

YEAR 11 KNOWLEDGE ORGANISER

MICHAELMAS TERM



Name:

Family Group:



LEARNING - LOVING - LIVING

HOW TO USE MY KNOWLEDGE ORGANISER

The timetable shows the **subjects** you should be studying and the days that you should be studying them. You should **complete your work in your exercise book**.

Each evening you should draw a straight line (using a ruler), under the previous day's work, and write the date, clearly at the top. You need to **bring your KO and exercise book with you to school EVERYDAY**.

The **KO** work that you have completed for the week will be checked in Family Group time **EVERY** Friday. If homework is not of an appropriate standard or amount will result in an after school detention. Knowledge tests will also be used frequently in lessons.

SUBJECT HOMEWORK

Students will also be **given** additional subject homework to be completed throughout the week and/or can use FREE online revision tools such as www.senecalearning.com

It is also recommended that students regularly **READ** a variety of fiction and non fiction books that they choose for pleasure. This extra reading will help to develop and broaden their general knowledge.

In **ENGLISH** all students will be expected to complete 1-2 reading assignments each week by accessing www.CommonLit.org . Each assignment will take 20-30 minutes and students will be required to answer multiple choice questions to check their understanding of what they have read.

In **MATHS** students are expected to watch short explanation videos and complete activities on the online platform of <https://mathswatch.co.uk>. Students can log in using the details and password they use to log in to the school computers.

HOMEWORK TIMETABLE

You should spend *at least* **1 hour** per night on homework = 3 subjects x 20 minutes per subject

Year 11	Subject 1	Subject 2	Subject 3
Monday	Maths	Option A	Option C
Tuesday	English	Option B	Option C
Wednesday	Maths	Religious Education	English
Thursday	English	Science	Option A
Friday	Maths	Languages	Option B

RETRIEVAL ACTIVITY IDEAS

Knowledge organisers are for **learning and mastering** the knowledge in each subject. There are many different ways you can do this, however some **PROVEN** methods to try in your work book are:

4 Methods of Retrieval Practice

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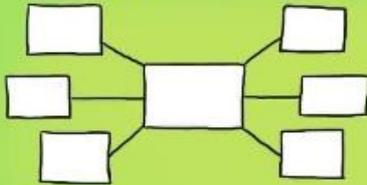
Before you start put away all your books & classroom materials.

Retrieval Practice Examples

- * Exit Tickets
- * Starter quizzes
- * Multiple choice quizzes
- * Short answer tests
- * Free write
- * Think, pair, share
- * Ranking & sorting
- * Challenge grids

BRAIN DUMP

Write, draw a picture, create a mind-map on everything you know about a topic.



Give yourself a time limit, say 3 minutes, then have a look at your books & add a few things you forgot.

QUIZZING

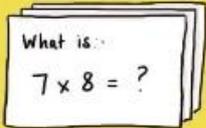
Create practice questions on a topic. Swap your questions with a partner & answer.

Question - What is a metaphor?

- A comparison using 'like, as, than'.
- A comparison where one thing is another.
- A comparison with a human attribute.

FLASHCARDS

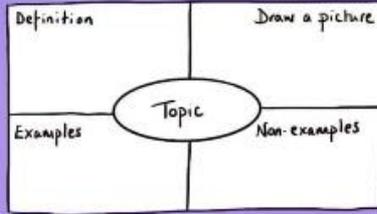
Create your own flashcards, question on one side answer on the other. Can you make links between the cards?



You need to repeat the Q&A process for flashcards you fail on more frequently & less frequently for those you answer correctly

KNOWLEDGE ORGANISERS

Complete a knowledge organiser template for key information about a topic.



You can use knowledge organisers to learn new vocab & make links in between subjects or ideas.

After you have retrieved as much as you can go back to your books & check what you've missed. Next time focus on that missing information

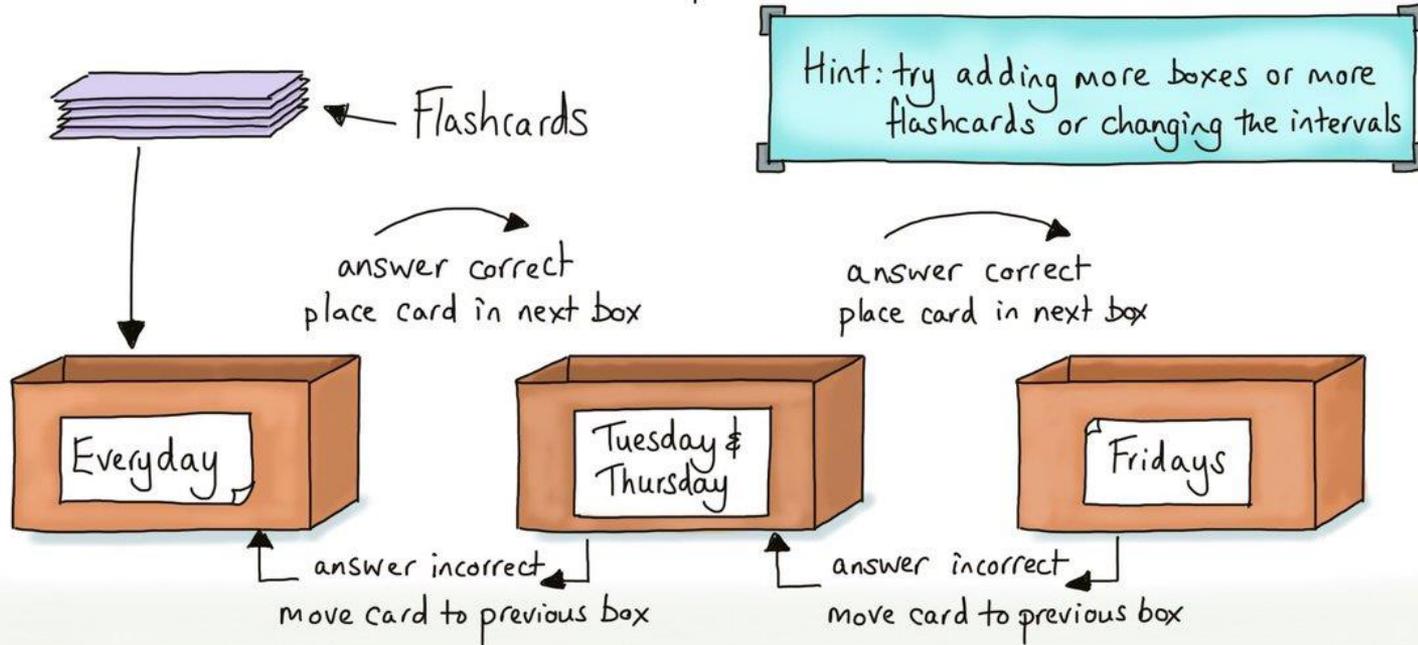
USING FLASH CARDS SUCCESSFULLY

Once flash cards are created, you will need to use them correctly to have an impact. Follow the method below for the best knowledge retention

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LEITNER Flash card method

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An effective use of flashcards to prompt & recall learning using spaced practice proposed by Leitner in the 1970s. It focuses on the proficiency of recall of the learner. Information which is easily recalled has a longer time lapse before the next recall opportunity.

Poetic Techniques	High Utility Quotations to Learn
<p>1) Alliteration: When words in a sentence start with the same letter</p> <p>2) Caesura: A pause within or at the end of a line, often using a full stop</p> <p>3) Enjambment: the continuation of a sentence without a pause beyond the end of a line, or stanza</p> <p>4) Consonance: Repetition of consonant sounds</p> <p>5) Assonance: Internal vowel rhyme</p> <p>6) Sibilance: The 'S' sound, normally several of these in a row.</p> <p>7) Symbolism: The idea of words or phrases representing something else</p> <p>8) Onomatopoeia: Words that sound like the noise they describe</p> <p>9) Metaphor: a figure of speech in which a word or phrase is applied to an object or action to which it is not literally applicable</p> <p>10) Simile: comparing things using 'like' or 'as'</p> <p>11) Oxymoron: When contradictory terms or ideas are put next to each other</p> <p>12) Rhythm: The pattern or beat of a poem</p> <p>13) Juxtaposition: Putting two things close together to create a contrasting effect</p> <p>14) Stanza: The name for a verse in a poem</p> <p>15) Refrain: A repeated part in a poem, like a chorus</p>	<p>Ozymandias</p> <p>1) (human power and pride v power of nature/time, power of art/words)</p> <p>2) 'Two vast and trunkless legs of stone'</p> <p>3) 'Look on my works, ye Mighty, and despair!'</p> <p>4) 'Nothing beside remains'</p> <p>5) 'Of that colossal wreck, boundless and bare The lone and level sands stretch far away'</p> <p>Exposure</p> <p>6) (power of nature v human, effects of conflict, experience of conflict, patriotism)</p> <p>7) 'In the merciless iced east winds that knife us...'</p> <p>8) 'But nothing happens'</p> <p>9) 'Sudden successive flights of bullets streak the silence'</p> <p>10) 'Slowly our ghosts drag home: glimpsing the sunk fires'</p> <p>Kamikaze</p> <p>11) (reality of conflict, patriotism, nature, memory)</p> <p>12) 'a shaven head full of powerful incantations'</p> <p>13) 'the little fishing boats strung out like bunting on a green-blue translucent sea'</p> <p>14) 'like a huge flag waved first one way'</p> <p>15) 'he must have wondered which had been the better way to die'</p>
<p>Form / Structural Features and Techniques</p> <p>16) Blank Verse: Poetry written in non-rhyming ten syllable words per line</p> <p>17) Couplet : Pair of rhyming lines which follow on from each other</p> <p>18) Chiasmus: reversal of ideas in a sentence - "... his hands, which did not tremble then / though seem to now." (War Photographer)</p> <p>19) Free Verse: Non-rhyming, non-rhythmical poetry which follow the rhythm of natural speech</p> <p>20) Iamb : A pair of syllables in which the second is stressed and the first is unstressed.</p> <p>21) Pentameter : Five pairs of syllables per line</p> <p>22) Tetrameter : Four pairs of syllables per line of poetry</p> <p>23) Trimeter: Three pairs of syllables per line of poetry</p> <p>24) Trochee (n) / Trochaic (adj) : A pair of syllables in which the first is stressed and the second unstressed (opposite of an iamb).</p> <p>25) Volta : A turning point in the line of thought or argument in the poem</p> <p>26) Quatrain : A four line stanza</p> <p>27) Dramatic Monologue : A poem in which an imagined speaker addresses the reader</p> <p>28) Narrative Poem: A poem which tells the story of an event</p> <p>29) Petrarchan Sonnet : A sonnet consisting of an octave (8 lines) and a sestet (6 lines) – 'Ozymandias'</p>	<p>War Photographer</p> <p>16) (Effects of conflict, experience of conflict, power of memory/picture, human power)</p> <p>17) 'As though this were a church and he a priest preparing to intone a Mass.'</p> <p>18) 'Belfast. Beirut. Phnom Penh. All flesh is grass.'</p> <p>19) 'blood stained into the foreign dust'</p> <p>20) 'The readers' eyeballs prick with tears between the bath and pre-lunch beers'</p> <p>Storm on the Island</p> <p>21) Storm on the Island (Human power, power of nature, conflict (context)')</p> <p>22) 'We are prepared.'</p> <p>23) You might think that the sea is company, Exploding comfortably down on the cliffs'</p> <p>24) 'spits like a tame cat Turned savage.'</p> <p>25) 'We are bombarded by the empty air.'</p>

	Term	Definition		Term	Definition		
Ozymandias	1	Immortalise(v) Immortal (adj)	Living forever, never dying	My Last Duchess	18	Domineering (adj)	Bossy and arrogant
	2	Contempt (n) Contemptuous (adj)	the feeling that a person or a thing is worthless or beneath consideration		19	Objectify (v) Objectification (n)	Treating someone like an object
	3	Vainglorious (adj)	vain, excessively boastful, and have swelled pride		20	Authoritarian (n)	Bossy in a cruel and strict way
	4	Transient (adj) Transience (n)	lasting only for a short time; impermanent		21	Repress (v) Repressive (adj)	Controlling someone by force
	5	Imperious (adj)	Arrogant and domineering		22	Subjugate (v) Subjugation (n)	Bring under your control, dominate
	6	Insignificant (adj) Insignificance (n)	too small or unimportant to be worth consideration		23	Euphemism (n) Euphemistic (adj)	A word or phrase used to replace something rude, uncomfortable or taboo
London	7	Indignant (adj) Indignance (n)	Shock or annoyance at something that is unfair	Charge of the Light Brigade	24	False modesty	Behaviour that is supposed to seem humble but comes across as being fake
	8	Corrupt (adj) Corruption (n)	Dishonest or fraudulent behavior by those in power		25	Dynamic (adj) Dynamism (n)	characterized by constant change, activity, or progress
	9	Marginalised (adj)	People on the edges of society: the poor, minorities and those thought of as insignificant		26	Audacious (adj) Audacity (n)	showing a willingness to take surprisingly bold risks.
	10	Oppression (n) Oppressive (adj)	inflicting harsh and authoritarian treatment		27	Venerate (v) Veneration (n)	regard with great respect; revere.
The Prelude	11	Vulnerable (adj) Vulnerability (n)	Weak and easily hurt or injured	28	Tribute (n)	an act, statement, or gift that is intended to show gratitude, respect, or admiration	
	12	The sublime	Duality of nature: beautiful but scary	Exposure	29	Tedium (n) Tedious (adj)	too long, slow, or dull; tiresome or monotonous.
	13	Pastoral (adj)	A beautiful and idealized country scene		30	Pernicious (adj)	having a harmful effect, especially in a gradual or subtle way.
	14	Formative (adj)	An experience that has a lasting effect		31	Macabre (adj)	disturbing because concerned with or causing a fear of death
	15	Profound (adj)	Very great, powerful and intense		32	Harrowing (adj)	Acutely and strongly distressing
	16	Baleful (adj)	Threatening, harmful, menacing		33	Agony (n) Agonise (adj)	extreme physical or mental suffering
	17	Sinister (adj)	Threatening and evil like		34	Nemesis (n)	a long-standing rival; an arch-enemy.
			35		Ostracise (v) Ostracisation (n)	To be excluded from something	

	Term	Definition		Term	Definition
Storm on the Island	35 Isolated (adj) Isolation (n)	far away from other places, buildings, or people; remote; lonely	War Photographer	52 Desensitised (adj) Desensitisation (n)	make (someone) less likely to feel shock or distress at scenes of cruelty or suffering by overexposure to such images.
	36 Robust (adj)	(of an object) sturdy in construction		53 Commodify (v) Commodification (n)	To turn something into something that can be sold
	37 Colloquial (adj) Colloquialism (n)	(of language) used in ordinary or familiar conversation; not formal or literary.		54 Ceremony (n) Ceremonial (adj)	a formal religious or public occasion
	38 Volatile (adj) Volatility (n)	liable to change rapidly and unpredictably		55 Detached (adj) Detachment (n)	the state of being objective or aloof; unaffected and uninvolved
Bayonet Charge	39 In media res	A narrative that begins in the middle of the action.	Tissue	56 Extended metaphor	a comparison between two unlike things that continues throughout a series of sentences in a paragraph or lines in a poem
	40 Bewildered (ad)	confused		57 Enduring (adj) Endure (v)	lasting over a period of time; durable.
	41 Disparage (v) Disparaging (adj)	expressing the opinion that something is of little worth; derogatory.		58 Chronicle (v)	record (a series of events) in a factual and detailed way
	42 Frantic (adj)	distraught with fear, anxiety, or other emotion		59 Nostalgia (n) Nostalgic (adj)	a sentimental longing or wistful affection for a period in the past
Remains	43 Nonchalant (adj) Nonchalance (n)	Relaxed, casual, not bothered	Emigre	60 Sentimental (adj) Sentimentality (n)	of or prompted by feelings of tenderness, sadness, or nostalgia
	44 Anecdote (n) Anecdotal (adj)	A personal story		61 Immutable (adj)	unchanging over time or unable to be changed.
	45 Grotesque (adj)	Disgusting, horrible perhaps comical too	Kamikaze	62 Indoctrinate (v) Indoctrination (n)	To accept a set of beliefs uncritically; brainwashed
	46 Torment (v/n)	severe physical or mental suffering.		63 Ignominious (adj) Ignominy (n)	Public shame and humiliation
	47 Unsentimental (adj)	not displaying or influenced by sentimental feelings.		64 Catch-22	a dilemma or difficult circumstance from which there is no escape because of mutually conflicting or dependent conditions.
Poppies	48 Poignant (adj) Poignancy (n)	Evoking sadness and regret	Checking out me History	65 Anglocentric (adj)	centred on Britain or England
	49 Allude (v) Allusion (n)	Make a link to something, hint at something		66 Sardonic (adj)	Grimly mocking
	50 Composure (n)	the state or feeling of being calm and in control of oneself		67 Vernacular (adj)	Spoken language from a specific region
	51 Domestic (adj)	Relating to the running of a home or to family relations.		68 Dismissive (adj)	showing that something is unworthy of consideration



Important Ideas

To simplify an expression you collect together all the terms that are alike. Look carefully at the sign before each term.

When substituting into expressions, use the correct order of operations i.e. $3x^2$ means $3 \times x^2$ BUT $(3x)^2$ means you multiply 3 by x then square the answer.

To expand a single bracket, the term on the outside of the brackets needs to be multiplied by EVERY term on the inside of the bracket

To factorise an expression is the opposite of expanding. Find the HCF and take this outside of the brackets

Vocabulary

Variable	A variable is an unknown letter used to represent a number and can take any value
Expression	An expression is made up of numbers and or letters that represent unknown values. There is no equal, For example $3a + 5$
Terms	Separate parts of an expression e.g. in $5x + 3y$, $5x$ is a term and $3y$ is a term
Coefficients	These are the numbers in front of the variables, e.g. in $6x$ 6 is the coefficient
Equation	An equation contains an = sign and at least one variable e.g. $3x + 1 = 7$
Formula	A formula is a special type of equation which gives us a rule for working things out, e.g. $A = b \times h$

Question Answer

$x + x + x + x$	$4x$
$5e + 2e - 3e$	$4e$
$4x + 2y - x + 5y + 6$	$3x + 7y + 6$
Be careful when there are square terms	$5x^2 + x$
$3x^2 + 5x + 2x^2 - 4x$	
$5 \times 4g$	$20g$
$3b \times 4c$	$12bc$ (normally written in alphabetical order but $12cb$ is the same as $12bc$)
Find the value of $5c$ when $c = 4$	$5c = 5 \times c = 5 \times 4 = 20$
Evaluate $3a^2$ when $a = 5$	Use BIDMAS to help with this. We do the indices part first then multiply by 3 3×5^2 $3 \times 25 = 75$
Expand $2(3m + 5)$	$2(3m + 5)$ $= 6m + 10$
Expand $4r(2r - 3)$	$4r(2r - 3)$ $8r^2 - 12r$
Factorise $10x + 15$	Find the HCF for 10 and 15 (5) outside the brackets, then work out what you need to multiply 5 by to get 10 and 15. ANS: $5(2x + 3)$

Key Facts & Formula

$a + 3$ $a - 3$ $3 - a$	Means add 3 to a Means subtract 3 from a Means subtract a from 3
$3a$	Means 3 x a
$a + a + a$	Simplifies to $3a$
$a \times a \times a$	Simplifies to a^3
BIDMAS	<ul style="list-style-type: none"> Gives the order we carry out operations: Brackets, Indices, divide, Multiply, Add and subtract. If there are just + and - in the expression we calculate from left to right. They have equal precedence

Expand and simplify $2(4m + 3) + 3(5m + 2)$
 $= 8m + 6 + 15m + 6$
 $= 23m + 12$

Expand and simplify $3(5m + 4) - 2(m + 3)$
 $= 15m + 12 - 2m - 6$
 $= 13m + 6$

MathsWatch References

33,34,35	Simplifying expressions
134	Expanding and simplifying expressions
136	Rearranging formulae
93	Expanding brackets
94	Simple factorisation
95	Substitution
75	BIDMAS



Important Ideas

Two lines are parallel if they are an equal distance apart, the two lines will never intersect (meet)

Two lines are perpendicular if their product is -1 OR in other words if they are the negative reciprocal of each other.

