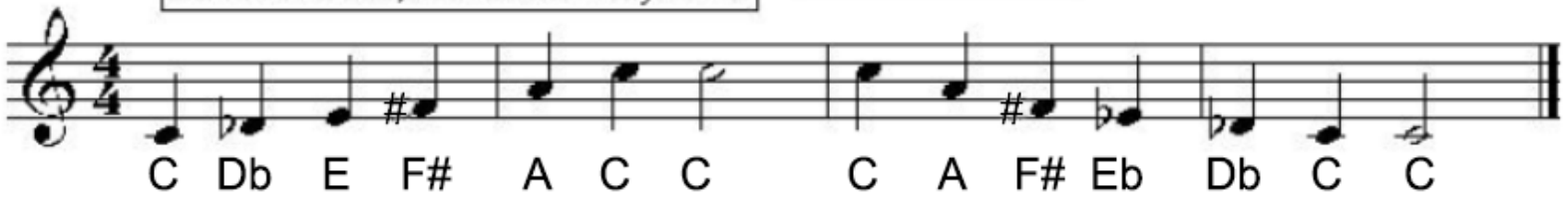
Year 8 World Music Theory - Indian

The learning outcomes for this topic are:
- Explore a wide range of music from different cultures.
- Understand scales and be able to use them when composing music

Indian Ragas

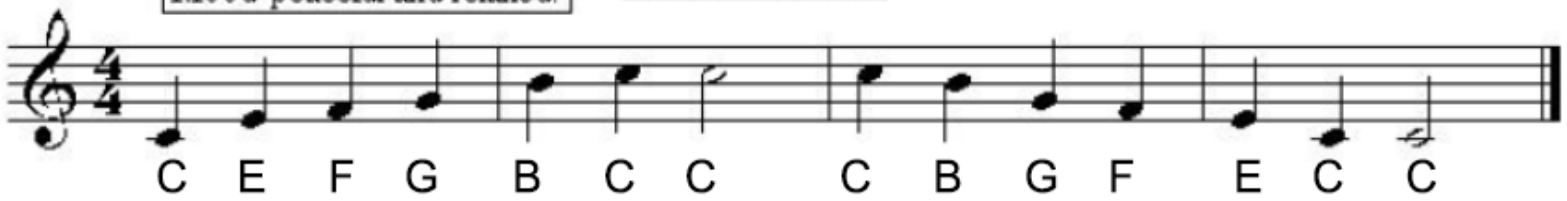
Morning raga (Vibhas)
Mood-Lovliness, sound of the early dawn.

Drone notes C, A



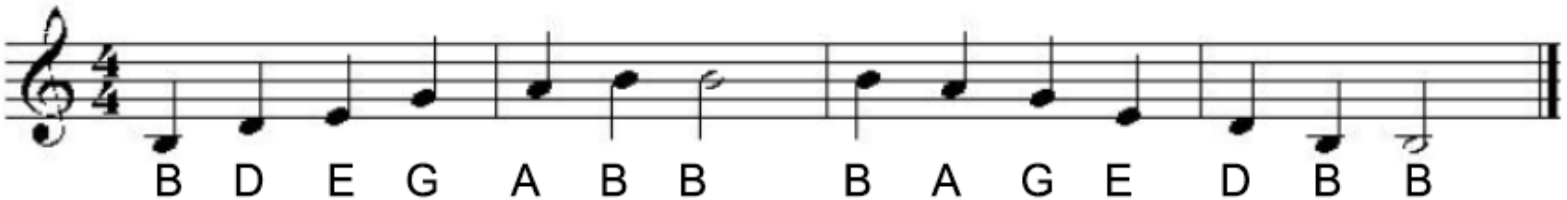
Evening raga (Behag)
Mood-peaceful and relaxed.

