

June to July

Year 10

**KNOWLEDGEABLE
AND EXPERT
LEARNERS**



Self
Quizzing

Flash
Cards

Mind
Maps

Brain
Dumps

enjoylearn**succeed**

INDEPENDENT LEARNING BOOKLET

NAME:

TUTOR GROUP:

CONTENTS

- Using Class Charts Instructions
- Accessing SENECA
- Independent Learning log
- The Core 4 instructions
- Subject Knowledge Organisers

You will need an A4 application booklet.

HOMEWORK:

- Your teacher will set subject specific tasks, with a deadline, on Class Charts.
- You must complete and hand in the work by the deadline

INDEPENDENT LEARNING EXPECTATIONS AND REWARDS:

- You should complete 3 tasks throughout the week (20 minutes on each task)
- The tasks will be set on Class Charts to help you keep track of what you need to do.
- You must bring your ILB and application book to school every day.
- You can choose the subject/topic you want to work on.
- Your tutor will check your ILB regularly to see how you are getting on.
- You will be rewarded for going above and beyond expectations.

SUBJECT KNOWLEDGE ORGANISERS CONTENTS

Subject	Page No.
English	8
Maths	9-11
Computer Science	12
Science	13-19
French	20
German	21
Business	22
Economics	23
Geography	24-25
Health and Social	26-27
History	28-31
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Performing Arts	34-35
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Hospitality	39-40
Music	41-48
Photography	49
Textiles	50
GCSE PE	51-52
PSHCE	53

USING CLASS CHARTS



All of your homework will be set by your teachers using the Class Charts System. You should check Class Charts every day to make sure you are up to date, and that you meet all your deadlines. Below, shows you how to log on and track your homework.

Logging in to Class Charts

1. Enter your email address and password into the fields provided

Access code *
Your access code

Please enter the access code supplied by your teacher.

Remember me

2. Click on the Log in button

LOG IN

3. Enter your date of birth if prompted and click on the OK button

Date of birth

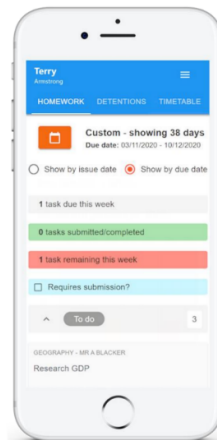
Please enter your date of birth below.

Date of Birth
12/06/2009

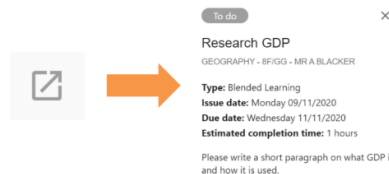
OK CANCEL

Homework

- Select the homework tab on our account.
- This will display a list of the homework tasks which you have been given.
- To change the date range for displayed homework tasks, click on the orange Date button.
- To display tasks in the order they are expected to be handed in, click on the Due date button.
- To mark a homework task as completed, view the homework task of your choice in more detail and tick the Completed checkbox.



To view a homework task in more detail, click on the expand icon in the bottom right hand corner of the homework tile. A popup will appear that contains the a description of the homework task, the estimated completion time and any links or attachments that may have been included.



Keeping track of homework

To track your homework use the three banners above the homework status. This shows the the number of homework tasks that are due that week, how many of those tasks you have completed and how many tasks you still need to complete.

1 task due this week

0 tasks submitted/completed

1 task remaining this week

To only see homework tasks that require an attachment submission, tick the checkbox labelled Requires submission.

Requires submission?

If you are viewing the Homework tab via a desktop or laptop, expanding a homework status category will display a table overview of each homework task for the selected date range.