The general equation of a linear graph is $y = mx + c$, where m is the gradient and c is the intercept

When changing the subject of the formula, you need to keep the equation balanced, i.e., what you do to one side you must do to the other. If we need to make x the subject for $y = 3x + 1$, subtract one from both sides leaving $y = 3x$, then divide both sides by 3, leaving $x = y/3$

Vocabulary

Gradient Gradient or m is a measure of steepness of a line, the higher the value of m the steeper the line

Intercept The intercept (or c in $y = mx + c$) is the y value where the line crosses the y axis

Parallel Two lines are parallel if they have the same gradient; when $y = mx + c$, ' m ' will be equivalent. $y = 2x + 1$, $y = 2x + 3$, both have a gradient of 2

Perpendicular Two lines are perpendicular if they intersect at right angles

Intersect The point of intersection of two lines is where the point where the lines meet

Quadratic A quadratic equation must contain an x^2 term, a quadratic curve is a parabola

Linear A straight line graph is a linear graph. A linear equation will have an x term

Subject The subject of a formula is the single variable on one side of the equal sign

inequality An *inequality* is like an *equation* that uses symbols for "less than" (<) and "greater than" (>) where an equation uses a symbol for "is equal to" (=).

Reciprocal The reciprocal of a number is 1 divided by that number.

Questions **Answers**

Gradient

Gradient from a graph

$$m = \frac{\text{change in } y}{\text{change in } x}$$

$$m = \frac{3}{1}$$

Example: Find the gradient of the line segment between (2, -3) and (6, 9).

$$m = \frac{9 - (-3)}{6 - 2} = \frac{12}{4} = 3$$

So the gradient of this line segment is 3.

Inequalities

Drawing inequalities on a **number line** is dead easy — all you have to remember is that you use an **open circle** (○) for > or < and a **closed-in circle** (●) for ≥ or ≤.

EXAMPLE: Show the inequality $-4 < x \leq 3$ on a number line.

1. Solve $3x - 2 \leq 13$.

Just solve it like an equation — but leave the inequality sign in your answer:

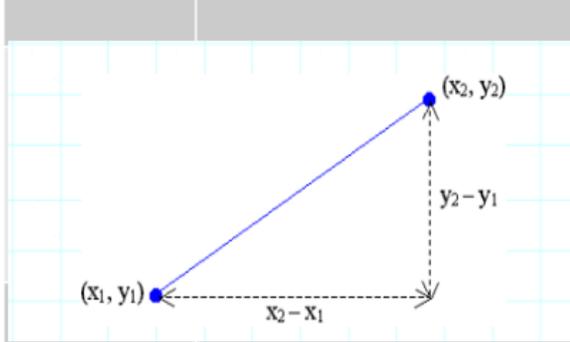
$$\begin{aligned} +2) \quad & 3x - 2 + 2 \leq 13 + 2 \\ & 3x \leq 15 \\ \div 3) \quad & 3x + 3 \leq 15 + 3 \\ & x \leq 5 \end{aligned}$$

MathsWatch References

138,139,198	Solving In equalities and shading regions
212	Solving quadratic Inequalities
136,190	Rearranging formula
96,97	Straight line graphs and gradients
133,159	Midpoints and finding the equation of a line

Key Facts & Formula

The equation of a straight line. M is the gradient of the line and c is the y intercept

$$y = mx + c$$


$$\text{gradient 'm'} = \frac{\text{change in 'y'}}{\text{change in 'x'}} = \frac{y_2 - y_1}{x_2 - x_1}$$

Pythagoras $A^2 + b^2 = c^2$

We can use Pythagoras to find the distance between two points.

$$\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

To make something the subject of a formula we need to isolate the variable on one side of the equation

Example 1
Make r the subject of $C = 2\pi r$.
To isolate r , divide by 2π .

$$\frac{C}{2\pi} = r$$

We often write formulae with the subject on the left-hand side, so this becomes

$$r = \frac{C}{2\pi}$$

Example 4
Make x the subject of $3x + 5 = y - ax$.
When a formula contains the new subject more than once, start by isolating any terms including it on one side of the equals sign.
Here, add ax and subtract 5.
 $3x + ax = y - 5$
Now we factorise the side with our new subject.
 $x(3 + a) = y - 5$
Then divide by the bracket to leave x on its own.
 $x = \frac{y - 5}{3 + a}$

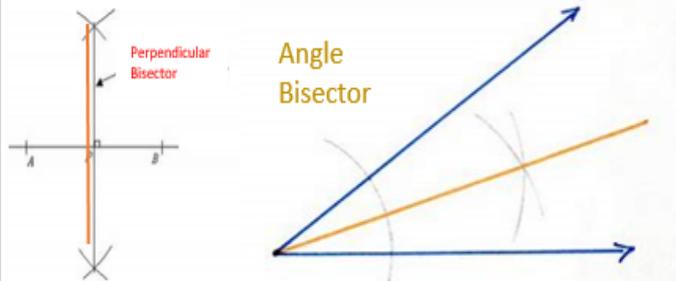
> means 'Greater than' ≥ means 'Greater than or equal to'
< means 'Less than' ≤ means 'Less than or equal to'



Topic/Skill	Definition/Tips	Example	Topic/Skill	Definition/Tips	Example
1. Parallel	Parallel lines never meet.		7. Constructing a perpendicular from a point on the line	Given line PQ and point R on the line: Put the sharp point of a pair of compasses on point R. 2. Draw two arcs either side of the point of equal width (giving points S and T) 3. Place the compass on point S, open over half way and draw an arc above the line. 4. Repeat from the other arc on the line (point T). 5. Draw a straight line from the intersecting arcs to the original point on the line.	
2. Perpendicular	Perpendicular lines are at right angles. There is a 90° angle between them.		8. Constructing Triangles (Side, Side, Side)	1. Draw the base of the triangle using a ruler. 2. Open a pair of compasses to the width of one side of the triangle. 3. Place the point on one end of the line and draw an arc. 4. Repeat for the other side of the triangle at the other end of the line. 5. Using a ruler, draw lines connecting the ends of the base of the triangle to the point where the arcs intersect.	
3. Vertex	A corner or a point where two lines meet.		9. Constructing Triangles (Side, Angle, Side)	1. Draw the base of the triangle using a ruler. 2. Measure the angle required using a protractor and mark this angle. 3. Remove the protractor and draw a line of the exact length required in line with the angle mark drawn. 4. Connect the end of this line to the other end of the base of the triangle.	
4. Angle Bisector	Angle Bisector: Cuts the angle in half. 1. Place the sharp end of a pair of compasses on the vertex. 2. Draw an arc, marking a point on each line. 3. Without changing the compass put the compass on each point and mark a centre point where two arcs cross over. 4. Use a ruler to draw a line through the vertex and centre point.		10. Constructing Triangles (Angle, Side, Angle)	1. Draw the base of the triangle using a ruler. 2. Measure one of the angles required using a protractor and mark this angle. 3. Draw a straight line through this point from the same point on the base of the triangle. 4. Repeat this for the other angle on the other end of the base of the triangle.	
5. Perpendicular Bisector	Perpendicular Bisector: Cuts a line in half and at right angles. 1. Put the sharp point of a pair of compasses on A. 2. Open the compass over half way on the line. 3. Draw an arc above and below the line. 4. Without changing the compass, repeat from point B. 5. Draw a straight line through the two intersecting arcs.		11. Constructing an Equilateral Triangle (also makes a 60° angle)	1. Draw the base of the triangle using a ruler. 2. Open the pair of compasses to the exact length of the side of the triangle. 3. Place the sharp point on one end of the line and draw an arc. 4. Repeat this from the other end of the line. 5. Using a ruler, draw lines connecting the ends of the base of the triangle to the point where the arcs intersect.	
6. Perpendicular from an External Point	The perpendicular distance from a point to a line is the shortest distance to that line. 1. Put the sharp point of a pair of compasses on the point. 2. Draw an arc that crosses the line twice. 3. Place the sharp point of the compass on one of these points, open over half way and draw an arc above and below the line. 4. Repeat from the other point on the line. 5. Draw a straight line through the two intersecting arcs.				

Important Ideas

Vectors	A vector between two points A and B is described as: \overrightarrow{AB} , or α
Iteration	An algebraic method used to <u>estimate</u> the roots of an equation
A Circle	The circle - the locus of points which are equidistant from a fixed point, the <u>centre</u>



Vocabulary

Vector	describes a movement from one point to another. A vector quantity has both <u>direction</u> and <u>magnitude</u> (size)
Roots	Where the graph cuts the x-axis; otherwise, the value(s) of x when the equation is equal to zero
Bisect	To cut into two equal halves
Midpoint	The middle of a line segment; it cuts the line segment exactly in half
Construct	To produce a geometrical drawing using rulers and compasses only
Loci (Locus singular)	A set of points that satisfy a certain condition

Q&A

Show, using vectors that: $\overrightarrow{XY} + \overrightarrow{YZ} = \overrightarrow{XZ}$

The diagram shows a triangle with vertices X, Y, and Z. Vector \overrightarrow{XY} goes from X to Y, \overrightarrow{YZ} goes from Y to Z, and \overrightarrow{XZ} goes from X to Z.

$$\begin{pmatrix} 4 \\ 2 \end{pmatrix} + \begin{pmatrix} 1 \\ -4 \end{pmatrix} = \begin{pmatrix} 4+1 \\ 2+(-4) \end{pmatrix} = \begin{pmatrix} 5 \\ -2 \end{pmatrix}$$

Show that $x = 1 + \frac{11}{x-3}$ is a rearrangement of the equation $x^2 - 4x - 8 = 0$

multiply everything by $(x-3)$:
 $x(x-3) = 1(x-3) + 11$
 so $x^2 - 3x = x + 8$
 so $x^2 - 4x - 8 = 0$

Calculate the Length Δn

The top triangle has legs of length 4 and 3, and a hypotenuse of length 5. The bottom triangle has legs of length 3 and 2, and a hypotenuse of length 5.4.

MathsWatch References

174, 219	vectors
180	iterative processes
165	loci
146a, 146b	Constructing perpendiculars
217	Pythagoras in 3D
218	Trigonometry in 3D

Key Facts & Formula

Negative Vectors

The diagram shows a vector k pointing up and to the right, and a vector $-k$ pointing down and to the left.

A negative vector has the same magnitude but different direction
 $k = \begin{pmatrix} 3 \\ -2 \end{pmatrix}$ $-k = \begin{pmatrix} -3 \\ 2 \end{pmatrix}$

Scalar multiples

$k = \begin{pmatrix} 3 \\ -2 \end{pmatrix}$

$2k = \begin{pmatrix} 2 \times 3 \\ 2 \times -2 \end{pmatrix} = \begin{pmatrix} 6 \\ -4 \end{pmatrix}$

The diagram shows vector k and a longer vector $2k$ in the same direction.

Pythagoras' Theorem

The theorem is:
 $a^2 + b^2 = c^2$

When calculating the length of side c, use $a^2 + b^2 = c^2$

Where:
 Side c is always opposite the right angle

The diagram shows a right-angled triangle with legs of length a and b, and hypotenuse of length c.

When calculating the length of a shorter side (a or b) use $c^2 - b^2 = a^2$

Trigonometry

$\sin \theta = \frac{\text{opposite}}{\text{hypotenuse}}$ $\cos \theta = \frac{\text{adjacent}}{\text{hypotenuse}}$ $\tan \theta = \frac{\text{opposite}}{\text{adjacent}}$

Where:
 opposite, adjacent, hypotenuse

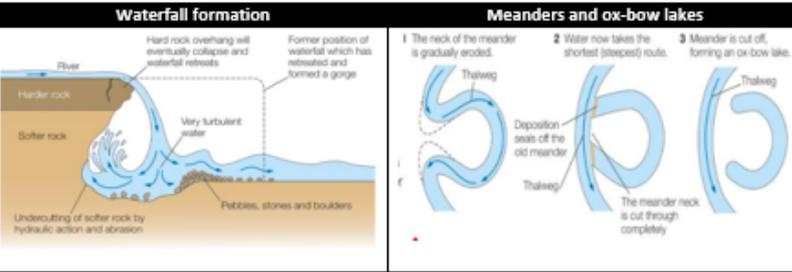
SOH-CAH-TOA!

To calculate angles, the trigonometry function needs to change sides - to do this, the inverse of the function must be used: \sin^{-1} ; \cos^{-1} ; \tan^{-1}

The diagram shows a right-angled triangle with an angle θ at the bottom right. The sides are labeled opposite, adjacent, and hypotenuse.

What is a drainage basin?
 1. A drainage basin is an area of land drained by a river and its tributaries.

How does a long profile of a river change downstream?
 1. In the mountains the velocity of the river varies.
 2. Water is shallow and turbulent as there is friction with the bed and bank slowing the rate of flow down
 3. Where the channel becomes narrow it is deeper and the flow is much faster.
 4. Further downstream, the river's channel is much deeper because of tributaries bringing additional water.
 5. Less water is in contact with the bed and banks so velocity increases, even though the gradient is less steep than in the mountains.



River processes – how the river is shaped through erosion, transportation and deposition.

Erosion	Transportation	Deposition
There are two main types of erosion: Vertical and Lateral . However, four processes can be identified. These are: 1. Hydraulic action – the force of the water hitting the river bed and banks. 2. Abrasion – when the load carried by the river repeatedly it's the bed or banks dislodging particles into the flow of water. 3. Attrition – when stones carried by the river knock against each other, gradually making stones smaller and less rounded. 4. Solution – when the river flows over limestone or chalk, the rock is slowly dissolved. This is because it is soluble in mildly acidic river water.	The material transported by a river is called its load. The four main processes of transportation are: 1. Traction – large particles rolled on the river bed. 2. Saltation – 'bouncing' of particles too heavy to suspend. 3. Suspension – small sediment held in the river. 4. Solution – dissolved load. The size and total amount of load that can be carried will depend on the river's rate of flow – its velocity .	Deposition occurs when the velocity of the water decreases. It no longer has enough energy to transport its sediment so it is deposited. 1. Larger rocks tend to be deposited in the upper course of a river. They are only transported for very short distances, mostly by traction, during periods of very high flow. 2. Finer sediment is carried further downstream, mostly held in suspension. This material will be deposited on the river bed and banks, where velocity is slowed by friction. 3. A large amount of deposition occurs at the river mouth, where the interaction with tides, along with the very gentle gradient, greatly reduces the river's velocity.

Keywords	Definition
1. Source	The starting point of a river.
2. Mouth	The area where the river flows into the sea.
3. Long profile	A line showing the gradient of a river from source to mouth.
4. Cross profile	A cross-section drawn across the river valley.
5. Weathering	The breaking up of rocks that occurs in situ (the same place) with no major movement taking place
6. Erosion	The breaking up of rocks that is the result of movement.
7. Sediment	Material moved and deposited in a different location.
8. Bedload	Larger particles moved along a river bed.
9. Meander	A large bend in the river.
10. Waterfall	A steep fall of water along the course of a river.
11. Flood plain	Area of flat land which is prone to flooding
12. Estuary	Wide part of a river where it meets the sea.
13. Velocity	Speed of flow, usually measured in metres per second.
14. Discharge	The volume of water at a given point in a river (measured in cumecs)
15. Flash floods	Rapidly rising river levels leading to a rapidly developing flood situation.

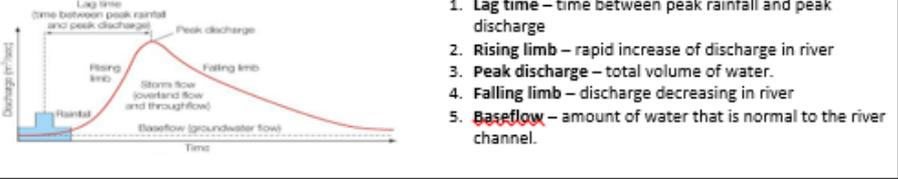
Flood risk

Physical factors	Human factors
1. Precipitation – torrential rainstorms can lead to sudden flash floods as river channels cannot contain the sheer volume of water. 2. Geology – impermeable rocks such as shales and clays encourage water to flow overland and into river channels. 3. Steep slopes – in mountain environments steep slopes encourage rapid transfer of water towards river channels.	1. Urbanisation – building on a floodplain creates impermeable surfaces. Water is transferred quickly which makes flooding more likely 2. Deforestation – much of the water that falls on trees is evaporated or stored on leaves. When trees are removed much more water reaches the river channel leading to flooding. 3. Agriculture – soil left exposed to the elements allows surface runoff. When land is ploughed the water flows along the furrows rapidly into channels.

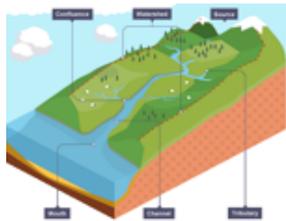
Managing floods

Hard engineering	Soft engineering
Flood prevention methods using hard engineering include: 1. Afforestation to increase interception, reduce soil erosion and use up some of the water. 2. Construction of reservoirs to regulate water flow 3. Land use zoning – ensuring new developments are constructed away from flood risk areas. 4. Controlled flooding to reduce serious floods downstream. 5. Channel straightening to speed up flow of water. 6. Creation of wetland areas for water storage. 7. Channel widening to increase capacity. 8. Embankments to enlarge the channel and reduce the likelihood of flooding 9. Concrete lined channel – semi-circular in shape to increase speed of flow. 10. Flood relief channels to bypass urban areas to reduce the threat from flooding.	Flood reduction methods using soft engineering include: 1. Wetlands and flood storage areas – areas that are deliberately allowed to flood to form flood storage areas. 2. Floodplain zoning – restricts certain land uses in locations on flood plain. Land next to river channels is used as farmland for pasturing instead of housing and industry. 3. River restoration – when the course of a river has been changed artificially, river restoration changes it back to its original course. 4. Flood preparation This includes: flood watch, flood warning and severe flood warning. 5. The Environment Agency makes maps identifying areas at risk. They encourage people to make plans which may include: 5a) Planning what to do 5b) Using flood gates 5c) Using sandbags.