Drone notes C, G

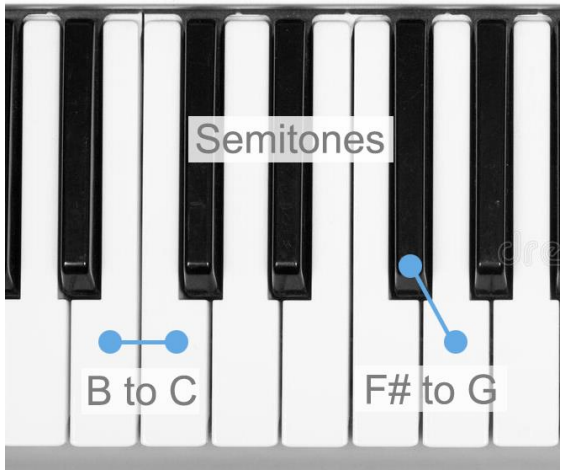


Night raga (Malakosh)
Mood-peaceful and relaxed.

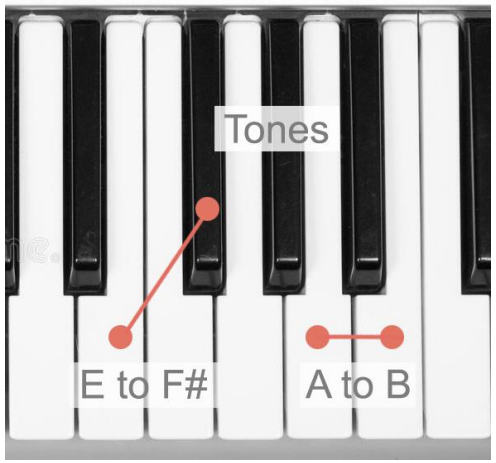
Drone notes B, E



Key Concepts – Tones and Semitiones



If we move from one key to the very next key on a piano, we call this a semitone (S)



If we move up two keys on a piano we call this a Tone (T)

Year 8 World Music Theory - Jamaican

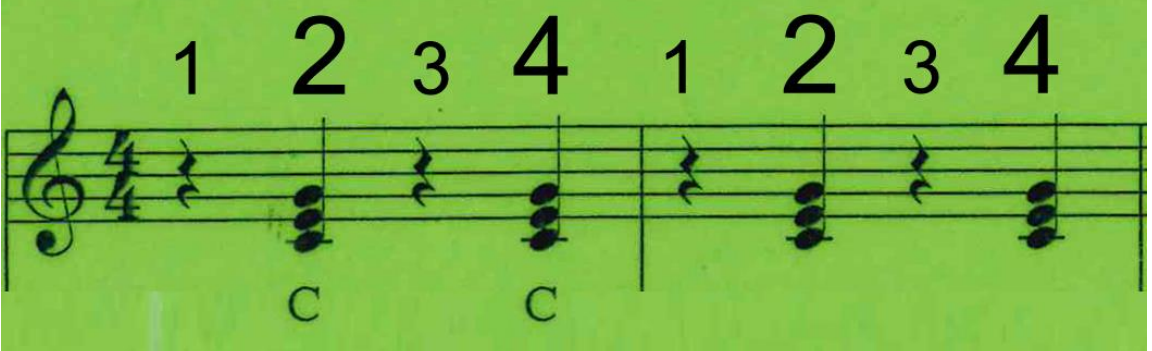
The learning outcomes for this topic are:
- Explore a wide range of music from different cultures.
- Understand scales and be able to use them when composing music

The Evolution of Reggae

Mento - 1950s	Ska – Early 1960s	Rocksteady – Late 1960s	Reggae – Late 1960s to 1980s
• Jamaican folk music • Banjo accompaniment • Fast tempo • Lighthearted lyrics • Bass lines played on double bass	• Walking bass line • Electric and brass instruments • Fast tempo • Lyrics about social issues	• Mainly electric instruments • Lots of electric bass riffs • Slow tempo • Drums often miss out the first beat of every bar	• Jamaican folk music • Lots of bass riffs • Slow tempo • Lyrics about social issues, love, peace, religion, war.

‘Three Little Birds’ by Bob Marley and the Wailers

Chorus



The Offbeat

In most western music beats 1 and 3 are usually given emphasis. Beats 2 and 4 are called the offbeat. In most Jamaican music (especially reggae) the emphasis is given to beats 2 and 4. In ‘Three Little Birds’ (left) the chords are placed on beats 2 and 4 to give this song it’s typical reggae rhythm.