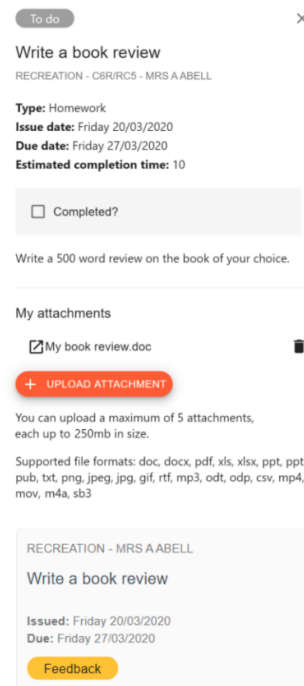
	Homework	Teacher	Lesson	Issued	Due	Estimated time	Type	Feedback
<input checked="" type="checkbox"/>	Research GDP	Mr A Blacker	8F/Gg	Monday 09/11/2020	Wednesday 11/11/2020	1 hours	Blended Learning	
<input checked="" type="checkbox"/>	Write a soliloquy	Mr J Kato	8y/En2	Tuesday 10/11/2020	Tuesday 17/11/2020	30 minutes	Homework	
<input checked="" type="checkbox"/>	Create a poster on French food	Mrs A Abell	7YEL/Fr	Friday 06/11/2020	Thursday 19/11/2020	45 minutes	Homework	Feedback

Homework attachment submissions

For certain homework tasks, you may be asked by your teacher to upload your work as an attachment. When viewing a homework task in more detail, you will see the Upload attachment button if your teacher is expecting your work to be uploaded. To submit a homework attachment, click on the Upload attachment button and select the files of your choice. Successfully uploaded files will then appear above the button

If your teacher leaves feedback on one of your homework attachments, you will see a Feedback icon appear on the associated homework task.

To view the feedback, click on the expand icon in the bottom right hand corner of the homework tile. Your teacher's feedback will appear directly below your homework attachment



To do

Completed

Submitted late

Not submitted

Submitted

To-Do: These are homework tasks that you need to complete. Once you have completed them, tick the checkbox

Completed: These are homework tasks that you have ticked as completed but have not been marked by your teacher

Late: These are homework tasks that have been handed in past the deadline.

Not submitted: These are homework tasks that were not handed in on time.

Submitted: These are homework tasks that have been handed in on time.

HOW TO ACCESS SENECA



Seneca learning is a free online platform that will help you revise for all your subjects.

1.

Go to
<https://senecalearning.com/en-GB/>

2.

Click 'Log In' at the top right hand corner.



Login

Sign up

3.

Select 'Continue with Microsoft'.



Continue with Microsoft

4.

Enter your school email and password.

5.

Select the course(s) you want to work on

If you need any help accessing SENECA please speak to your class teacher, or Miss Holmes.

You can also scan this QR code for a video walkthrough of how to log in as a student

SCAN HERE



INDEPENDENT LEARNING LOG

THE CORE FOUR




Expectation this ½ term: Choose any of the Core 4 strategies, and complete 3 over the week.


- Three tasks should be completed throughout the week, for approximately 20 minutes.
- All Core 4 tasks should be evidenced in your application booklet.
- Use this log to track how what subjects you have done (see example)

Week Beginning	Monday	Tuesday	Wednesday	Thursday	Friday
EXAMPLE:	English: KG1 & 2 (Flash Cards)		History: KG4 & 5 (Mind Map)		Drama: KG 1 & 3 (Self quizzing)
15/06/2026 (3 Tasks Complete)					
22/06/2026 ILB CHECK (6 Tasks Complete)					
29/06/2026 (9 Tasks Complete)					
06/07/2026 (12 Tasks Complete)					


FLASH CARDS - INSTRUCTIONS

- 
Identify knowledge


What are you creating flashcards on?
Look at one knowledge group at a time.

- 
Design


1 Question per flashcard.
Making them clear and concise.
No extended answer questions.

- 
Use

Read the question
Say your answer out loud OR Write your answer down
Check your answer
Quiz yourself on each card at least twice.


- 
Revisit

Resist the questions you got wrong.
Did you just forget? Or make a small error that can be corrected?
Do you need further help from your teacher?