Flood hydrograph



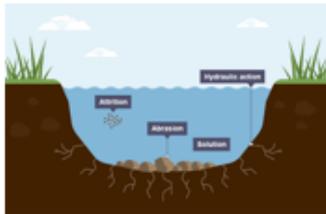
- Lag time** – time between peak rainfall and peak discharge
- Rising limb** – rapid increase of discharge in river
- Peak discharge** – total volume of water.
- Falling limb** – discharge decreasing in river
- Baseflow** – amount of water that is normal to the river channel.



A drainage basin is the area of land around the river that is drained by the river and its tributaries.

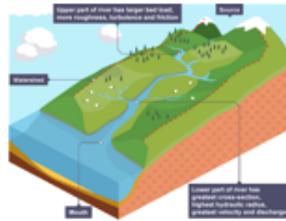
- **Watershed** - the area of high land forming the edge of a river basin
- **Source** - where a river begins
- **Mouth** - where a river meets the sea
- **Confluence** - the point at which two rivers meet
- **Tributary** - a small river or stream that joins a larger river
- **Channel** - this is where the river flows

Erosion



Erosion is the process that wears away the river bed and banks. Erosion also breaks up the rocks that are carried by the river.

- **Hydraulic action** - This is the sheer power of the water as it smashes against the river banks. Air becomes trapped in the cracks of the river bank and bed, and causes the rock to break apart.
- **Abrasion** - When pebbles grind along the river bank and bed in a sand-papery effect.
- **Attrition** - When rocks that the river is carrying knock against each other. They break apart to become smaller and more rounded.
- **Solution** - When the water dissolves certain types of rocks, e.g. limestone.

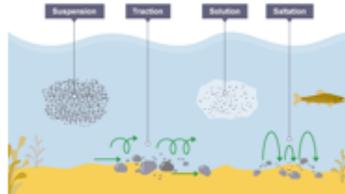


A long profile is a line representing the river from its source (where it starts) to its mouth (where it meets the sea). It shows how the river changes over its course.

Upper course - in the upper course, where the river starts, there is often an upland area. The river's load is large in the upper course, as it hasn't been broken down by erosion yet.

Lower course - in the lower course, the land is a lot flatter. The river's load is fine sediment, as erosion has broken down the rocks.

Transportation



The river picks up sediment and carries it downstream in different ways.

- **Traction** - large, heavy pebbles are rolled along the river bed. This is most common near the source of a river, as here the load is larger.
- **Saltation** - pebbles are bounced along the river bed, most commonly near the source.
- **Suspension** - lighter sediment is suspended (carried) within the water, most commonly near the mouth of the river.
- **Solution** - the transport of dissolved chemicals. This varies along the river depending on the presence of soluble rocks.

Deposition

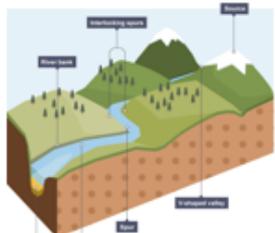
When the river loses energy, it drops any of the material it has been carrying. This is known as **deposition**.

Factors leading to deposition:

- shallow water
- at the end of the river's journey, at the river's mouth
- when the volume of the water decreases

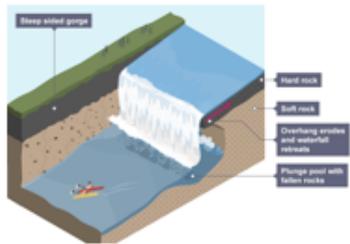
Erosional & Depositional Landforms

Erosional Landforms
The erosional features are often found in the upper course of the river.



Interlocking Spurs
In the upper course there is more vertical erosion. The river cuts down into the valley. If there are areas of hard rock which are harder to erode, the river will bend around it. This creates interlocking spurs of land which link together like the teeth of a zip.

Landforms



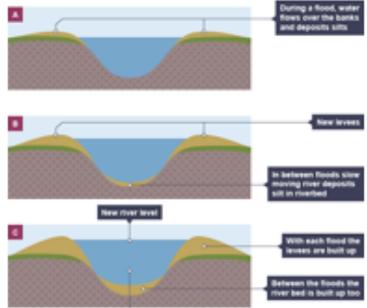
A **waterfall** is a sudden drop along the river course. It forms when there are horizontal bands of resistant rock (hard rock) positioned over exposed, less resistant rock (soft rock).

- The soft rock is eroded quicker than the hard rock and this creates a step.
- As erosion continues, the hard rock is undercut forming an overhang. Abrasion and hydraulic action erode to create a plunge pool.
- Over time this gets bigger, increasing the size of the overhang until the hard rock is no longer supported and it collapses.
- This process continues and the waterfall retreats upstream.
- A steep-sided valley is left where the waterfall once was. This is called a gorge.

Depositional Landforms



A **floodplain** is an area of land which is covered in water when a river bursts its banks. Floodplains form due to both erosion and deposition. Erosion removes any interlocking spurs, creating a wide, flat area on either side of the river. During a flood, material being carried by the river is deposited (as the river loses its speed and energy to transport material). Over time, the height of the floodplain increases as material is deposited on either side of the river. Floodplains are often agricultural land, as the area is very fertile because it's made up of alluvium (deposited silt from a river flood). The floodplain is often a wide, flat area caused by meanders shifting along the valley.



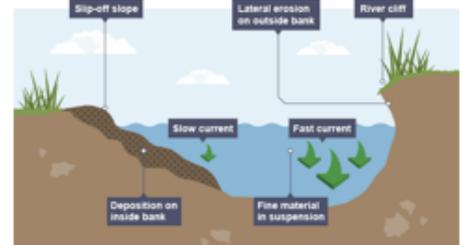
Levees occur in the lower course of a river when there is an increase in the volume of water flowing downstream and flooding occurs.

- Sediment that has been eroded further upstream is transported downstream.
- When the river floods, the sediment spreads out across the floodplain.
- When a flood occurs, the river loses energy. The largest material is deposited first on the sides of the river banks and smaller material further away.
- After many floods, the sediment builds up to increase the height of the river banks, meaning that the channel can carry more water (a greater discharge) and flooding is less likely to occur in the future.

As the river makes its way to the middle course, it gains more water and therefore more energy. Lateral erosion starts to widen the river. When the river flows over flatter land they develop large bends called **meanders**.

- As a river goes around a bend, most of the water is pushed towards the outside. This causes increased speed and therefore increased erosion (through hydraulic action and abrasion).
- The lateral erosion on the outside bend causes undercutting of the bank to form a river cliff.
- Water on the inner bend is slower, causing the water to slow down and deposit the eroded material, creating a gentle slope of sand and shingle.
- The build-up of deposited sediment is known as a slip-off slope (or sometimes river beach).

Oxbow lakes
Due to erosion on the outside of a bend and deposition on the inside, the shape of a meander will change over a period of time. Erosion narrows the neck of the land within the meander and as the process continues, the meanders move closer together. When there is a very high discharge (usually during a flood), the river cuts across the neck, taking a new, straighter and shorter route. Deposition will occur to cut off the original meander, leaving a horseshoe-shaped oxbow lake.

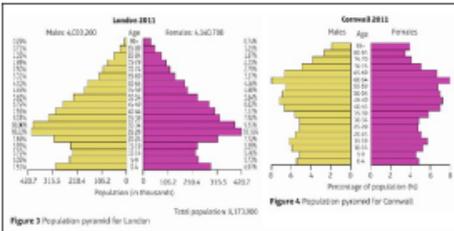


Legend: Yellow arrow = Areas of deposition, Red arrow = Areas of erosion

Why are population, economic activity and settlements key elements of the human landscape?

How do the urban core and rural periphery compare?

	Urban core E.g.	Rural periphery E.g.
Population density	High, over 200 people per km ²	Low, 1-100 people per km ²
Age structure	Young adults, single people	Older people, some single
Economic Activities	Retailing, large shops, offices, HQ's, many jobs	Farming, fishing, forestry, mining, working from home, tourism, renewable energies
Settlement	Conurbation, large town, high and low rise buildings. expensive	Market towns, villages, farms, low rise generally cheaper



North-East England where a decline in coal, steel and ship building left unemployment and poverty.
What is regional development and transport infrastructure?
 The EU's Regional Development Fund supports UK regions by economic regeneration for example projects connecting businesses to fast broadband enabling people to live in Cornwall and work from home. Investment in transport for example rail routes linking Manchester with Sheffield.

Unit 2: Topic 5a The UK's Evolving Human Landscape

How does migration shape the UK economy and society?

Retirement migration

Older people moving within in a country when they retire. The SW attracts many retirement migrants because of beautiful scenery, slower pace of life, lower crime rates and a sense of community.

Rural to urban migration

Advantages	Disadvantages
Creates demand for services, shops and social activities creating jobs locally	Healthcare pressure, house price rise, young people move out

In rural areas, apart from a few jobs in farming, fishing or mining/quarrying jobs opportunities are scarce so young people leave to find better jobs in the city leaving a concentration of older people.

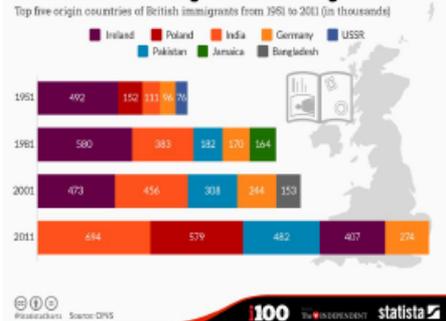
International migration

The UK government encouraged immigration from former British colonies in the Caribbean, India and Bangladesh during the 1950's in response to shortage of workers reaching 1million by 1971. During the 1970's there was no longer a shortage of workers and immigration was controlled by the government. Around 2004 and the enlargement of the EU saw young immigrants, 80% aged 18-34, from Eastern Europe especially Poland to cities such as London and Birmingham for jobs in industries or fruit farming. In 2014 560,000 immigrants arrived in the UK and during the period 2012-15 people fled from fighting in Syria and Afghanistan arrived in cities like Birmingham.

What are the impacts of international migration?

Advantages	Disadvantages
Source of cheap unskilled (construction) and skilled labour (doctors/nurses). Benefits of a youthful population. Introduced to new cultures and cuisines	Puts pressure on services e.g. housing, healthcare, education, social unrest

Where Britain's immigrants historically come from



How is the UK economy changing?

There have been many changes in the UK economy in the last 50years in the primary, secondary, tertiary and quaternary sectors. These changes are best seen in two contrasting regions on the country, the NE and SE of England.

How has the North East changed?



The economy of the NE used to be dominated by heavy industry e.g. coal mining/ shipbuilding. In the last 50years this has declined due to foreign competition, high land and labour costs and end of coal deposits. In 1971, manufacturing was 40% of employment but in 2011, this was only 10%. Between 2007 – 2013, unemployment rose quickly to 8%. The contribution of the area to national GDP is only 2%. Between 2011-12, child poverty rates in Middlesbrough and Newcastle rose 39% on average. In rural areas, economy still relies heavily on agriculture. Mining, fishing and quarrying are very small scale. Manufacturing is based in urban areas but employs fewer people due to increase in machines and new technology. Manufacturing, especially chemicals, are still important but employ fewer people with improved technology and Nissan employ 4000. Tertiary activities have increased (257,000) which has reduced unemployment slightly, 22% of all employment.

How has the South East changed?

Primary industries are mainly centred on farming in rural areas with some of the most prosperous farms in Britain. Manufacturing industry is growing rapidly, mainly in urban areas and along the M4 corridor, a centre for light industries in electronics and engineering. The region is very important for tertiary and quaternary industries in financial and business service firms. Unemployment is low, 6% and prosperity is high compared to the NE.



Why is the South East so attractive to industries?

Transport—M25 motorway network and railways. 72% of UK freight was carried on roads in the south-east. It has 4 major airports e.g. Heathrow and ports e.g. Southampton. Markets and labour— a market of 19million people, skilled labour from Oxbridge and London Universities. Political— Close to national government. Previous governments encouraged movement from London to the South East. Geographical—transport routes radiate from London and its close to the channel tunnel giving access to Europe.

	% of UK pop	Median age	Unemployment %	Manufacturing employment 2011
NE	4	41.5	8.2	10.2
SE	14	40.8	6.0	7.2

What are the effects of Globalisation, trade and investment?

Globalisation

'The growing importance of international operations for all economic sectors and for the culture and way of life of people around the world'.

Manufacturing, tertiary and quaternary industries are being increasingly affected by decisions and events in other parts of the world. The three key elements of the global economy are: **Networks** – linking countries together e.g. internet/ trading blocs

Flows – goods and services that move through networks e.g. raw materials, manufactured goods or migrant workers **Global players** – organisations that have a big impact on the working of the global economy e.g. TNCs, World Bank, IMF

Privatisation

Privatisation of many UK industries e.g. steel, railways, computers, airports, docks, petroleum, electricity, water, gas and postal services.

The Effects of privatisation include:

- Increased Foreign Direct Investment (FDI) from businesses wanting to invest in the UK.
- Increased awareness of markets and increased competition
- Increased foreign ownership of UK firms
- Dividends and profits from some UK based firms going abroad
- Loss of jobs in the UK due to increased efficiency

Free trade

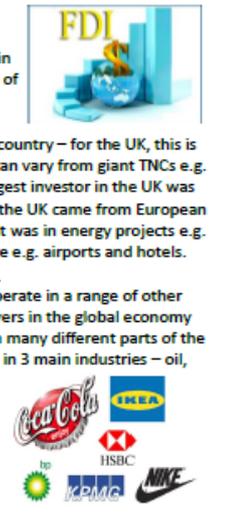
Firms want to and need to take part in international trade to increase their profits. Global links can significantly increase the market for a firm. Not all trade is free trade which is trade without tariffs or import duties. Some countries have high import duties to protect their industries. The UK, as part of the EU, has pursued a policy of promoting free trade with the EU to allow the free movement of goods and services which should make them cheaper.

Foreign Direct Investment (FDI)

FDI is composed of the flows of money (capital) from businesses in one country to another. The flow of finance allows the companies to become involved in the business life and markets of the receiving country – for the UK, this is the EU markets. The companies can vary from giant TNCs e.g. GlaxoSmithKline. In 2014, the largest investor in the UK was the USA. 50% of investment into the UK came from European countries. Most of the investment was in energy projects e.g. wind and nuclear or infrastructure e.g. airports and hotels.

Transnational Companies (TNCs)

TNCs are large companies that operate in a range of other countries. They are powerful players in the global economy and link up national economies in many different parts of the world. The top TNCs are involved in 3 main industries – oil, electronics and motor vehicles. Some TNCs are specialised e.g. Nestle (food & drinks) or Rio Tinto (mining) where others e.g. Mitsubishi have a range of interests e.g. vehicles, air transport and food processing.



The Weimar Republic	
1	This was the name given to Germany after the Kaiser had abdicated in November 1918. This was a time of despair and hope for Germany. At first, the country faced lots of chaos but under Gustav Stresemann, there was some stability.
Key events	
2	1918 World War One ended. The Kaiser abdicated and Germany became a country without a monarch (a Republic).
3	1919 January Spartacist Uprising
4	1919 June Signing of the Treaty of Versailles
5	1919 August Weimar Constitution finalised
6	1920 Kapp Putsch
7	1923 French occupation of the Ruhr and hyperinflation
8	1924 Dawes Plan
9	1925 Locarno Pact
10	1926 Germany joins League of Nations
11	1928 Kellogg Briand Pact
12	1929 Young Plan
Key Concepts	
13	The Weimar Republic faced much opposition, It was disliked by the left wing who wanted Germany to be like Communist Russia and it was disliked by the right wing who wanted the monarchy back.
14	The Treaty of Versailles caused many problems for Germany. The German people disliked the politicians for signing it and it caused political problems and economic problems.
15	Gustav Stresemann helped to bring about recovery in Germany after 1924. He solved economic problems by making friends with other countries. However, historians have very different views about the extent of this recovery.
16	The Golden Age was the period from 1924-29 and it saw significant changes in culture, the standard of living and the position of women.

Key Words		
17	Abdication	When a monarch leaves the throne
18	Republic	A country without a King or a Queen
19	Ebert	The first President of the Republic
20	Stresemann	The Chancellor of Germany from the Summer of 1923
21	Article 48	The President could use this to ignore the Reichstag and rule as he saw fit
22	Kaiser	King
23	Armistice	An agreement to end war
24	Weimar	The new government could not meet in Berlin as it was so dangerous, so they met here instead
25	Constitution	This is an agreement about how the country would be ruled
26	Reichstag	German parliament
27	Gewaltfrieden	An enforced peace
28	Freikorps	Ex military soldiers who wanted to overthrow the Republic
29	Rentemark	The currency of Germany after November 1923
30	Hyperinflation	When money loses its value
31	Dawes Plan	An agreement where the USA would lend Germany money
32	Young Plan	This lowered the reparations payment and gave Germany longer to pay
33	Treaty of Versailles	This decided how Germany was going to be treated after WW1
34	Locarno Pact	An agreement on borders signed by Britain, France, Italy and Belgium
35	Kellogg Briand Pact	65 counties including Germany agreed to resolve conflict peacefully
36	Coalition	A government of two or more political parties

Hitler's Rise to Power	
1	Hitler sets up the Nazi Party in 1920 and becomes Chancellor in January 1933. This happens for a variety of reasons – Hitler's strengths, inbuilt problems of the Weimar Republic, and the weaknesses of others.
Key events	
2	1919 Hitler joins the German Worker's Party
3	1920 Hitler sets up the Nazi Party
4	1921 Hitler introduces the SA
5	1923 The Munich Putsch
6	1925 Mein Kampf published
7	1926 Bamberg Conference
8	1928 Nazis win 12 seats in Reichstag
9	1929 Death of Stresemann and Wall Street Crash
10	1930 Nazis win 107 seats in Reichstag
11	1932 July Nazis win 230 seats in Reichstag
12	1932 November Nazis win 196 seats in Reichstag
13	1933 January Hitler becomes Chancellor
Key Concepts	
14	The Munich Putsch is a significant event. Although a failure, Hitler gained publicity, he wrote Mein Kampf and he realised that if he was to win power, he needed to do this by votes and not by force.
15	Stable Stresemann caused problems for the popularity of the Nazi Party. When times were good, voters were not attracted to the Nazi policies.
16	The Wall Street Crash was a major turning point in the fortunes of the Nazi Party. The Nazi message did not change but people were now prepared to hear it.
17	The Backstairs Intrigue - At a time when Nazi popularity at the polls was decreasing, Hitler was handed power by political elites who feared a Communist take over and Civil War.