Further Listening

‘You Can Get It If You Really Want It’ by Desmond Decker

‘Baby I Love Your Way’ by Big Mountain. *A reggae cover of a non-reggae song*

‘Superman’ by Goldfinger. *A more modern genre called ska punk that fuses ska with pop and punk.*

Challenge Activities

Listen to ‘I Can’t Help Falling in Love With You’ by Elvis Presley and compare it to the reggae cover version by UB40. What reggae features does the UB40 version include?

Newsome Academy
Everyone Exceptional Everyday

Year 8 - Band Skills: Hooks and Riffs

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

- **are able to compose a pop riffs and hooks through understanding of common writing techniques**
- **Increase confidence by performing to others**

Keyword	Definition
Riff	A short, repeated, ‘catchy’ phrase in popular music, typically used as an introduction or refrain in a song. Often played on a guitar
Hook	A short riff, passage, or phrase, that is used in popular music to make a song appealing, memorable and "catchy”.
Key	The main group of notes/pitches that are used throughout a piece of music.
Composition	a song or piece of music
Ensemble	A group of musicians
Band	A group of musicians. (Most often used in pop music)
Rehearsal	A set time a band get together to practise and learn their songs.
Performance	When a musician or group of musicians play music, usually to an audience.

Career Focus - Where could this take you?

Being in a band will really strengthen your time management. Getting to rehearsals, gigs and studio sessions on time is vital in our band. While we don’t always get along, we have to overcome these difficulties and learn to work well with others.
Through the years we have developed our creative thinking skills by coming up with ideas and writing over 150 songs! In the early days we had to organise gigs, rehearsal spaces and recording studio time as well as spreading the word about our gigs and albums. Now we employ people who do this for us. There are many music careers aside from being in a band, such as: Promotion, marketing, roadies, live/studio engineers, tour bus drivers, band management, song writers, stylists and many more.

Challenge Activities

1. Create your own guitar or piano riff using a scale (eg. Pentatonic, Minor).
2. Here is a compilation of riffs played using the pentatonic scale. See how many you can play on an instrument: https://www.youtube.com/watch?v=9teYiPih-X8&ab_channel=MartyMusic

Further listening:
Famous Guitar Riffs: The White Stripes - ‘Seven Nation Army’,
Deep Purple – ‘Smoke on the water’
Famous Bass Riffs: Queen – ‘Another One Bites The Dust’
Pink Floyd – ‘Money’
Famous Keyboard Riffs: Van Halen – ‘Jump’ Prince – ‘1999’

Topic Links

This topic links to other topics such as:

- Drama – General skills (voice projection, stage presence, costumes)
- Music – Voice 21 Oracy skills (through performance)

Additional Resources

BBC Bitesize:
https://www.bbc.co.uk/bitesize/guides/z6ch8xs/revision/4

Billboard list of the 25 catchiest hooks ever:
https://www.billboard.com/music/music-news/greatest-catchiest-pop-hooks-ever-6731053/

Year 8 - Band Skills: Hooks and Riffs

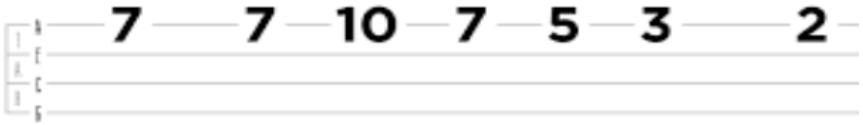
The aims of the sequence of learning are to ensure that all students:

- are able to compose a pop riffs and hooks through understanding of common writing techniques
- Increase confidence by performing to others