Key Words		
18	NSDAP	The Nazis
19	Iron Cross Award	Given for bravery in war
20	Volk	The notion of pure German people
21	25 Point Programme	The political manifesto of the Nazi Party
22	Volkischer Beobachter	People's Observer, a Nazi newspaper
23	Fuhrerprinzip	Belief that one person should run a Party
24	Swastika	Emblem of the Nazi Party
25	SA or Sturmabteilung	Private army of the Nazi Party headed by Himmler
26	Aryan	Pure German people
27	Anti-Semitism	Hatred of the Jewish people
28	Mein Kampf	Hitler's autobiography
29	Putsch	An attempt to get power illegally
30	Blood Martyrs	16 Nazis who died at the Munich Putsch
31	Gaue	Local party branches
32	SS or Schutzstaffel	Hitler's bodyguards
33	KPD	German Communist Party
34	Propaganda	Goebbels attempted to make people think in a certain way
35	Hindenburg	The President of the Republic from 1925 to 1934
36	Roter Frontkampferbund	The Communist's own private army

Nazi Control and Dictatorship	
1	This was a time when Hitler formed a legal dictatorship and put in place methods of propaganda and censorship to persuade and encourage all Germany people to support Nazi ideals.
Key events	
2	1933 January Hitler becomes Chancellor
3	1933 February Reichstag Fire
4	1933 March Nazis win 288 seats
5	1933 March Enabling Act passed
6	1933 July Nazis become the only legal party in Germany
7	1934 June Night of the Long Knives
8	1934 August President Hindenburg dies
9	1934 August Hitler combines the post of Chancellor and President and becomes Fuhrer
10	1934 August German army swears allegiance to Hitler
11	1938 Over the course of the year, Hitler removes 16 army generals from their positions
Key Concepts	
12	Removal – From 1933 to 1934, Hitler removed all opposition and established himself as Fuhrer.
13	Control – There was an attempt to control and influence attitudes. This was done by propaganda and terror.
14	Opposition – The youth and the churches opposed the regime.

Key Words		
15	Marinus van der Lubbe	The Reichstag Fire was blamed on this Communist
16	Enabling Act	Gave the Nazis full power for the next 4 years
17	Gleichschaltung	Hitler’s attempt to bring German society into line with Nazi philosophy
18	German Labour Front (DAF)	Set up to replace Trade Unions
19	Dachau	First concentration camp
20	Centralisation	Germany had been divided into districts called Lander. Now Germany was run from Berlin alone
21	Purge	To get rid of opposition
22	Gestapo	Secret police headed by Goering.
23	Night of the Long Knives	Removal on internal and external opposition
24	Sicherheitsdienst (SD)	The intelligence body of the Nazi Party
25	Concordat	In July 1933 the Pope agreed to stay out of political matters if the Nazis did not interfere with Catholic affairs
26	Eidelweiss Pirates and Swing Youth	Groups who opposed the Hitler Youth
27	Confessional Church	Followed traditional German Protestantism and refused to allow the Nazification of religion. Led by Pastor Martin Niemoller
28	Mit Brennender Sorge (With Burning Concern)	The Pope wrote to priests in Germany about his concerns over the Nazi attempts to control religion

YEAR 11 — MICHAELMAS TERM- HISTORY — LIFE IN NAZI GERMANY

Life in Nazi Germany	
1	The lives of German citizens were changed after Hitler's appointment as Chancellor. For some, life was better under the Nazis but for others, it was much worse.
Key events	
2	1933 Boycott of Jewish shops and businesses. Law for the Encouragement of Marriage. Sterilisation Law passed.
3	1935 The Nuremberg Laws were passed.
4	1935 Conscription introduced.
5	1936 Membership of the Hitler Youth made compulsory.
6	1938 Jewish children were not allowed to attend German schools. Lebensborn programme introduced. Kristallnacht.
7	1939 The euthanasia campaign began. Designated Jewish ghettos established.
Key Concepts	
9	Anti-Semitism – Persecution of the Jews grew continuously after 1933.
10	Young – The Nazis placed much emphasis on controlling the young as only then could they secure a 'thousand year Reich'. Youth organisations and education indoctrinated the German youth.
11	Women – The Nazis had traditional family values but even these were tested by the needs of war and the desire to ensure a growing Aryan population.
12	Living Standards – The Nazis did reduce unemployment but they did this by banning Jews and women from the workplace and by putting Germany on a war footing. Workers had limited rights.

Key Words		
13	Kinder, Kuche, Kirche	Children, Kitchen, Church. This summed up the Nazi ideal of womanhood
14	The Motherhood Cross Award	Given to women for large families
15	Lebensborn	Where unmarried women were impregnated by SS men.
16	Napola	Schools intended to train the future leaders of Germany
17	Nazi Teachers League	All teachers had to swear an oath of loyalty to the Nazis
18	Reich Labour Service	A scheme to provide young men with manual labour jobs
19	Invisible unemployment	The Nazi unemployment figures did not include women, Jews, opponent and unmarried men under 25
20	Autobahn	Motorway
21	Rearmament	Building up the armed forces readiness for war
22	Volksgemeinschaft	The Nazi community
23	Strength Through Joy	An attempt to improve the leisure time of German workers
24	Beauty of Labour	Tried to improve working conditions of German workers.
25	Volkswagon	People's car
26	Eintopf	A one pot dish
27	Herrenvolk	The master race or the Aryans
28	Nuremberg Laws	Jews were stripped of their citizenship rights and marriage between Jews and no Jews was forbidden
29	Kristallnacht (Night of the Broken Glass)	A Nazi sponsored event against the Jewish community

BOX 1: Key words.

1. **Afterlife** – Life after death; the belief that existence continues after physical death.
2. **Euthanasia** – Greek for ‘a good death’. Sometimes known as ‘mercy killing’. Killing or permitting the death of a seriously ill person.
3. **Evolution** – The process by which different living creatures have developed from earlier less complex forms during the history of the earth.
4. **Abortion** – When a pregnancy is ended so that it does not result in the birth of a child.
5. **Quality of life** – The extent to which life is meaningful and pleasurable.
6. **Sanctity of life** – The belief that life is precious, or sacred. For many religious believers, only human life holds this special status.
7. **Bioethics** – the process of deciding what is good and acceptable in medicine.
8. **Situation ethics** – judging the rightness or wrongness of an act on a case-by-case basis. Basing moral decision-making on the most loving thing.
9. **Hospice** – A place where those with terminal illness go to die with dignity. Palliative care – focuses on relieving pain and suffering.
10. **Purgatory** – A Catholic place of waiting to have sins forgiven before entering heaven.

BOX 2: Life after Death

Christians believe in resurrection and everlasting life. Jesus modelled what would happen to our mortal bodies by rising from the dead. On **Judgement Day** God will decide who enters paradise and who doesn't. **Dualists** believe the body will decay upon death and the soul, which is immortal, will be reunited with God in heaven. **Evangelicals** argue we will have a bodily resurrection like Jesus. St Paul says it will be a spiritual body.

The Parable of the Sheep and Goats reveals that Jesus will separate those who followed Him (sheep) from those who rejected Him (goats).

Humanists say we can reflect on our own lives. There is nothing after death. We should live morally for ourselves and others, not God.

BOX 3: Heaven and Hell

For **Christians**, heaven is to be in God's presence. **Evangelicals** argue it is a real place. **Liberal Christians** say heaven is symbolic. Heaven is believed to be a reminder there are consequences to actions and thoughts.

For **Christians** hell is to be in constant torment cut off from all things good and loving. **Evangelicals** argue it is a real place. **Liberal Christians** say hell is symbolic. A reminder there are consequences to actions and thoughts.

The **Roman Catholic Church** teaches that after death there is a state of **Purgatory**. This is a place where some people who have sinned are purified in a 'cleansing fire', after which they are accepted into Heaven.

Humanists say there is no heaven or hell, the dead live on through the memories of the living.

BOX 4: The scientific origins of the world

Charles Darwin in the 1800s explained how living creatures have evolved through a process of gradual change over millions of years.

Natural selection was observed on the Galapagos Islands where finches (birds) had different shaped beaks on different islands to suit the environment and eat food. These characteristics happened by chance but helped them survive and pass on these traits to their offspring. **'The survival of the fittest.'** Over time, this process led to new species of animals. It is how humans evolved.

Theory of the Expanding Universe Lemaitre argues that the universe is expanding outwards and possibly into infinity. Lemaitre also argues that time and space began 15 billion years ago from a singularity which was infinitely hot and dense and expanded causing sub-atomic particles and atoms to appear. He referred to this argument as hypothesis of the 'primeval atom' or the 'cosmic Egg'. Stars and planets were formed, including Earth.

BOX 5: The sanctity of life

Most people believe to have **life is special** but religious people believe this because it is God's gift. This belief has an impact on issues of **bioethics** such as **abortion** and **euthanasia**.

Christians believe God is involved in His creation and has made everyone unique. He made humankind in His own image which means all life is sacred. Only G-d should take life away. Quakers oppose the death penalty and war. God chooses when life begins. Catholics disagree with IVF and contraception.

Humanists argue there is no soul or afterlife as this is the only life we get. Therefore life is special and its purpose is to make us and others happy.

The quality of life

Some argue this is more important than the sanctity of life. If we are free from pain and can live in freedom and dignity then we have a good quality of life. If pain outweighs pleasure, then we are have a poor quality of life. Measuring our quality of life is difficult as we all experience different tolerance to pain and pleasure. Government look at living conditions, health, education, the economy and human rights to determine the quality of life. This belief impacts medical ethics where some argue if the quality of life has deteriorated then someone should be allowed to die (**euthanasia**).

BOX 6: Sources of Authority

"I am the resurrection and the life; he who believes in me will live, even if he dies". -John 11:25

"Before I formed you in the womb I knew you" - Jeremiah 1: 5

*"Don't you know that your body is the temple of the Holy Spirit"-
1 Corinthians 6:19*

"You shall not kill" 10 Commandments - Exodus 20:13

BOX 7: Euthanasia

The four types of euthanasia:

Voluntary (asks to die)

Active (tries to end their life)

Passive (treatment is removed)

Involuntary (forced death)

Usually the poor **quality of life** and suffer from incurable degenerative diseases is the reason someone may want to end their life. Euthanasia is **illegal in the UK** but legal in countries like Switzerland where the *Dignitas* clinic exists.

Christians mostly disagree stating the **sanctity of life** argument or see it as murder/ going against the 10 Commandments and also believe there is purpose in suffering. Many Christians see **Hospices** as an alternative. **Liberal Christians** might agree to life support being turned off or withholding treatment as it is the most loving thing (**situation ethics**).

Humanists support legalising **voluntary euthanasia** and not just for the terminally ill. People should be able to die with dignity and when faced with a poor **quality of life**.

BOX 8: Abortion

Life begins at different points for people. Some argue it is at **conception** (when the sperm meets the egg). Other when the baby can be felt in the womb. Others it's when the nervous system and organs develop. At **24 weeks** the baby has viability and can survive if born. This is the **UK legal limit** for an abortion where 2 doctors must agree. For some it is at birth. **Pro-life** people believe abortion is always wrong as the foetus has a right to life. UK law however does not recognize an unborn child as a person. **Pro-choice** people believe a women should have a right to choose what happens to her body.

Catholics do not allow abortions due to the sanctity of life. Life begins at conception. It is murder and against the 10 Commandments.

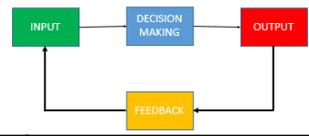
Church of England opposes abortion for social reasons but not if the mother's life is in danger, or it affects the quality of her life (e.g rape).

Humanists look for the least amount of harm to be brought to all concerned. There is not one view, but many are liberal and pro-choice.

1. Skills	are learned and, when mastered, are consistently done in a way that looks good and shows
2. Abilities	are inherited from parents. They are known as traits which remain fairly stable throughout life. Abilities can help performers learn new skills quicker.
Classification of Skills	
3. Basic to complex continuum	Basic – a skill that a beginner would learn with little difficulty and decision making needed e.g. a tuck jump Complex – a skill that a more experienced performer will learn, that involves more difficulty and decision making e.g. a forward somersault
4. Open to closed continuum	Open - A skill which is performed in a certain way to deal with a changing or unstable environment, e.g. to outwit an opponent. Closed - A skill which is not affected by the environment or performers within it. It tends to be done the same way each time.
5. Self paced to externally paced continuum	Self - The skill is started when the performer decides to start it. The speed, rate and pace of the skill is controlled by the performer. Externally -The skill is started because of an external factor. The speed, rate and pace of the skill is controlled by external factors, e.g. opponents.
6. Gross to fine continuum	Gross - involves big movements of the body and large muscle groups. Fine -Involves small, precise movements that use small muscle groups.
Guidance	
7. Visual	This is where a learner gets to 'see' the skill. E.g. A demonstration of technique or skill by another person; Footage of a performance via dvd/youtube; Still images like posters.
9. Verbal	Where a coach talks to a performer letting them know the correct technique or what they are doing right/wrong E.g. Talking to a performer about technique; Highlighting particular parts of a skill.
10. Manual/ Mechanical	Manual and mechanical guidance are very similar and can be grouped together. The physical support allows the performer to produce the movements required without being able to actually doing it themselves. They involve physically moving/guiding a performer (manual)Using other aids to support the safety of a performer e.g. in a harness (mechanical)
Feedback	
11. Positive	Used to inform the athlete what was right about their movements. This is important so that athletes know for future. It is very important for motivating players.
12. Negative	Is used to inform athletes what they have done wrong in a performance. In order for it to be beneficial information needs to be given on what actions needs to be done to improve.
13. Intrinsic	Information received from inside the performer (e.g. how something feels). As an athlete develops that are much more able to use this type of feedback as they are able to simply 'feel' whether the movement was right or not.
14. Extrinsic	information received about performance which comes from outside the performer (e.g. coach, spectators, team mates). It usually comes in the form of verbal feedback, but could be score cards etc.

15. Knowledge of Results	Focuses on how successful you have been in achieving what you set out to do (a goal). It is factual, given by teacher/coach or seen by yourself. E.g. when you scored or not in a free throw in Basketball; whether your shot went past the keeper in Football; whether you won the 100m
16. Knowledge of Performance	Provides more detail about how well you did regardless of the overall result. It may relate to technique used, or a specific point in the movement. It deals with the quality of the performance not the result.

Information Processing



17. INPUT	Performer takes in the information from the environment/display . What they can see, hear, feel etc.
18. DECISION MAKING	This is where the performer selects the appropriate response from their memory (perhaps they have been in this situation before).
19. OUTPUT	The decision has been chosen, brain sends message to the appropriate muscles to carryout the response
20. FEEDBACK	Information is received via themselves (intrinsic) and/or from others (extrinsic) regarding the success (or not!!) of the action The feedback you receive may impact on how you perform the skill in the future.

Arousal and Stress Management	
1. Arousal	Arousal is physical (physiological) and mental (psychological) state of alertness/excitement varying from deep sleep to intense excitement.
2. Inverted U theory	Yerkes and Dobson (1908) developed a theory called inverted U theory which visually shows how a performer can be under or over aroused, or at the correct (optimal) level. As arousal <u>increases</u> so does performance, up to the <u>optimal/perfect</u> level. Then if arousal increases further, performance will <u>decrease</u> .
3. Stress Management Techniques	Deep Breathing Physical technique which involves performer using exaggerated breaths in and out. This helps a performer relax and focus on their task in hand. Mental rehearsal/visualisation Mental technique where the performer pictures themselves performing the skill perfectly before attempting it, or visualising themselves in a calm and relaxing environment. Positive self talk Mental technique where the performer talks to themselves in their head. Often saying positive and reassuring things, 'you can do this', to relax the performer and give them confidence.
Aggression	
4. Direct Aggression	where there is physical contact between performers. They deliberately inflict harm upon the opponent. E.g. a foul in football from behind, or an illegal high tackle in rugby or a boxer punching opponent below the belt
5. Indirect Aggression	does not involve physical contact. The aggressive act is taken out on an object to gain an advantage over an opponent. They act WITHIN the rules of the game. E.g. smashing a badminton shuttle very hard, Serving a fast forehand return in tennis.
Personality	
6. Introvert	<ul style="list-style-type: none"> ➤ These people <u>do not</u> need a high level of arousal – they become over aroused when over stimulated. ➤ Tend to be <u>shy, quiet and thoughtful</u> individuals. ➤ Tend to play <u>individual sports</u> and are <u>self motivated</u>. ➤ Tend to play sports where: ➤ <u>Concentration/precision</u> (fine skills) is required. ➤ <u>Low arousal is required</u>
7. Extrovert	<ul style="list-style-type: none"> ➤ These people need a <u>high</u> level of arousal – they lack concentration and often seek exciting situations. ➤ Tend to enjoy interactions with others, very sociable, enthusiastic, talkative and prone to boredom when on their own. ➤ Tend to play <u>team sports</u> ➤ Tend to play sports where: ➤ <u>Gross skills</u> and <u>a fast pace</u> is required. ➤ Often leaders in a team
Motivation – the drive to succeed	
8. Intrinsic Motivation	The drive that comes from within the performer. Feeling of pride; self-satisfaction; general achievement. They are driven to achieve something because of the way it makes them feel.
9. Extrinsic Motivation	the drive experienced by a performer when striving to achieve a reward . Trying to win a reward. Reward is given by an external source or person. Tangible – certificates, trophies, medals, money. Intangible – praise, positive feedback, applause from the crowd.
Teacher's Tip – you must be able to relate all of the above to a sporting example. E.g. what personality type is suited to what sport. Which type of motivation is best to succeed in a sport. Be able to discuss the inverted U theory of arousal and how arousal in sport can affect performance and what stress management techniques are most appropriate for what sport.	

Outdoor Activities	A leisure, recreation or sport activity undertaken in a natural , rural space that can be done as an individual or part of a group.
Types of Outdoor Activities	
Water Sports	<p>Canoeing – paddling a canoe kneeling down with a single-bladed paddle can be done in the sea, on rivers, canals or lakes.</p> <p>Kayaking - sitting in a kayak uses a double bladed paddle, can be done in the sea, on rivers, canals or lakes.</p> <p>Sailing – wing acting on sails to move the boat on the surface of the water. Boats range in size, can be done in a dinghies for one person, or yachts with up to groups of 20.</p> <p>Windsurfing – uses a board with a sail attached to it, usually learned on flat lakes – variations include: kitesurfing, wakeboarding and kiteboarding.</p>
Trekking	<p>Trekking - is a long journey undertaken on foot in areas where there are usually no forms of transport. Walking usually for a couple of days on footpaths that are unchartered, in challenging areas such as on hills and mountains.</p> <p>Hill Walking – involves walking in areas that are mountainous or hilly.</p> <p>Orienteering – activity that requires skill of using a map and compass to navigate from a point to a point in unfamiliar terrain, whilst moving at speed. Participants are given specially prepared orienteering map which they use to find control points as quickly as possible. This involves decide the best route between control points and the best pace to use on different terrains.</p> <p>Mountaineering – is climbing and trekking in the mountains. Hiking in the mountains can also be a simple form of mountaineering if it includes some scrambling over rocks or simple rock climbing.</p>
Climbing	Ascent of steep incline using hands and feet usually with the special aid of specialist equipment such as ropes, harness to protect the climber from falling. Normally involves two or more people working together in a process called belaying. Examples include – free climbing, ice climbing, rock climbing, indoor climbing, and bouldering.
Caving	Caving – often referred to as potholing is an exploration of caving systems. Caves come in different shapes and sizes, but they all lack light. It often involves some rock climbing, squeezing into small spaces and crawling.
Cycling	<p>Mountain biking – riding bicycles off road, often over rough terrains. These style bikes have thicker tyres for extra grip and suspension to handle the bumps.</p> <p>Trail Biking – using a mountain bike on short steep and highly technical and specially constructed trails.</p>
Snow Sports	<p>Skiing – a participant uses skis to glide about on the snow – two main types alpine (downhill skiing) and Nordic (cross country)</p> <p>Snowboarding – riding down a snowy slope with a board that is attached to the rider’s shoes.</p> <p>Snowshoeing – form of hiking in snow with specialized shoes.</p>
Gliding	<p>Gliding – air based activity where pilots fly unpowered aircraft using natural currents of rising air to remain airborne. Gliders are launched by powered aircraft or winched from airfields.</p> <p>Hang Gliding – pilot flies a lighter than air craft called a hang glider. The pilot is attached to a harness and controls the craft by shifting their body weight.</p> <p>Paragliding – flying a canopy adapted from a parachute – most paragliders launch themselves off mountain tops and use the air currents to glide along.</p>

Provision	
Provision	Refers to how easy it is for people to participate and where each activity takes place. Provision is affected by several factors, including: media; location and finance.
Outdoor Activity Providers	
National Sport Centres	There are three national sport centres as part of Sport England’s policy. Plas y Brenin is an example of one of these in Wales offering a range of outdoor activities such as mountaineering, mountain biking and paddling.
Voluntary Organisations	E.g. the Scouts – voluntary organization that offers young people opportunities to enjoy fun and adventure in the outdoors. Duke of Edinburgh – a school led initiative where you take part in outdoor challenges such as orienteering and trekking in order to achieve awards – bronze, silver and gold.
Value	
Value	The general benefits of participating in outdoor activities may be summarized under four headings – physical, social, emotional and intellectual.
Examples include:	
Increased confidence	
Enjoyment and Challenge	
Improved health and fitness	
Greater environmental awareness	
Increased motivation	
Opportunity to socialize with others	
Team building skills	
Decision making skills	
Learning how to plan and organise	
Improved communication skills with others.	

A. Key Terms

Keyword	Description
7. Silhouette	SILHOUETTE: the dark shape and outline of someone or something visible in restricted
2. Sky-Line	The thickness of a mark or brushstroke
3. Landscape	to BLOCK IN: to fill in an empty area in an image with a certain colour before adding fine details such as shadows and highlights.
4. Texture	how objects or figures are arranged in the frame of an image
5. Contemporary	Living or occurring at the same time.
6. Negative Space	When drawing shapes, you must consider the size and position as well as the shape of the area around it. The shapes created in the spaces between shapes are referred to as negative space .
7. Geometric	characterized by or decorated with regular lines and shapes. "a geometric pattern"

B. Command Words

Keyword	Description
8. Demonstrate	To show, exhibit, prove or express such things as subject specific knowledge, understanding and skills.
9. Evidence	EVIDENCE: To show, prove, support and make clear or verify something.
10. Organise	ORGANISE: To collect, collate, arrange and combine elements of your work into a clear and logical submission.
11. Research	RESEARCH: To study in detail, discover and find information about.

C. Formal Elements

LINE	the path left by a moving point, e.g. a pencil or a brush dipped in paint. It can take many forms. e.g. horizontal, diagonal or curved.
-tone	means the lightness or darkness of something. This could be a <u>shade</u> or how <u>dark</u> or <u>light</u> a <u>colour</u> appears
TEXTURE	the surface quality of something, the way something feels or looks like it feels. There are two types : <u>Actual</u> and <u>Visual</u>
SHAPE	an area enclosed by a <u>line</u> . It could be just an outline or it could be <u>shaded</u> in.
PATTERN	a design that is created by repeating <u>lines</u> , <u>shapes</u> , <u>tones</u> or <u>colours</u> . can be <u>manmade</u> , like a <u>design</u> on fabric, or <u>natural</u> , such as the markings on animal fur.
COLOUR	There are 2 types including <u>Primary</u> and <u>Secondary</u> . By mixing any two <u>Primary</u> together we get a <u>Secondary</u>

C. Art Criticism

12. Art Criticism is when you analyse and present your own opinions of an artists work. Memorise the 4 steps to help you annotate your book.

4 steps of art criticism

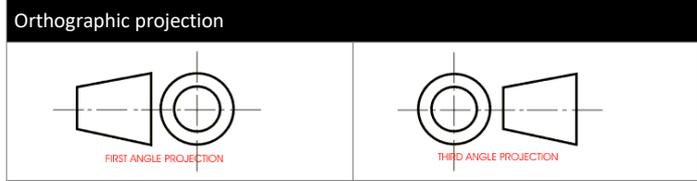
13. **describe:** Tell what you see (the visual facts)

14. **Analyse:** Mentally separate the parts or elements, thinking in terms of textures, shapes/forms, light/dark or bright/dull colours, types of lines, and sensory qualities. In this step consider the most significant art principles that were used in the artwork. Describe how the artist used them to organize the elements.

15. **interpret:** seeks to explain the meaning of the work based on what you have learned so far about the artwork, what do you think the artist was trying to say?

16. **judgment.** personal evaluation based on the understandings of the work(s)

Materials	
Ceramic	Plastic
 <p>Glass— A hard, brittle substance, typically transparent or translucent, made by fusing sand with soda and lime and cooling rapidly.</p>	 <p>Acrylic (polymethyl methacrylate), (of synthetic resins and textile fibres) made from polymers of acrylic acid or acrylates.</p>
 <p>Concrete— A building material made from a mixture of broken stone or gravel, sand, cement, and water,</p>	 <p>High impact polystyrene (HIPS) (of plastic or a similar substance) able to withstand great impact without breaking.</p>
 <p>Terra cotta—Unglazed, typically brownish-red earthenware, used chiefly as an ornamental building material and in modelling.</p>	 <p>Polyvinyl chloride (PVC) A tough chemically resistant synthetic resin made by polymerizing vinyl chloride and used for a wide variety of products including pipes, flooring, and sheeting.</p>
Print	Wood
 <p>Aluminium—A metal used in domestic utensils, engineering parts, and aircraft construction</p>	 <p>Pine—An evergreen coniferous tree used for making furniture, doors and floors.</p>
 <p>Pewter—A gray alloy of tin with copper and antimony (formerly, tin and lead).</p>	 <p>Plywood—A type of strong thin wooden board consisting of two or more layers glued and pressed together</p>
 <p>Copper—A red-brown metal, a very good conductor of heat and electricity and is used especially for electrical wiring</p>	 <p>Medium density fibreboard (MDF) - A type of board made from compressed sawdust usually bonded with formaldehyde resin</p>



Title Block — Contents

Author	Drawing number	Date
Title	Materials	Scale
Sheet Number	System of measurement	Projection

Properties and characteristics of materials

 <p>Absorbency</p>	To be able to soak up liquid easily.
 <p>Strength</p>	The capacity of an object or substance to withstand great force or pressure.
 <p>Elasticity</p>	The ability of an object or material to resume its normal shape after being stretched or compressed; stretchiness.
 <p>Plasticity</p>	The quality of being easily shaped or moulded.
 <p>Malleability</p>	To be able to be hammered or pressed into shape without breaking or cracking.
 <p>Density</p>	The quantity of mass per unit volume of a substance
 <p>Effectiveness</p>	The degree to which something is successful in producing a desired result; success.
 <p>Durability</p>	The ability to withstand wear, pressure, or damage.

Environmental Factors

<p>Recyclability We should recycle as many materials as possible, as this reduces the amount of new materials required to manufacture the products we want.</p>	<p>Reusability Where possible, we should reuse products or their components / parts when they are disassembled, at the end of their life cycles.</p> <p>Products should be designed, so that they can be used again or at least their parts, with minimal reprocessing.</p>
<p>A vast range of materials can be recycled particularly paper, card, and many plastics.</p>	
<p>Sustainability This means using less non-renewable resources. Reducing the amount of raw materials we use to manufacture products.</p>	<p>Ecological footprint. The ecological footprint measures human demand on nature, i.e., the quantity of nature it takes to support people or an economy.</p>
<p>Reduce wastage of raw materials used in the manufacture of products.</p>	<p>The ecological footprint is defined as the biologically productive area needed to provide for everything people use:.</p>

SI Base Units

unit	abb	physical quantity	Smallest - - - - - Largest
metre	m	length	Micrometer, millimeter, centimeter, meter
second	s	time	Microsecond, millisecond, seconds
kilogram	kg	mass	Milligram, gram, kilogram
ampere	A	electric current	Micro amp, milliamp, amp, kiloamp
kelvin	K	thermodynamic temperature	Kelvin, degrees Celsius
candela	cd	luminous intensity	Microcandela, millicandela, candela
mole	mol	amount of substance	Nanomole, micromole, millimole, mole

Engineering Disciplines

Mechanical	Hydraulics, gears, pulleys
Electrical	Power station, household appliances, integrated circuits
Aerospace	Aircraft, space vehicles, missiles
Communications	Telephone, radio, fibre optic
Chemical	Pharmaceuticals, fossil fuels, food and drink
Civil	Bridges, roads, rail
Automotive	Cars, motorcycles, trains
Biomedical	Prosthetics, medical devices, radiotherapy
Software	Applications, systems, programming

Understand the making Process

1	Preparation	Drawing, CAD, sketches, plans.
2	Marking Out	Pencil, scribe, steel rule, tri square, marking gauge, calipers, centre punch.
3	Modification	Saw, jigsaw, scroll saw, laser cutter, pliers, hammer, drill, file, glass paper.
4	Joining	Riveting gun, spanner, screwdriver, hot glue, gun, soldering iron, nail gun.
5	Finishing	Hand sander, glass paper, disc sander, buffing wheel, polish, spray paint, varnish.

Health & Safety Legislation

Health and Safety at work Act	Personal Protective Equipment	Manual Handling Operations	Control of Substances Hazardous to Health	Reporting of Injuries RIDDOR
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Scientific method for NEA 1

Analyse

Break down a task or question explaining the keywords and what is required

Hypothesis

An idea, prediction or explanation that you then test through experimentation

Research

Gathering data or information about the ingredient(s) that you are investigating.

Hypothesis

An idea, prediction or explanation that you then test through experimentation

Investigation

practical work that is undertaken by experimentation to prove or support the hypothesis.

Analysis

Explanation of the results linked to the data. Link back to research

Annotate

Add information to a photograph or chart

Fair test

An experiment that tests exactly the same thing during the investigation changing ONE part of the experiment..

Control

The part of the experiment that stays the same. This ensures that a 'Fair Test' is carried out.

Independent variable

The part of the experiment that is changed

Dependent variable

The outcome of the experiment that can be measured

Sensory testing and tasting

Measuring the outcomes of experiment using the senses to describe outcomes.

Aeration

Incorporating air into a mixture.

Agitate

To stir, shake or disturb a liquid.

Al dente

'Firm to the bite', a description of the texture of correctly cooked pasta.

Ambient

Foods that can be stored, at room temperature (ordinary room temperature 19°C to 21°C), in a sealed container. All foods found on supermarket shelves are ambient foods.

Amino acids

The building blocks of proteins.

Antioxidant

A molecule that is able to stop the oxidation process in other molecules and therefore can be useful in stopping foods from deteriorating.

Antioxidants can prevent or slow down damage to the body which otherwise can lead to diseases such as heart disease. Antioxidants also improve our immune system.

Antioxidant vitamins

Vitamins A, D and E, found in fruits and vegetables.

Bacteria

Pathogenic microscopic living organisms, usually single-celled, that can be found everywhere. They can be dangerous, such as when they cause infection, or beneficial, as in the process of fermentation (for wine).

Baking

Convection-conduction, cooking foods in a hot oven.

Basted

When fats or juices are poured over something (usually meat) while cooking in order to keep it moist, eg roasting meats.

Batter

A mixture of flour, milk or water, and usually an egg.

Bind

To bring the ingredients in a mixture together using an ingredient, eg egg.

Biological catalysts

Substance which speeds up a chemical reaction.

Biological raising agent

Using yeast to produce CO₂ gas.

Biological value

The number of amino acids that a protein food contains.

Blanching

A method of cooking where food is cooked very quickly in boiling water for a short period of time. It stops enzyme actions which can cause loss of flavour, colour and texture. Conduction-convection.

Blanching

A method of cooking where food is cooked very quickly in boiling water for a short period of time. It stops enzyme actions which can cause loss of flavour, colour and texture. Conduction-convection.

Braising

Conduction-convection, sealing meat/vegetables in hot fat, then cooking slowly in a covered dish with some cooking liquid.

Bridge hold

Use thumb and forefinger and grip either side of the ingredient, use knife under the bridge to cut.

Calcium

Main mineral in the body, teeth and bones. It needs vitamin D to help absorption.

Caramelisation

Breaking up of sucrose molecules (sugar) when they are heated. This changes the colour, flavour and texture of the sugar as it turns brown into caramel.

Carbohydrates

Macronutrients required by all animals; made in plants by the process of photosynthesis.

Chemical raising agent

Uses baking powder or bicarbonate of soda to produce CO₂ gas

Choux pastry

A light, crisp, hollow pastry used to make profiteroles, éclairs and gougères.

Claw grip

Tips of fingers and thumb tucked under to hold the ingredient before chopping.

Coagulation

The setting or joining together of lots of denatured protein molecules during heating or change in PH. An irreversible change to the appearance and texture of protein foods.

Coat

To add another ingredient to create an attractive finish, or to create a protective layer on food when cooking.

Conduction

Transfer of heat through a solid object into food.

Consistency

Thickness or viscosity.

Convection

Transfer of heat through a liquid or air circulation into food.

Cook's knife

A large general purpose knife with a deep blade, used for cutting, chopping, slicing and dicing.

Danger zone

Range of temperatures between 5°C to 63°C at which bacteria begin to multiply rapidly.

Deglazing

To loosen the browned juices on the bottom of the pan by adding a liquid to the hot pan and stirring while the liquid is boiling.

Denaturation

Chemical bonds in the protein food have broken, causing the protein molecule to unfold and change shape.

De-seed

To remove seeds before using.

De-skin

To remove the skin by either putting the fruit or vegetable into boiling water or, for peppers, placing on direct heat.

Dextrinisation

Breaking up of the starch molecules into smaller groups of glucose molecules when exposed to dry heat, eg toast.

Dietary fibre

Complex carbohydrate/non-starch polysaccharide, eg whole grain cereals and cereal products.

Disaccharide

A carbohydrate made from two sugar molecules.

Discrimination tests

Test used to find out whether or not people can tell the difference between similar samples of food.

Dry-frying

Heating food on a low heat without any fat or oil. Conduction.

Efficacy

Power or capacity to produce a desired effect; effectiveness.

Enzymic action

Causes fruit to ripen, change colour, texture, flavour and aroma; maturing of fruits and vegetables.

Enzymic browning

The discolouration of a fruit or vegetable due to the reaction/chemical process where oxygen and enzymes in the plant cells of the food to react and cause the surface to become brown. This process cannot be reversed.

Emulsification

Refers to the tiny drops of one liquid spread evenly through a second liquid. An emulsifier (such as egg yolk) is used to stabilise an insoluble mixture.

Enzymes

Biological/natural substances (catalysts) which speed up biochemical reactions without being used up themselves.

Fats

Macronutrient which supplies the body with energy.

Fat soluble vitamins

Vitamins (the A, D, E, and K groups) that dissolve in fat.

Filleting knife

A thin, flexible, narrow blade knife used to fillet fish.

Fluoride

Strengthens the bones and teeth, helps prevent tooth decay.

Foam formation

Foams are formed when gases (mainly air) are trapped inside a liquid, for example meringue, whisked sponge.

Free range

A method of farming husbandry where the animals, for at least part of the day, can roam freely outdoors.

Free sugars

All monosaccharides and disaccharides added to foods by the manufacturer, cook, or consumer, plus sugars naturally present in honey, syrups, and fruit juices.

Fruit sugars

Carbohydrate, which is the natural sugar in fruit –mostly in the form of fructose, or glucose.

Gelatinisation

When starch granules swell when cooked with liquid, then burst open and release the starch, causing the liquid to thicken.

Gliadin and glutenin

The core proteins of the gluten part of wheat seeds.

Gluten formation

Formed from the two wheat proteins gliadin and glutenin, in presence of water. Gluten is developed by kneading.

Gluten free

Food which does not contain gluten (crucial for those with Coeliac disease).

Grading tests

Put in order particular characteristics of a food product.

Grilling

Radiation cooking foods under intense heat.

Hedonic rating test

People give their opinion of one or more food products by filling out a table that uses a preference scale.

High Biological Value (HBV)

Protein foods that contain all the essential amino acids.

Iron

Needed to make haemoglobin in the red blood cells, requires Vitamin C for absorption.

Julienne

Cutting vegetables into matchstick strips.

Knead

To manipulate dough by pushing it across a work surface and pulling it back. This is essential to develop the gluten.

Knock back

To knead out the carbon dioxide in risen dough to remove large air pockets to ensure an even texture.

Lactose

A natural sugar found in milk and dairy products.



Lactose intolerant
A condition which means you cannot digest disaccharide sugar lactose.

Layer
To make up a dish with differing ingredients one on top of another.

Marinade
To soak foods such as fish, meat, poultry and vegetables in a liquid to help develop the flavour, tenderise and in some instances colour the food before it is cooked. The liquid can be acidic or a salty solution. Protein is denatured by marinating.

Mash
To reduce to a soft mass by using a masher.

Mechanical raising agent
Whisking, beating, sieving, creaming, rubbing in or folding to trap air into the mixture.

Micro filtered
All bacteria in milk are removed, by forcing it through filtration membranes, then pasteurised and homogenised.

Micro nutrients
Nutrients required in small quantities to facilitate a range of physiological functions.

Microorganisms
Tiny forms of life, usually single cell microscopic organisms such as bacteria, moulds and fungi.

Milk sugars (lactose)
A single molecule of glucose linked to a single molecule of galactose to form a carbohydrate, known as lactose.

Milling
Breaking cereal grains (seeds) down and separating the layers, turning grain into flour.

Minerals
Chemical substances found in a wide variety of foods.

Mix
To combine two or more ingredients together to become one.

Monosaccharide
A simple carbohydrate. Mono means one, saccharide means sugar.

Monounsaturated fats
Fats that contain one double bond in the molecule.

Nutrients
The properties found in food and drinks that give nourishment – vital for growth and the maintenance of life. The main nutrients needed by the human body are carbohydrates, proteins, fats, vitamins and minerals.

Nutritional analysis
Nutritional information for different foods, creating a nutritional profile of the specific nutrients in the food.

Oil in water emulsion
Keeping drops of oil or fat suspended in a liquid to prevent them from joining together, for example butter.

Olfactory systems
The receptors found in the back of the nose that are responsible for our sense of smell/aromas.

Oxidation
Substances pick up oxygen from the air; they then oxidise to undergo a chemical reaction, resulting in food losing freshness and colour.

Palatability
Reward provided by foods or fluids that are agreeable with regard to the satisfaction of nutritional, water, or energy needs.

Paired preference
People given two similar samples of food and they have to say which one they prefer.

Paring knife/vegetable knife
A small multi-purpose knife mainly used for slicing and dicing.

Pasteurisation
The process of heating a food to a specific temperature for a specific period of time in order to kill microorganisms that could cause disease, spoilage or undesired fermentation.

Phosphorus
Helps calcium to mineralise the teeth and bones.