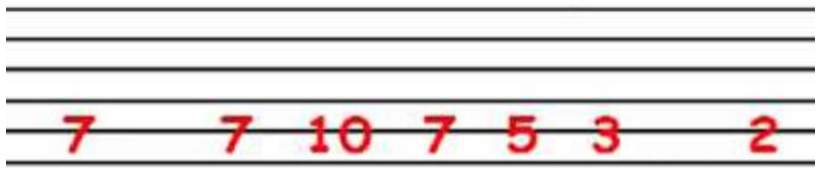
Key Concepts

‘Seven Nation Army’ by The White Stripes - Tabs

Ukulele



Guitar



Bass

```
G|----------------------
D|----------------------
A|--7-7-10-7-5-3-5-3-2--
E|----------------------
```

Instruments in a Typical Popular Music Band

Year 8 Health and Fitness

The aims of the sequence of learning are to ensure that all students:
Being able to demonstrate the: set up, completion and interpretation of fitness tests. Learning about and understanding the components of fitness and how they can be trained. Learning which components of fitness are important to specific types of athlete. Learning about and completing training sessions to train specific components of fitness. Learning how to live a healthy, active lifestyle.

Keyword	Definition
Power	The maximum strength and maximum speed of your muscles in order to move an object or yourself forward. Power = strength x speed.
Co-ordination	The ability for muscles to work together in pairs to move different body parts in time.
Reaction Time	The time taken for a person to react to a stimulus.
Agility	The ability to change direction at speed without making a mistake in your performance.
Balance	The ability to maintain your centre of mass and control without falling over.
Speed	To moves as fast as possible over a distance in the shortest time. Speed=distance/time.
Cardiovascular endurance	The ability for the heart and blood vessels to transport oxygenated blood to the working muscles in sports performance so a person can work for a long time without getting tired.
Muscular strength	The maximum force that your muscles can make to move an object.
Muscular endurance	Your muscles can work continuously at moderate intensity for a long period of time without them getting tired.
Flexibility	This is the range of movement that can be performed around a joint by the muscles.
Body composition	This is the total amount of fat, bone and muscles of a person's body.

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

Health and Fitness Key Concepts

Newsome Academy
Everyone Exceptional Everyday

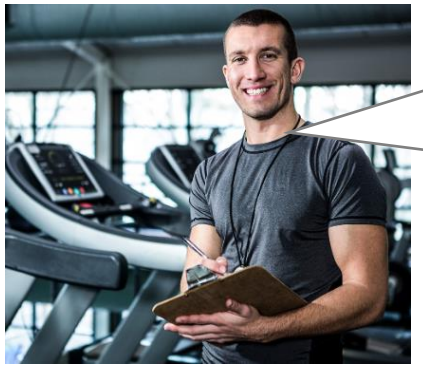
Year 8 Health and Fitness

The aims of the sequence of learning are to ensure that all students:
Being able to demonstrate the: set up, completion and interpretation of fitness tests. Learning about and understanding the components of fitness and how they can be trained. Learning which components of fitness are important to specific types of athlete. Learning about and completing training sessions to train specific components of fitness. Learning how to live a healthy, active lifestyle.

Retrieval Practice:
Unscramble the component of fitness keywords and match them to the correct definitions

COMPONENT OF FITNESS		DEFINITION
SHGTERNT _ _ _ _ _ _ _ _		When one or muscles contract repeatedly when lifting or moving, for a certain length of time.
CAEIBRO EECNDANUR _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _		The amount of body fat compared to muscle in the body.
WEPOR _ _ _ _ _		When the body has to exert a force against resistance.
IBILEXILTYF _ _ _ _ _ _ _ _ _ _ _		How fast the body can move from A to B or perform an action until it's complete.
LACEBAN _ _ _ _ _ _ _		The amount/range of movement around a joint.
LIYAGIT _ _ _ _ _ _ _		The time it takes for the body to respond to a stimulus.
NOCARDOINTIO _ _ - _ _ _ _ _ _ _ _ _		When a sequence of movements are performed smoothly and accurately together.
CREATION MEIT _ _ _ _ _ _ _ _ _ _ _ _ _		The rate at which work is performed often strength x speed = this
PESED _ _ _ _ _		The ability to maintain your centre of gravity when standing still or moving.
BOYD MOPOSTINICO _ _ _ _ _ _ _ _ _ _ _ _ _		Being able to change direction whilst keeping the body under control.
MULSCURA EECNDANUR _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _		When the body is working at a level that demands the need for more oxygen.