Poaching
A method of cooking where food is cooked in a liquid that is just below boiling point. Conduction-convection.

Polysaccharide
A complex carbohydrate: many sugar molecules joined together, they do not taste sweet.

Polysaturated fats
Fats that contain several double or even triple bonds in the molecule.

Plasticity
The ability of fat to soften over a range of temperatures to hold its shape, or be shaped and spread.

Preservatives
Used to prevent food from spoilage by microorganisms; increases the shelf life of commodities.

Profiling
People asked to rate the intensity of a food product from 1–5 against a set of sensory descriptors.

Protein
A macronutrient that is essential to building muscle mass.

Protein alternatives
Manufactured protein food products consumed in place of meat or fish.

Proving
The last rising of the bread dough in its final shape before it is baked.

Radiation
A heating process that does not require physical contact between the heat source and the food being cooked. Instead, energy is transferred by waves of heat or light striking the food. Two kinds of radiation heat are used in the kitchen: infra-red and microwave.

Ranking
People asked to rank order samples of food according to a criteria.

Rating
People asked to rate a food sample for a specific characteristic.

Raising agents
An ingredient or process that introduces a gas into a mixture so that it rises when cooked.

Reduction
The process of simmering a liquid over heat until it thickens. It is also the name of the concentrated liquid that forms during this process.

Roasting
Convection-conduction, cooking foods in oil or fat in a hot oven.

Saturated fats
This type of fat is mostly from animal sources; they are normally solid fats. All of the carbon atoms in the fatty acid molecules are linked by single bonds.

Scientific principles
Demonstrates how science of the ingredients are at work in producing, processing, preparing, preserving, and metabolising foods.

Segment
To peel and pull apart, for example an orange.

Sensory properties
Smell, appearance and texture, mouth feel influence what we select to eat.

Sensory testing methods
A way of measuring the sensory qualities of food and is used by chefs, food manufacturers and retailers to analyse a food product.

Shallow frying
A quick method of cooking where a small amount of fat is used to cook food in a frying pan.

Shortening
The ability for fat to shorten the length of the gluten molecules in pastry or shortbread, for example butter, lard or other fat that remains solid at room.

Shred
To slice into long, thin strips.

Simmering
Water that is heated to just below boiling point.

Skewer
A long metal or wooden pin used to secure food on during cooking; to skewer is to hold together pieces of food using a metal or a wooden pin.

Sodium (salt)
Controls the amount of water in the body.

Snip
To cut (usually with a pair of scissors) with a small, quick stroke.

Stabilisers
Help stop substances separating again after they have been mixed stabilise an emulsion.

Starch
A polysaccharide, a complex carbohydrate.

Steaming
A method of cooking where food is cooked in the steam coming from boiling water. Conduction-convection.

Sterilised
Heated in sealed bottles to 110°C for 30 seconds

Stir-frying
A quick method of cooking where small pieces of food are fast-fried in a small amount of oil in a wok.

Taste receptors
Special cells on the tongue that pick up flavours.

Tasting panel
A process of testing foods. The process must be fair and realistic controlled conditions.

Temperature control
Range of temperature for the storage of food correctly.

Temperature probes
Give an accurate reading of the core temperature (centre) of the food. Food probes must be used correctly.

Triangle test
People given three samples of a food product to try. Two samples are identical, the third something is different; they need to discriminate between the samples.

Ultra Heat Treatment (UHT)
Heated very quickly in a heat exchanger to 72°C for 15 seconds cooked rapidly to below 10°C (normally 4°C).

Unsaturated fats
Fats that contain a high ratio of fatty acid molecules with at least one double bond. Unsaturated fats are normally liquid oil.

Vegan
People who do not eat flesh or any animal products. They can eat plant protein soya, TVP, tofu.

Vegetarian
A lacto-vegetarian diet includes dairy products and plants, and a lacto-ovo vegetarian diet includes eggs, dairy products and nuts.

Vitamin B2 (Riboflavin)
Enables energy to be released from carbohydrate, fat and protein in the body found in many foods, such as milk, eggs, rice. Deficiency is rare.

Vitamin B3 (Niacin)
Enables release of Vitamin C (ascorbic acid) needed for absorption of iron, to maintain body cells. Found in citrus fruits, green vegetables.

Vitamin B12
Works with folic acid, found in meat, fish fortified cereals.

Water based
Using liquid to transfer heat via convection.

Water in oil emulsion
Where liquid is suspended in oil or fat and prevents them from separating out, for example mayonnaise.

Water soluble vitamins
Soluble vitamins (the B group and vitamin C) in water of energy in the body. Found in wheat flour, eggs, milk some meats. Deficiency is called pellagra.

Yeasts
A microscopic fungus consisting of single oval cells that reproduce by budding, and capable of converting sugar into alcohol and CO2 gas. Also ferments in the correct conditions to make bread rise.

What is a Network?

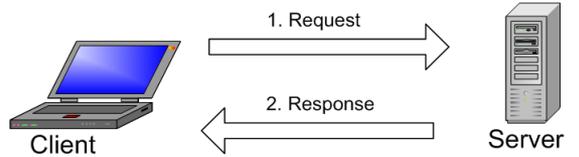
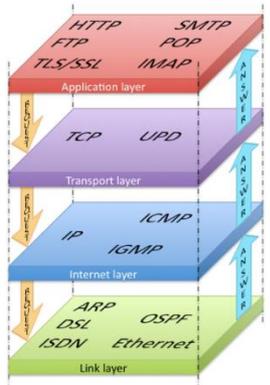
- Connected computers/devices
 - LAN / WAN/WLAN and examples

Network hardware

- Network interface card (NIC)
- Cables (*Network media*)
 - Unshielded twisted pair (UTP)
 - Fibre-optic cable
- Hub , Switch
- Wireless access point
- Router

Protocols and Addressing

- Protocols
 - Layered TCP/IP protocol stack
 - Data packets
 - DNS
 - FTP
 - HTTP
 - HTTPS
 - SMTP
 - POP
 - IMAP
- Packet switching
- IP addressing
- MAC addressing



Models of network

- Client-server network
 - Peer-to-peer network
- Advantages/Disadvantages



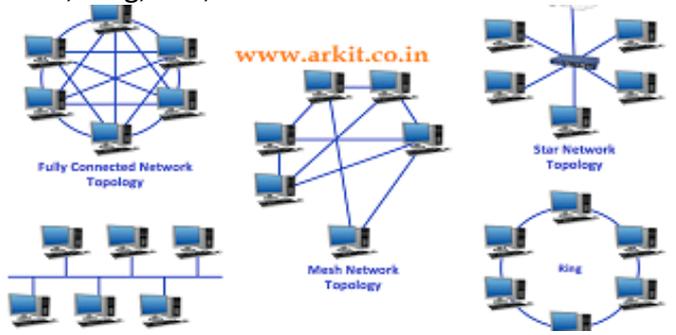
The Internet

- The internet vs. World Wide Web
- Hardware: Modem, Router...
- Addressing
 - Uniform Resource Locator (URL)
 - IP address, IPv4, IPv6
 - Domain name System (DNS)
 - Network data speed
 - Network protocols

Topologies

Diagram, Advantages and Disadvantages of...

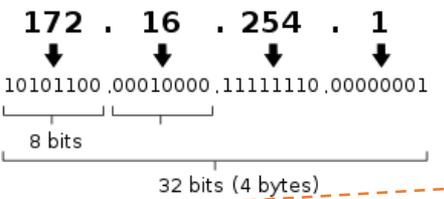
- Bus, Ring, Star, Mesh



Internet file standards

- Meaning and uses for:
 - JPG
 - GIF
 - PDF
 - MP3
 - MPEG
- Compression
 - Lossy
 - Lossless

IPv4 address in dotted-decimal notation



Quizlet
Use quizlet app or website to learn the definitions associated with this topic.

Forms of attack	Different methods of attacking a computer network
Threats posed to networks	Computer networks, viruses
Social engineering	How are people a weak point in a computer network
Brute force attacks	Trying many passwords or passphrases with the hope of eventually guessing correctly. systematically checks all possible passwords and passphrases until the correct one is found.
Denial of service attacks	A cyber-attack where the perpetrator seeks to make a machine or network resource unavailable.
Data interception and theft	The unauthorized taking or interception of computer-based information.
The concept of SQL injection	SQL injection attacks allow attacker to spoof identity, tamper with existing data, cause repudiation issues such as voiding transactions or changing balances.
Poor network policy.	How poor network policy can result in risks to computer networks.
Penetration testing	Penetration testing is testing a computer system, network or Web application to find vulnerabilities that an attacker could exploit.
Network forensics	Network forensics refers to the monitoring and analysing of data on a computer system.
Network policies	A network security policy, or NSP, is a generic document that outlines rules for computer network access,
Anti-malware software	Anti-malware software protects against infections caused by many types of malware, including viruses, worms, Trojan horses, rootkits, spyware, keyloggers, ransomware and adware
Access Levels	Access levels allow network administrators to decide what users can do on the network depending

environmental issues.	Technology has had an impact on the environment that is both positive and negative. The use of computers affects the environment
remote working.	in different ways, such as energy consumption, technological waste, and the impact of
ethical issues	What information can we consider to be private and who owns data, There are piracy laws protecting the distribution of films and other media.

The Cloud
The remote provision of storage and software resources which can be Accessed from a device. Uses servers and data centers to access such content.

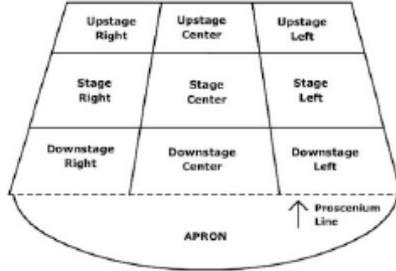
Phishing Attempting to obtain sensitive information such as usernames, passwords, and credit card details (and, indirectly, money), often for malicious reasons, by disguising as a trustworthy entity in an
Complex passwords Password consisting of at least 6 characters letter, numbers and symbols
Encryption Encoding a message so only authorised people can read it.
Firewalls Part of a network designed to prevent unauthorised access
Anti-Virus Software designed to detect, prevent and remove viruses
Ransomware Malicious software that blocks the victim's data or threatens to publish it unless a ransom is paid.
Failover Having backup servers/systems in place in case of failure
Malware Software that is specifically designed to gain access or damage a computer without the knowledge of the owner
Carbon footprint The amount of carbon dioxide released into the atmosphere as a result of the activities of a particular individual, organization, or community.
Pollution The presence in or introduction into the environment of a substance which has harmful or poisonous effects.
Sensors A sensor is a device that detects and responds to some type of input from the physical environment. The specific input could be light, heat, motion, moisture, pressure, or any one of a great number of other environmental phenomena.

Devised: Explanation	How is the Devising Log Assessed?
<p>Devising is a way of creating a drama without starting with a script. It usually begins with an idea and a stimulus. Actors and designers research, improvise, develop and shape scenes until they have a drama ready for an audience. The play you create will use either the techniques from a theatre practitioner (e.g. Brecht or Stanislavski) or in the style of a theatre genre (e.g. Physical Theatre or Theatre in Education). You will research your chosen topic, create a performance and document the development in a devising log.</p> <p>The devising log will explain how you created and developed the play and how you will communicate meaning to the audience. You will also analyse and evaluate your personal contribution to the devising process and the final devised piece.</p>	<p>Section 1: Response to Stimulus (20 marks) Section 2: Development and Collaboration (20 marks) Section 3: Analysis and Evaluation (20 marks)</p>

Section 1: Response to Stimulus	Section 2: Development and Collaboration	Section 3: Analysis and Evaluation
<p>In your devising log, you will be asked to write about the stimuli that your teacher presented to you and the stimulus you chose. You will need to explain the following:</p> <ul style="list-style-type: none"> Your first response to the stimuli. The different ideas, themes and settings you considered and how and why you reached your final decision. What you discovered from your research What your own dramatic aims and intentions are (for example, if you are a performer what you want to achieve in your portrayal of your character). What the dramatic aims and intentions of the piece were (for example what theme might your piece explore or what message would you deliver?). 	<p>Working with others and developing ideas are a part of the pleasure of drama, but these can also be difficult. Make sure that throughout the process you are contributing and meeting your responsibilities. For your devising log, you need to explain:</p> <ul style="list-style-type: none"> How you developed and refined your ideas and those of others with whom you worked. How you developed the piece in rehearsals. How you developed AND refined your own theatrical skills (performance or design) during the devising process. How you responded to feedback. How you used your refined theatrical skills in the final piece. 	<p>Section 3 of your devising log provides you with the opportunity to show your skills at analysing and evaluating your devised work.</p> <p>Key Words To 'analyse' is to identify and investigate. To 'evaluate' is to assess the different approaches used and formulate judgments. For example "This was successful because... or this could be improved by"</p> <ul style="list-style-type: none"> You need to include: How far you developed your theatrical skills. The benefits you brought to the pair/group and the way in which you helped to shape the final piece. The overall impact you personally had on the devising, rehearsal and performance. <p>You could also, if appropriate, consider the areas of the devising that didn't go as well as you had hoped or could have been further developed. In order to write concisely about how well you succeeded, you need to be very clear about what you hoped to achieve.</p> 
<p>Assessment Criteria – Response to Stimulus</p> <ul style="list-style-type: none"> The explanations given in the Devising log evidence excellent skills in creating and developing ideas to communicate meaning. There is evidence of a highly developed and highly creative response to the stimulus. The explanation is very clear and points are comprehensively explored. Precise details are provided throughout. 	<p>Assessment Criteria – Development and Collaboration</p> <ul style="list-style-type: none"> The explanations given in the Devising log evidence excellent skills in creating and developing ideas to communicate meaning. There is evidence of extensive and highly effective development and refinement of skills and the piece. The explanation is very clear and points are comprehensively explored. Precise details are provided throughout. 	<p>Assessment Criteria – Evaluation</p> <ul style="list-style-type: none"> Response demonstrates highly developed skills in identifying and investigating how far they developed their theatrical skills and how successfully they contributed to the devising process and to the final devised piece (analysis). Response demonstrates highly developed skills in assessing the merit of different approaches and formulating judgements about the overall impact they had as an individual (evaluation). Response is critical and insightful. Points are comprehensively explored and supported in depth with thorough exemplification.

Devising Log - Guidance

Use the information on this side of the Devising Log Knowledge organiser to help you to write your devising log.

Starter Sentences	Connectives	Theatrical Terminology	Devising Log Checklist		
<p>Sometimes it can be tricky deciding how best to start your sentences. Use these starter sentences below to help you.</p> <div data-bbox="34 428 448 721"> <p>To Introduce</p> <ul style="list-style-type: none"> My devised play focused on... The key aspect of my devised play was... The central theme to my devised performance was... In my devised performance I wanted to emphasise... The issue that we focused on in our devised piece was... My intentions for my character was... The overall intensions for our piece is... </div> <div data-bbox="34 735 448 985"> <p>To conclude</p> <ul style="list-style-type: none"> In summary, my play... To conclude, I am pleased that my play... In conclusion, we successfully... In short, my play... It has been shown that my play... Hence... To sum up... To review my ideas... </div>	<p>Connectives can be used to link ideas within sentences, between sentences and between paragraphs. Improve the sentence structure of your Devising Log. Why not develop your ideas more effectively by using connectives to show how your ideas are linked.</p> <div data-bbox="473 428 680 578"> <p>Adding</p> <p>And... Also... As well as... Moreover... Too...</p> </div> <div data-bbox="699 428 923 578"> <p>Cause and Effect</p> <p>Because... So... Therefore... Thus... Consequently...</p> </div> <div data-bbox="473 592 680 771"> <p>Emphasising</p> <p>Above all... In particular... Especially... Significantly... Indeed... Notably...</p> </div> <div data-bbox="699 592 923 771"> <p>Comparing</p> <p>Equally... In the same way... Similarly... Likewise... As with... Alike...</p> </div> <div data-bbox="473 785 680 1006"> <p>Qualifying</p> <p>However... Although... Unless... Except... If... As long as... Apart from... Yet...</p> </div> <div data-bbox="699 785 923 1006"> <p>Illustrating</p> <p>For example... Such as... For instance... As revealed by... In the case of...</p> </div> <div data-bbox="473 1021 680 1228"> <p>Contrasting</p> <p>Whereas... Instead of... Alternatively... Otherwise... Unlike... On the other hand... Despite...</p> </div> <div data-bbox="699 1021 923 1228"> <p>Speculative</p> <p>It would seem... One could say... One wonders... It could appear that...</p> </div>	<p>Have you been using the key words? Check as this will increase your grades.</p> <table border="0"> <tr> <td data-bbox="946 442 1130 1078"> <p>General</p> <p>Antagonist Anti-climax Aside Blackout Character Character Interaction Charter Motivation Chorus Climax Communal Voice Costume Mood and Atmosphere Cross Cutting Flashbacks Forth Wall Forum Theatre Freeze Frame Genre Improvisation Narration Props Protagonist Split Screen Structure Sub-Text</p> </td> <td data-bbox="1188 442 1381 1042"> <p>Genre</p> <p>Documentary Theatre Naturalism (Stanislavski) Non Naturalism (Brecht) Physical Theatre Theatre in Education</p> <p>Rehearsal Techniques</p> <p>Bigger Bigger Bigger Conscience Corridor Hot-Seating Inner Thoughts Role on the Wall</p> <p>Stage Types</p> <p>End on In the round Arena Thrust Traverse Promenade Proscenium Arch</p> </td> </tr> </table> <div data-bbox="985 1085 1381 1356">  <p>The diagram shows a trapezoidal stage layout. At the top (back of the stage) are three sections: Upstage Right, Upstage Center, and Upstage Left. Below these are three sections: Stage Right, Stage Center, and Stage Left. At the bottom (front of the stage) are three sections: Downstage Right, Downstage Center, and Downstage Left. Below the Downstage sections is a dashed line labeled 'Proscenium Line' with an upward arrow, and below that is the 'APRON'.</p> </div>	<p>General</p> <p>Antagonist Anti-climax Aside Blackout Character Character Interaction Charter Motivation Chorus Climax Communal Voice Costume Mood and Atmosphere Cross Cutting Flashbacks Forth Wall Forum Theatre Freeze Frame Genre Improvisation Narration Props Protagonist Split Screen Structure Sub-Text</p>	<p>Genre</p> <p>Documentary Theatre Naturalism (Stanislavski) Non Naturalism (Brecht) Physical Theatre Theatre in Education</p> <p>Rehearsal Techniques</p> <p>Bigger Bigger Bigger Conscience Corridor Hot-Seating Inner Thoughts Role on the Wall</p> <p>Stage Types</p> <p>End on In the round Arena Thrust Traverse Promenade Proscenium Arch</p>	<p>As you are preparing your devising log, keep checking it against the following checklist:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Have I written three sections with appropriate headings? <input type="checkbox"/> Are the sections roughly the same length? <input type="checkbox"/> Have I stayed within the final word count? <input type="checkbox"/> Have I provided evidence of research? <input type="checkbox"/> Have I stated my dramatic aims AND intentions? <input type="checkbox"/> Have I shown how I developed and refined my ideas? <input type="checkbox"/> Have I explained how I helped the group? <input type="checkbox"/> Have I shown how I responded to feedback? <input type="checkbox"/> Have I demonstrated that I have developed my theatrical skills? <input type="checkbox"/> Have I explained how I positively shaped the final piece? <input type="checkbox"/> Have I used correct theatrical terms to explain my thoughts? <input type="checkbox"/> Have I given specific examples to back up my points? <input type="checkbox"/> Have I analysed and evaluated my work?
<p>General</p> <p>Antagonist Anti-climax Aside Blackout Character Character Interaction Charter Motivation Chorus Climax Communal Voice Costume Mood and Atmosphere Cross Cutting Flashbacks Forth Wall Forum Theatre Freeze Frame Genre Improvisation Narration Props Protagonist Split Screen Structure Sub-Text</p>	<p>Genre</p> <p>Documentary Theatre Naturalism (Stanislavski) Non Naturalism (Brecht) Physical Theatre Theatre in Education</p> <p>Rehearsal Techniques</p> <p>Bigger Bigger Bigger Conscience Corridor Hot-Seating Inner Thoughts Role on the Wall</p> <p>Stage Types</p> <p>End on In the round Arena Thrust Traverse Promenade Proscenium Arch</p>				

MR TIGHTS	Features	KEYWORDS
Melody	<ul style="list-style-type: none"> Use of nonsense lyrics. Syllabic main verse; some spoken parts. Short phrases; repetitive. Limited range for the female vocal (6th). The male has a more extended range of a 13th; Vocal samples. Sense of improvisation from opening female vocals Use of glissando and ornamentation. Use of reverb is very obvious for the whole track. 	<p>1- Nonsense lyrics – non-sensical words (no meaning).</p> <p>2- Syllabic - when one note is sung per syllable.</p> <p>3- Sample – a pre-recoded segment of sound, often manipulated in some way.</p> <p>4- Improvisation – making something up 'on the spot', within given parameters.</p> <p>5- Glissando – a continuous slide upwards or downwards between two notes.</p> <p>6- Ornament – notes that decorate a melody.</p>
Rhythm (incl. tempo & metre)	<ul style="list-style-type: none"> Free time at the start; Steady tempo established at 50" – 100 bpm. Simple quadruple metre. Slightly swung semiquavers. Syncopation. Triplets and Sextuplets. Rhythmic ostinato with use of loops and riffs. Short rhythmic phrases. 	<p>7- Acciaccatura (grace note) – a very quick preceeding note.</p> <p>8- Reverb - an effect, which creates the impression of being in a physical space.</p> <p>9- Free time – no set pulse</p> <p>10- Swung rhythm – often used in jazz, the first of a pair of quavers is given a slightly longer duration, giving a 'skipping' feel.</p> <p>11- Syncopation - a temporary displacement of the regular metrical accent in music caused typically by stressing the weak beat.</p>
Texture	<ul style="list-style-type: none"> Main texture is homophonic Heterophonic texture (during outro) Polyphonic texture. Constantly changing Use of layering and loops. 	<p>12- Triplet – three notes should be played in the space of two, highlighted by a square bracket with a '3'.</p> <p>13- Sextuplet – six notes played in the space of four, highlighted by a square bracket with a '6'.</p>
Instrument (sonority)	<p>African forces: kora, talking drum</p> <p>Celtic forces: hurdy-gurdy, uilleann pipes, bodhrán, fiddle, whistle, accordion</p> <p>Western (dance) forces: male vox, female vox, synthesisers (including string pad, soft pad, bells, string bass), breath samples, drum machine, electric piano, shaker and tambourine.</p> <p>Much of the piece is made from looping.</p> <p>Playing techniques include: glissando, ornamentation, double stopping, open and closed hi-hat.</p>	<p>14- Ostinato – a persistent phrase or motif repeated over several bars or more.</p> <p>15- Loop – a short repeated passage, often involving electronic drums.</p> <p>16- Riff – a short passage of music that is repeated.</p> <p>17- Homophonic - a texture comprising a melody part and an accompaniment.</p>
Genre	<p>Afro Celt Sound System was originally formed by guitarist Simon Emmerson in 1995 and has featured a number of guest artists over the years. Their music is a fusion of African, Celtic and electronic dance music.</p> <p>The album Volume 2: Release was put on hold until Sinéad O'Connor stepped in and wrote the lyrics to a track that became 'Release'. The album was released on 25 January 1999.</p>	<p>18- Heterophonic – a texture where two or more instruments are playing the same melody simultaneously, with each embellishing it in a slightly different way.</p> <p>19- Polyphonic - Multiple melodies playing together.</p> <p>20- Layering – combining multiple parts simultaneously.</p>
Harmony	<ul style="list-style-type: none"> Diatonic Chord sequences are repetitive Hint of chromaticism Use of extended chords (7th, 9th) Slow harmonic pulse Use of drone. 	<p>21- Fusion – the blending of two or more musical styles, usually from different cultures.</p> <p>22- Diatonic - using only notes from the key.</p> <p>23- Chromatic - Relating to or using notes not belonging to the diatonic scale of the key in which a passage is written.</p> <p>24- Extended chords – a chord with at least one added note, such as a ninth.</p>
Tonality	<ul style="list-style-type: none"> Key of C minor Modal 	<p>25- Drone – a continuously held or repeated note, usually low in pitch.</p>
Structure	<p>There is a distinct verse form. It contains an intro, solos, breaks and an outro. There are no choruses in this piece and the piece contains three verses.</p> <p>Intro-V1-V2-Solos-V3-Build-Outro</p>	<p>26- Modal –using modes (precursor to scales) for melodic and/or harmonic material (not major/minor).</p>

MR TIGHTS	Features	KEYWORDS
Melody	<ul style="list-style-type: none"> The words are set syllabically. Two main melodies, heard separately at first, and then combined: Verse 1 (A) - An eight-bar idea repeated with a different ending: <ul style="list-style-type: none"> rising arpeggio shape; 1st/2nd note of each phrase descends in a long downward sequence; moves mostly by leaps of a 3rd and occasionally a 7th; phrases span a 7th; develops through rhythmic & melodic changes. Verse 2 (B) - A 16-bar idea repeated with a different ending: <ul style="list-style-type: none"> conjunct; descent to leading note, answered by a rising and falling idea; sequences. 	<p>1- Syllabic - when one note is sung per syllable.</p> <p>2- Arpeggio - the chord is spread, normally from the bottom note to the top.</p> <p>3- Sequence - the repetition of a musical phrase at a higher or lower pitch than the original.</p> <p>4- Conjunct - movement by step.</p> <p>5- Leading note - the seventh note of a scale, usually raised in a minor key.</p> <p>6- Free time - no set pulse.</p>
Rhythm (incl. tempo & metre)	<ul style="list-style-type: none"> Very free - b.1-3 bars, difficult to recognise a strong pulse and returns at b.114 Slow tempo & rubato - Verse 1. Bossa nova tempo - b.19, the tempo almost doubles. Bossa nova-type rhythm - (bars 6, 9, 10, 14 and 17) of bass part. 'Standard' bossa nova rhythm in b. 23. 4/4, quadruple time. Complex rhythms - vocal melody v1, although never syncopated enough to lose the sense of beat: Triplets and rests - effectively separate most of the phrases here. Syncopated rhythms - bass part in verse 1; vocal line in V2 - longer note values start off beat. Syncopated and un-syncopated passages - guitar adds to rhythmic interest. Vocal rhythms of v2 are less syncopated. 	<p>7- Rubato - is a musical term referring to expressive and rhythmic freedom by a slight speeding up and then slowing down of the tempo of a piece at the discretion of the soloist or the conductor.</p> <p>8- Bossa Nova - a union of samba & cool jazz. The music is in syncopated 2/4 time, with a dotted crotchet & quaver rhythmic pairing. Instrumentation is simple, limited to a few rhythm instruments. In vocalized passages the musical background becomes more subdued to allow the singer greater range for improvisation.</p> <p>9- Triplet - three notes should be played in the space of two, highlighted by a square bracket with a '3'.</p> <p>10- Syncopation - a temporary displacement of the regular metrical accent in music caused typically by stressing the weak beat.</p> <p>11- Monophonic - a texture comprising a single line/part.</p> <p>12- Homophonic - a texture comprising a melody part and an accompaniment.</p> <p>13- Polyphonic - a texture comprising multiple melodies playing together.</p> <p>14- Chest register - the lower ranges of the voice in speaking or singing.</p>
Texture	<ul style="list-style-type: none"> Monophonic - introduction, apart from double-stops. Mostly homophonic - but the bass part at times becomes almost melodic enough to be a melody in its own right. Polyphonic - b.89-104, as two melodies of the piece are combined. 	<p>15- Virtuosic - characterized by exceptional technical skill.</p> <p>16- Double-stops - the technique of playing two or more notes simultaneously on a bowed stringed instrument.</p> <p>17- Mordent (upper and lower) - Played quickly, Upper = note-note above-note; Lower = note, note below-note.</p> <p>18- Harmonic - the overtones that are present with any fundamental tone.</p> <p>19- Tonal - based around a key-note and its scale.</p> <p>20- Extended chords - a chord with at least one added note, such as a ninth.</p>
Instrument (sonority)	<ul style="list-style-type: none"> Female voice, acoustic guitar and acoustic bass guitar. 2nd acoustic guitar appears in solo. Low female range using chest register. It covers a range of a minor tenth. Active bass part - more than playing the root notes. Virtuosic bass solo in intro - double stops, wide leaps, rapid semiquaver passages, mordent harmonic. Acoustic guitar - virtuosic solo. Guitar accompaniment: plucked chords; small melodic passages; imitation of vocal part. 	<p>21- Diminished 7th - a diminished seventh is an interval produced by narrowing a minor seventh by a chromatic semitone. A diminished seventh chord is a four note chord that comprises a diminished triad plus the interval of a diminished seventh.</p> <p>22- Flattened fifth chord - a chord where the 5th is flattened.</p> <p>23- Chromatic - Relating to or using notes not belonging to the diatonic scale of the key in which a passage is written.</p> <p>24- Perfect cadence - a cadence comprising two chords. A perfect cadence is chord V followed by chord I.</p>
Genre	<ul style="list-style-type: none"> 'Samba em Preludio', written in 1962, is a bossa nova. 'Bossa nova' means 'new trend' in Brazilian, and was one of the most popular musical styles of the late 1950s and early 1960s. The style mixes elements of Brazilian samba with jazz. 	<p>25- Modulation - Change from one key to another.</p>
Harmony	<ul style="list-style-type: none"> The harmonies are essentially tonal. Chord roots still based around chords I, II, IV and V. Complex - influence of jazz and American popular song: chord extensions; diminished seventh; flattened fifth chord; Chromatic chords. Cadences - not used classically: ends of sections tend to land on either chord V or the tonic with a more conventional V-I perfect cadence. Descending chromatic movement in the bass line - created by chord progressions. 	<p>26- Coda - a passage that brings a piece to an end.</p>
Tonality	<ul style="list-style-type: none"> The key of the piece is B minor. Many bossa novas use minor keys. Despite the complexity of some of the harmony, the music does not modulate. 	
Structure	<ul style="list-style-type: none"> Introduction - V1 (A) - Link - V2 (B) - Guitar solo - Voice & Bass duet - Coda. 	

Important Ideas

- Time series graphs are useful for studying the trend and seasonal variation
- Trend lines can be used to predict future values.
- You can find estimates of a probability by repeating an experiment many times
- You can use a variety of diagrams to represent all the different outcomes possible of events

Vocabulary

Time series	Graphs which show variation over time
Trend	The overall behaviour over time
Trend line	Shows the tend of data over time ignoring any seasonal variation
Moving average	A sequence of averages that smooths out variations in data. Used to show trends.
Expected (relative) frequency	How often we expect something to happen based on trials.
Risk	The probability of loss
Two-way table	A way of presenting data with two variables
Sample space diagram	A table showing all possible outcomes of two combined events
Tree diagram	A diagram with branches used to work out probabilities of combined events
Venn diagram	A diagram using circles to represent sets. The position and overlap of the circles indicates the relationships between the sets.

Question

Time series

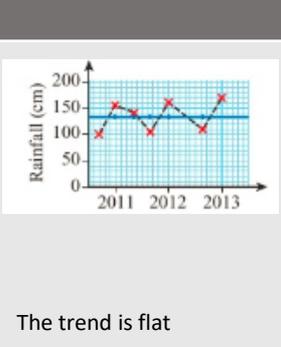
	2011		
Rainfall (cm)	102	156	142
3-point moving average		133	135

	2012		
Rainfall (cm)	106	157	135
3-point moving average	135	133	134

	2013		
Rainfall (cm)	110	169	
3-point moving average	138		

Plot the time series
Plot the moving averages
Draw the trend line
Describe the trend

Answer



Experimental probability

Sami spins a coin 250 times. He gets 110 heads

(a) Work out the experimental probability of getting a head

(b) Write down the experimental probability of getting a tail

(a) 110/250
(b) 140/250

Risk

	Football	Hockey	Rugby
Injuries	8	5	13
Games	50	60	40

Work out the risk of a knee injury in each sport
Estimate the number of knee injuries next season, which has 35 games

Football 0.16
Hockey 0.083
Rugby 0.325

3 (rounded from 2.9)

Key Facts & Formula

Moving averages	
Expected (relative) frequency	Uses trials to estimate the probability of something happening next.
Equation of a trend line	$Y = ax + b$ where b is the intercept on the y-axis and a is the gradient of the line.
Experimental probability	Number of times the event happens ÷ total number of trials
Estimate	Total number of trials x probability The more times an experiment is repeated the more accurate the estimate will be. Increasing sample size leads to better estimates
Risk	Risk of a fault x number of items sold



Important Ideas

Index numbers are often used to compare price changes over time.

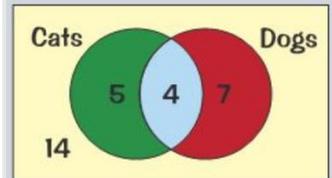
The probability of one event may affect the probability of another.

Vocabulary

Independent events	Events are independent if the outcome of one does not affect the probability of another occurring.
Conditional probability	When the probability of a second event depends on the first.
Index numbers	A way of tracking changes in value through time.
Weighted index numbers	A measure of how a set of items changes in value.
Retail price index (RPI)	Shows changes in the cost of living. Used to set interest rates for student loans.
Consumer price index (CPI)	Shows changes in the cost of living (not including mortgage payments). Used to index benefits, tax credits and pensions in the UK
Gross domestic product (GDP)	The main measure of economic output based on the value of goods and services produced by a country or region.
Crude rates	A simple way to compare population statistics such as births, deaths and employment levels
Standardised rates	Enables valid comparisons between distributions

Question

Conditional probability



Using the Venn diagram above, find the probability that a randomly chosen household does not own a dog, given the household owns a cat.

Index numbers

Year	2013	2014	2015
Index Number	100	85	109

The index numbers in the table show the average monthly rent for a flat, using 2013 as the base year.

a) In which year did the average monthly rent decrease?

b) The average monthly rent in 2013 was £530. Calculate the average monthly rent for the years 2014 and 2015.

Answer

$$P(\text{no dog} \mid \text{cat}) = \frac{\text{Number of households with cats but no dog}}{\text{Number of households with cats}} = \frac{5}{9}$$

(a) Average monthly rate decreased in 2014 ($85 < 100$)

(b) 2014:

$$85 = \frac{\text{price in 2014}}{\pounds 530} \times 100 \Rightarrow \text{price in 2014} = \pounds 450.50$$

2015:

$$109 = \frac{\text{price in 2015}}{\pounds 530} \times 100 \Rightarrow \text{price in 2015} = \pounds 577.70$$

Key Facts & Formula

Independent events	$P(A \text{ and } B) = P(A) \times P(B)$
Conditional probability	$P(A \text{ and } B) = P(A) \times P(B \mid A)$
Index number	$\frac{\text{value}}{\text{value in base year}} \times 100$
Weighted index numbers	$\frac{\sum (\text{index number} \times \text{weight})}{\sum \text{weights}}$
Chain base index number	$\frac{\text{value this year}}{\text{value last year}} \times 100$



M1 Semaine 1

Countries

le Danemark
le Pakistan
le pays de Galles
le Royaume-Uni
l'Algérie
l'Allemagne
l'Angleterre
l'Autriche

la Belgique
l'Espagne
l'Italie
la Pologne
la Russie
la Suisse
les États-Unis
les Pays-Bas

Belgium
Spain
Italy
Poland
Russia
Switzerland
the USA
the Netherlands

Les vacances

Où vas-tu en vacances?

Je vais ...
en France
au pays de Galles
aux États-Unis
Comment voyages-tu?
Je voyage ...
en avion/en bateau
en car/en train
en voiture
à vélo
Où loges-tu?
Je loge dans ...
un camping
un hôtel

Holidays

Where do you go on holiday?

I go ...
to France
to Wales
to the USA
How do you travel?
I travel ...
by plane/by boat
by coach/by train
by car
by bike
Where do you stay?
I stay in/on ...
a campsite
a hotel

une auberge de jeunesse

une caravane
Avec qui pars-tu en vacances?
Je pars ...
avec ma famille
avec mes copains/copines
avec mes grands-parents
seul(e)
C'est comment?
C'est ...
extra/formidable
bien
ennuyeux/nul
Ce n'est pas mal.

a youth hostel

a caravan
Who do you go on holiday with?
I go ...
with my family
with my friends
with my grandparents
alone
What's it like?
It's ...
amazing/great
good
boring/rubbish
It's not bad.

Les hôtels

un hôtel
des chambres d'hôtes
Nous proposons des chambres
avec ...
un grand lit
un lit simple
une salle de bains
une douche
un micro-ondes
une télévision à écran plat
une vue sur la mer

Hotels

a hotel
guest rooms (i.e. in a B&B/
guest house)
We offer rooms with ...
a double bed
a single bed
a bathroom
a shower
a microwave
a flat-screen TV
a sea view

M1 Semaine 2

un balcon
la climatisation
Nous avons aussi ...
une aire de jeux
un parking
une piscine
un restaurant
le Wi-Fi
Nos chambres sont bien équipées.
Le petit-déjeuner est inclus/compris.
Notre hôtel est situé/se trouve ...

a balcony
air conditioning
We also have ...
a games area
a car park
a swimming pool
a restaurant
Wi-Fi
Our rooms are well equipped.
Breakfast is included.
Our hotel is located ...

Réserver une chambre

Nous voulons/Je voudrais réserver
une chambre ...
pour une/deux personne(s)
avec un lit simple/un grand lit
pour une nuit/deux nuits
Est-ce que vous avez ...
une piscine?
la climatisation?

Booking a room

We want/I would like to book
a room ...
for one person/two people
with a single/double bed
for one night/two nights
Do you have ...
a swimming pool?
air conditioning?

Votre chambre est ...
au rez-de-chaussée
au premier étage
au deuxième étage
Je voudrais payer avec ma
carte bancaire.

Your room is ...
on the ground floor
on the first floor
on the second floor
I would like to pay with my debit/
credit card.