Career Focus - Where could this take you?



My career is known as a personal trainer. My job is to carry out various tasks, starting from assessing my clients' physical condition and creating unique workout routines for them. I explain the exercises in a clear and efficient way, while demonstrating how to use the training equipment safely and how to avoid injuries .I also help with giving advice on lifestyle choices linked to nutrition and healthy eating habits.

Challenge Activities

Design a training programme:-
Can you create a 4-week training programme that shows 5 different exercises that get progressively harder each week. Use the example provided on the previous page for guidance.

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

Topic Links

This topic links to:
- RSHE – Understanding how physical activity can reduce stress and anxiety and promote physical, mental and social wellbeing
- English –understanding and defining key terminology
- Mathematics –problem solving, recording figures and analysing performance.
- Voice 21 –testing others in the class on keywords.

Additional Resources

To further practise and develop your knowledge see:

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

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

Year 8 Trampolining

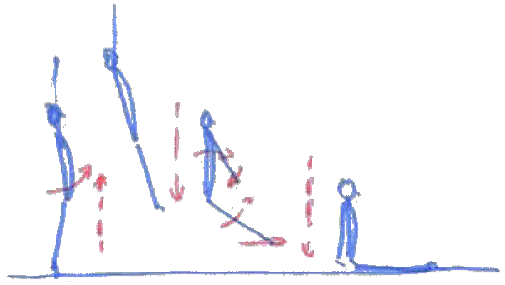
The aims of the sequence of learning are to ensure that all students:

- Identify at least 5 core trampolining skills.
- Demonstrate core skills such as a seat drop.
- Demonstrate a 7 bounce routine.
- Lead a small group of peers in a drill.

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

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?



Above shows the basic **biomechanics** of the **seat drop**. By the end of the block, you should be able to master this skill.

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.

Newsome Academy
Everyone Exceptional Everyday

Year 8 Trampolining

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

- Identify at least 5 core trampolining skills.
- Demonstrate core skills such as a seat drop.
- Demonstrate a 7 bounce routine.
- Lead a small group of peers in a drill.

Retrieval Practice

Questions	Answers
Why does a trampolinist require good flexibility?	Without flexibility, a trampolinist will struggle to perform their moves aesthetically due to a lack of pointed toes and straight body lines.
Explain the importance of an aesthetic performance.	An aesthetic performance is important as it allows people to fully enjoy the performance and ensures the performance looks good to the audience.
Why does a seat drop require good core strength?	Because without good core strength, the body will not stay tense and upright.
Give 3 safety points for trampolining.	All jewellery removed, hair tied back, socks worn.
Explain the term tuck	Jumping with the knees flexed and toes pointed down.
Why do your toes need to be pointed when performing on the trampoline?	Pointing your toes while performing on the trampoline helps you to maintain control and balance in the air and can help to prevent injuries by keeping your legs and feet in the correct position.

Career Focus - Where could this take you?

As a trampoline tester, my job is to test trampolines to make sure they are safe and fun to use. I try out different types and sizes of trampolines to make sure they meet certain standards for safety and performance. I also check for any defects or problems that could make the trampoline dangerous to use. This job requires an eye for detail and a willingness to follow rules and procedures.

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

Newsome Academy
Everyone Exceptional Everyday

Usernames and Passwords

Newsome Academy

RESPECT | INTEGRITY | TEAMWORK | ASPIRATION

FAIL EARLY - FAIL FORWARD - FAIL OFTEN | SEIZE EVERY MINUTE | BE BRAVE - BE PRESENT - BE YOU

NON NEGOTIABLE EQUIPMENT

BLACK PEN

PURPLE PEN

PENCIL

BONUS ITEMS

HIGHLIGHTER | RUBBER | GLUE STICK | CALCULATOR

RULER

PLACE YOUR EQUIPMENT ON THE PLACEMAT TO SHOW YOUR TEACHER YOU ARE PREPARED AND READY FOR LEARNING