Voyager

l'aéroport (m)
le billet
le conducteur/la conductrice
le contrôle des passeports
le guichet
le/la pilote
le quai

Traveling

l'aéroport (f)
la ceinture de sécurité
la circulation
la douane
la gare
la route
les bagages

motorway
seatbelt
traffic
customs
station
road
luggage

M1 Semaine 3

Au guichet

Je peux vous aider?
Je voudrais un aller simple/
un aller-retour pour (Lyon),
s'il vous plaît.
En quelle classe?
En première/deuxième classe.

At the ticket counter

Can I help you?
I would like a single/a return to
(Lyon), please.
In which class?
In first/second class.

C'est quel quai?

Le train part à quelle heure?
Le voyage dure combien de temps?
Est-ce qu'il faut changer?
C'est un train direct.

Which platform is it?

What time does the train leave?
How long does the journey last?
Do I/we have to change?
The train is direct.

M1 Semaine 4

more adventurous
better for the planet
less boring/tiring
less expensive

plus aventureux
mieux pour la planète
moins ennuyeux/fatigant
moins cher

Favourite means of transport and reasons
I always travel (by train, etc.) because it's ...
faster/more comfortable
more practical/greener

Moyens de transports préférés et raisons
Je voyage toujours (en train, etc.) parce que c'est ...
plus rapide/plus confortable
plus pratique/plus vert

Holiday activities

I go windsurfing.
I go sailing.
I do a tree-top adventure.
I go skiing.
I visit the museums.
I visit the monuments.
I go fishing.
I go to the beach.

Je joue à la pétanque.
Je me baigne.
Je me promène.
Je me repose.
Je me lève (tôt/tard).
Je m'habille.
Je ne m'ennuie pas.
Je sors au restaurant.

I play French bowls.
I swim (in the sea).
I go for a walk.
I rest.
I get up (early/late).
I get dressed.
I don't get bored.
I go out to a restaurant.

Au restaurant

Voici la carte.
Le plat du jour, c'est ...
Vous avez fait votre choix?
Pour commencer, je vais prendre ...
Comme plat principal, je voudrais ...
Je vais prendre le menu (à 30 euros).
Et comme boisson?

At the restaurant

Here is the menu.
The daily special is ...
Have you made your choice?
To start, I am going to have ...
As a main course, I would like ...
I am going to have the (30 euro) set menu.
And to drink?

Qu'est-ce que vous avez comme desserts?

Vous avez besoin d'autre chose?
On a besoin de l'addition.
J'ai faim.
J'ai soif.
J'ai envie d'un dessert.

M1 Semaine 5

What desserts do you have?

Do you need anything else?
We need the bill.
I am hungry.
I am thirsty.
I want a dessert.

Les plats

les entrées
les brochettes de crevettes
les escargots
la soupe à la tomate
la tarte à l'oignon
les plats principaux
l'épaule d'agneau
la cuisse de canard
les lasagnes végétariennes
le soup de mer

Dishes

starters
prawn skewers
snails
tomato soup
onion tart
main dishes
shoulder of lamb
duck leg
vegetarian lasagne
sea bass

le poulet basquaise
le rôti de veau
les desserts
la crème brûlée
la mousse au chocolat
le roulé au chocolat
le sorbet
la tarte au citron
la tarte aux pommes
l'eau gazeuse

Basque-style chicken
roast veal
desserts
crème brûlée
chocolate mousse
chocolate roll
sorbet
lemon tart
apple tart
sparkling water

Critiques

J'y suis allé(e) pour le déjeuner/le dîner.
Le service était lent/exceptionnel.
Le serveur/La serveuse était/n'était pas (très) poli(e).

Reviews

I went there for lunch/dinner.
The service was slow/exceptional.
The waiter/waitress was/wasn't ... (very) polite.

C'était ...

délicieux/bien cuit.
La nourriture était froide/trop salée.
La nourriture n'était pas cuite.
Je recommande/Je ne recommande pas ce restaurant.

It was ...

delicious/well cooked.
The food was cold/too salty.
The food wasn't cooked.
I recommend/I don't recommend this restaurant.

M1 Semaine 6

Des vacances catastrophiques

J'ai oublié mon passeport.
J'ai pris un coup de soleil.
J'ai cassé mon appareil photo.
J'ai été malade.
On m'a volé mon sac.
Il a plu tous les jours.
Il y avait des cafards dans notre chambre.
J'ai raté l'avion.
J'ai dû aller chez le médecin.

Catastrophic holidays

I forgot my passport.
I got sunburnt.
I broke my camera.
I got sick.
Someone stole my handbag.
It rained every day.
There were cockroaches in our room.
I missed the plane.
I had to go to the doctor.

J'ai perdu mes photos.
J'ai vomé.
J'ai dû aller au commissariat.
Il n'y avait rien à faire.
On a dû chercher un autre hôtel.
La prochaine fois, je vais ... faire plus attention
mettre de la crème solaire
loger dans un camping

I lost my photos.
I vomited.
I had to go to the police station.
There was nothing to do.
We had to look for another hotel.
Next time, I am going ... to be more careful
to put on sun cream
to stay on a campsite

Les mots essentiels

d'habitude
normalement
tous les ans
le lendemain
à l'avenir
toujours
parfois

High-frequency words

usually
normally
every year
the next day
in future
always/still
sometimes

un peu
plutôt
enfin
évidemment
malheureusement
y
gratuit

a bit
rather, quite
finally
obviously
unfortunately
there
free

M1 Semaine 7

Each test is made of 20 questions.
Previous week vocabulary can be used.





M2 Semaine 1

Les matières
 le commerce
 le dessin
 le français
 la biologie
 la chimie
 la géographie
 la musique
 la physique
 la religion
 la technologie
 l'allemand (m)

l'anglais (m)
 l'art dramatique (m)/le théâtre
 l'EPS (f)/le sport
 l'espagnol (m)
 l'étude des médias (f)
 l'histoire (f)
 l'informatique (f)
 l'instruction civique (f)
 les arts ménagers
 les maths

School subjects
 business studies
 art
 French
 biology
 chemistry
 geography
 music
 physics
 religious studies
 technology
 German

English

drama

PE

Spanish

media studies

history

ICT

citizenship

home technology

maths

L'emploi du temps

à neuf heures
 à neuf heures dix
 à neuf heures et quart
 à neuf heures et demie
 à dix heures moins vingt
 à dix heures moins le quart
 lundi/mardi
 mercredi/jeudi

The timetable

à nine o'clock
 at ten past nine
 at a quarter past nine
 at half past nine
 at twenty to ten
 at a quarter to ten
 (on) Monday(s)/Tuesday(s)
 (on) Wednesday(s)/Thursday(s)

vendredi

la récré(ation)

l'heure du déjeuner

Lundi à neuf heures, j'ai ...

histoire/maths.

Vendredi, j'ai deux heures

de français.

La récré commence à ...

(on) Friday(s)

break time

lunchtime

On Monday at nine o'clock, I have ..

history/maths.

I have two French lessons on

Fridays.

Break time starts at ...

Ce que j'aime et ce que je n'aime pas

Ma matière préférée est ...
 Je suis fort(e) en ...
 Je suis faible en ...
 Je (ne) suis (pas) doué(e) en ...
 C'est ...
 facile/difficile
 utile/mutile

What I like and what I don't like

My favourite subject is ...
 I am good at ...
 I am weak at ...
 I (don't) have a talent for ...
 It's ...
 easy/difficult
 useful/useless

M2 Semaine 2

intéressant/enjoyeux
 fascinant/passionnant
 Le/La prof est ...
 bon(ne)/marrant(e)
 sympa/gentil(le)
 sévère/impatient(e)
 On a trop de devoirs.

interesting/boring
 fascinating/exciting
 The teacher is ...
 good/funny
 nice/kind
 strict/impatient
 We have too much homework.

Une école bien équipée

le gymnase
 le hall
 le terrain de basket
 le terrain de sport
 la bibliothèque
 la cantine

A well-equipped school

sports hall
 (assembly) hall/auditorium
 basketball court
 sports ground
 library
 canteen

la cour de récréation

la piscine

la salle de sport

les labos de science

les salles de classe

les vestiaires

playground

swimming pool

gym

science labs

classrooms

changing rooms

Mon collège

Comment s'appelle ton école?
 Mon école s'appelle ...
 C'est quelle sorte d'école?
 C'est ...
 une école mixte
 une école publique
 une école privée
 une école pour filles/garçons
 pour les élèves de 11 à 16 ans
 Il y a combien d'élèves?
 Il y a (750) élèves et (45) professeurs.
 Quels sont les horaires?

My school

What is your school called?
 My school is called ...
 What sort of school is it?
 It's ...
 a mixed school
 a state school
 a private school
 a school for girls/boys
 for pupils aged 11 to 16
 How many pupils are there?
 There are (750) pupils and (45) teachers.
 What are the school hours?

M2 Semaine 3

La journée commence à (8h30) et finit à (16h ou à 17h).
 Il y a combien de cours par jour?
 Il y a (huit) cours par jour.
 Comment sont les professeurs?
 En général, les profs sont gentils/un peu sévères.
 Qu'est-ce que tu penses de ton collège?
 Je pense que les journées sont longues et qu'on a trop de contrôles.

The school day starts at (8.30 a.m.) and finishes at (4 or 5 p.m.).
 How many lessons are there per day?
 There are (eight) lessons per day.
 What are the teachers like?
 In general, the teachers are kind/a bit strict.
 What do you think of your school?
 I think the days are long and we have too many tests.

M2 Semaine 4

Le règlement scolaire
 Il faut être à l'heure.
 Il faut faire ses devoirs.
 Il faut porter l'uniforme scolaire.
 Il est interdit de mâcher du chewing-gum.
 Il est interdit d'utiliser son portable en classe.
 Il est interdit de porter des bijoux, des piercings ou trop de maquillage.
 Il est interdit de sortir de l'école pendant l'heure du déjeuner.
 Il est interdit de manquer les cours.

L'uniforme scolaire
 Je porte ...
 un pantalon/un polo
 un sweat/une chemise
 une cravate/une jupe
 une veste
 mes propres vêtements

School rules
 You must be on time.
 You have to do your homework.
 You have to wear school uniform.
 It is forbidden to chew chewing gum.
 It is forbidden to use your mobile phone in class.
 It is forbidden to wear jewellery, piercings or too much make-up.
 It is forbidden to leave school at lunchtime.
 It is forbidden to skip lessons.

School uniform
 I wear ...
 trousers/a polo shirt
 a sweatshirt/a shirt
 a tie/a skirt
 a blazer/jacket
 my own clothes

Je trouve ça ...
 juste/logique
 raisonnable/frustrant
 injuste/ridicule
 parce que/car ...
 c'est/ce n'est pas dangereux
 c'est/ce n'est pas important
 on n'est pas des bébés
 il faut respecter les autres
 la mode/la religion n'a pas de place à l'école
 l'école, c'est pour apprendre

I think that's ...
 fair/logical
 reasonable/frustrating
 unfair/ridiculous
 because ...
 it is/isn't dangerous
 it is/isn't important
 we aren't babies
 you have to respect other people
 fashion/religion doesn't have any place in school
 school is for learning

Fashion has no place in school.
Uniform is expensive.
Everyone looks the same/like.
It's old-fashioned and embarrassing.
It's practical and comfortable.

La mode n'a pas de place à l'école.
L'uniforme coûte cher.
Tout le monde se ressemblent.
C'est démodé et embarrassant.
C'est pratique et confortable.

M2 Semaine 5

A l'école primaire et maintenant
 J'avais ...
 J'ai ...
 beaucoup de temps libre
 beaucoup d'amis
 trop de devoirs
 J'allais ...
 Je vais ...
 au ciné-club
 au club d'échecs
 au zoo
 à la piscine
 J'étais ...
 Je suis ...
 dans une chorale
 délégué(e) de classe
 membre de l'équipe de basket
 timide

At primary school and now
 I had/used to have ...
 I have ...
 lots of free time
 lots of friends
 too much homework
 I used to go ...
 I go ...
 to film club
 to chess club
 to the zoo
 to the swimming pool
 I was/used to be ...
 I am ...
 in a choir
 class representative
 a member of the basketball team
 shy

Je faisais ...
 Je fais ...
 du judo/du karaté
 du yoga/de la danse
 de la natation
 Je jouais ...
 Je joue ...
 à cache-cache
 au foot/au hand
 au ping-pong
 au rugby
 Je participais ...
 Je participe ...
 au spectacle de Noël
 Je chantais ...
 Je chante ...
 dans la chorale

I used to do/go ...
I do/go ...
 judo/karate
 yoga/dancing
 swimming
I used to play ...
I play ...
 hide and seek
 football/handball
 ping pong/table tennis
 rugby
I used to participate/take part ...
I participate/take part ...
 in the Christmas play
I sang ...
I sing ...
 in the choir

M2 Semaine 6

Les succès au collège
 Je suis fier/fière de moi.
 Je joue dans l'orchestre.
 Je suis membre du club informatique.
 Je suis membre du conseil d'administration.
 Je vais jouer dans l'équipe de hockey.
 Je vais participer à un échange scolaire.
 J'ai gagné ...
 un prix pour mes efforts en classe
 le championnat de foot/basket
 un concours de slam/danse

Successes at school
 I am proud of myself.
 I play in the orchestra.
 I'm a member of the IT club.
 I'm a member of the school council.
 I'm going to play in the hockey team.
 I'm going to take part in a school exchange.
 I won ...
 a prize for my efforts in class
 the football/basketball championship
 a slam/dance competition

Je participais ...
 un spectacle
 un échange scolaire
 une sortie scolaire
 J'ai organisé ...
 un concert
 un concours de chant
 J'ai récolté de l'argent pour une association caritative.
 Les sorties scolaires sont une bonne/mauvaise idée parce que/qu' ...
 on se fait de nouveaux amis
 on s'amuse ensemble
 c'est trop cher/ennuyeux

I participated/took part in ...
a show
a school exchange
a school trip
I organised ...
a concert
a singing competition
I raised money for a charity.
School trips are a good/bad idea because ...
you make new friends
you have a laugh together
it's too expensive/boring

Je participais ...
 un spectacle
 un échange scolaire
 une sortie scolaire
 J'ai organisé ...
 un concert
 un concours de chant
 J'ai récolté de l'argent pour une association caritative.
 Les sorties scolaires sont une bonne/mauvaise idée parce que/qu' ...
 on se fait de nouveaux amis
 on s'amuse ensemble
 c'est trop cher/ennuyeux

trop (de)
plein de
tout(e)/tous/toutes
tout(e) seul(e)
toute l'école
tous les vendredis

too (much/many)
lots of
all
all alone
the whole school
every Friday

Les mots essentiels
 maintenant
 malheureusement
 meilleur(e)(s)
 pendant
 propre(s)
 Je porte mes propres vêtements.
 Les toilettes sont propres.

High-frequency words
 now
 unfortunately
 best
 during
 own/clean
 I wear my own clothes.
 The toilets are clean.

Each test is made of 20 questions.
 Previous week vocabulary can be used.

Key term	Definition
1. Democracy	a system of government which allows citizens (18+) to vote and take part in how the country is run.
2. Tolerance	the ability or willingness to accept the existence of opinions or behaviour that one dislikes or disagrees with.
3. Liberty	the state of being free within society from harsh restrictions imposed by authority on one's way of life, behaviour, or political views.
4. Law	Rules made by Parliament and enforced by the courts.
5. Respect	Treating a person or their feelings with consideration.
6. Golden rule	Treat others as you would like to be treated.
7. Nationalism	A strong feeling or belief in the rightness of ones country.
8. House of Commons	The more powerful of the two parts of the British Parliament. The members are elected by the public.
9. Bill	A proposal to change something into law.
10. Social Cohesion	Shared sense of belonging for all groups in society.

Why do you need to Know British Values?

Understanding British values are the key values that are believed to be fundamental to being a British citizen and for life in modern British society. There are 5 fundamental British Values. The UK government have been promoting British Values, especially in schools, for over 10 years. The goal is through understanding the British values of **Democracy, the Rule of Law, Individual Liberty, Mutual Respect, and Acceptance** for those with different faiths and beliefs, all citizens will develop self-knowledge, be better able to make the right choices and make contributions to the school and the wider community creating **social cohesion**.

Democracy

In the United Kingdom we vote (age 18 +) for the people we want to run our **councils** and Government. We vote for Members of Parliament (MP's). Elections take place at least once every 5 years. In our democracy there are **political** parties. At the time of writing the political party who has the majority of MP's in Parliament is the Conservative Party. Labour are currently the opposition Party. MP's debate in the Palace of Westminster, in the **House of Commons**. On the opposite side of the Building is the House of Lords. The House of Lords (unelected members) **ratify** law and **policies** put forward by parliament.

Where can I see British Values at School? Democracy – Student voice and prefects.

11. council	a body of people elected to manage the affairs of a city, county, or other municipal district	13. policies	a course or principle of action adopted or proposed by an organization or individual
12. ratify	sign or give formal consent to (a treaty, contract, or agreement), making it officially valid	14. political	relating to the government or public affairs of a country



Key term	Definition
15. consequences	a result or effect, typically one that is unwelcome or unpleasant.
16. principle	a rule or belief governing one's behaviour
17. accountable	required or expected to justify actions or decisions; responsible
18. institution	an organization founded for a religious, educational, professional, or social purpose
19. reconciled	restore friendly relations between
20. extremist	a person who holds extreme political or religious views, especially one who advocates illegal, violent, or other extreme action
21. discrimination	the unjust or prejudicial treatment of different categories of people, especially on the grounds of race, age, or sex
22. dignity	the state or quality of being worthy of honour or respect
23. reciprocated	respond to (a gesture or action) by making a corresponding one
24. radicalised	advocating or based on thorough or complete political or social change; representing or supporting an extreme or progressive section of a political party
25. ethnicity	the fact or state of belonging to a social group that has a common national or cultural tradition



The rule of law

In the UK, we have laws which determine what is legal and illegal. You are expected to know the difference between right and wrong. There are **consequences** for making the wrong choice or taking illegal actions. We all take responsibility for our actions. The rule of law is a principle that individuals and **institutions** are subject and **accountable** to, which is fairly applied and enforced.

Where can I see British Values at School? Rule of Law – Our Behaviour Systems and Behaviour Policy. We have agreed rules and expectations so that our school is a safe and happy place where all differences are **reconciled** peacefully and learning can take place.

Individual liberty

In the UK you are free to have an opinion (unless it is **extremist**) and believe in what you want without **discrimination**.

Where can I see British Values at School? Mutual Respect – Our school ethos of being outstanding Trinitarians encourages us to show respect, anti-bullying and assemblies. Boundaries are used to ensure you are safe.

The acceptance and tolerance of those with different faiths and beliefs and for those without faith.

Mutual Respect and Tolerance are the proper regard for an individuals’ **dignity**, which is **reciprocated**, and a fair, respectful and polite attitude is shown to those who may be different to ourselves. We are to protect one another and to tackle ‘extremist’ views and prevent people from being **radicalised**. Differences in terms of faith, **ethnicity**, gender, sexuality, age, young carers and disability, are differences that should be respected, tolerated and celebrated.

Where can I see British Values at School? Acceptance of differences – Assemblies, RE, Citizenship and PSHE Lessons. As a Christian school we following the teaches of Jesus who said we should ‘love thy neighbours’ We give you messages of tolerance and respect for others no matter what their ethnicity, beliefs, sexuality, gender or disability.