- 
Review

How have you performed when you look back at your answers?
Which flashcards need to be repeated next time?


SELF QUIZZING - INSTRUCTIONS

- 
Identify knowledge


Identify the subject and knowledge groups you are going to cover.
Look at one knowledge group at a time.

- 
Review


Spend around 5 minutes reviewing the knowledge group you have chosen.
Use this time to create questions if you need too.
Read it to yourself
Highlight keywords

- 
Cover and answer

Cover up your knowledge and answer the questions from memory.
Take your time and where possible answer in full sentences.

- 
Revisit

Go back to the content and self-mark your answers in green pen.

- 
Review

Review the areas where there were gaps in knowledge, and self-quiz this area again.

SELF-QUIZZING QUESTIONS

These are taken straight from a knowledge organiser. These are examples of questions in your KO that can help you with self quizzing.

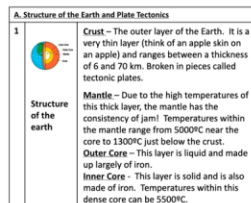
What is happiness?

What is gratitude?

What is vulnerability?

What is courage?

OR




Using your KO, you can create your own questions, such as:

- Structure of the Earth**
1. What is the Crust?
 2. What is the Mantle?
 3. What is the Outer Core?
 4. What is the Inner Core?


You can directly answer these questions in your application book.

MIND MAPS - INSTRUCTIONS


- 
Identify knowledge

Select a topic you wish to cover.
Decide which type of mind map you are creating


 - **Retrieval:** No material
 - **Concept:** Material needed

- 
Topics & Subtopics

Place the main topic in the centre of your page and identify subtopics that will branch off.


- 
Branch off

Branch of your subtopics with further detail.
E.g. Key terms, definitions, examples or descriptions.
Try not to fill the page with too much writing.

- 
Review

Is the information on your mind map accurate?

Green pen: Do you need to add anything?
Green pen: Do you need to correct anything?

- 
Revisit it

Use it to help you prioritise your revision; you can RAG rate it.
Use it to help you summarise the topic, or use your mind map to teach someone else a topic.

BRAIN DUMPS- INSTRUCTIONS

- 
Identify knowledge

Select a topic you wish to cover.
Do you have the resources you need?
Knowledge organisers
Textbooks
Lesson materials

Set your page up and make sure you have the correct equipment

- 
Write it down

Write down everything you can remember about that topic. (with no prompts)
Give yourself a maximum of 5 minutes. This is Quick recall.

- 
Check it

Once complete and you cannot remember any more use your knowledge organiser to check what you have written down.
Use green pen to tick anything correct, or add any information you have missed.

- 
Review

Use your brain dump to:

 - 1 - Identify your strengths
 - 2 - Identify the areas you need to revise
 - 3 - Write down any key areas you missed
 - 4 - Address how you will move forward on points 2 and 3.

- 
Revisit it

Keep your brain dump safe and revisit it.
Use your brain dump to RAG rate your knowledge organiser. This will help you prioritise your revision in the future.

Plot Summary

1	Prologue	Sets up main themes and events within the play.
2	Act 1 Main events?	<ul style="list-style-type: none"> Montagues and Capulets brawl. Romeo depressed about Rosaline. Paris wants to marry Juliet. Juliet's mother and Nurse encourage Juliet to marry Paris. Romeo attends Capulet party, sees Juliet and falls in love.
3	Act 2 Main events?	<ul style="list-style-type: none"> Balcony Scene – R&J decide to get married. Nurse visits Romeo to check his commitment. Friar Lawrence marries R&J.
4	Act 3 Main events?	<ul style="list-style-type: none"> Romeo refuses to fight Tybalt. Mercutio killed by Tybalt and Tybalt by Romeo. Romeo is banished. Juliet told she is to be married to Paris. Capulet flies into a rage after Juliet refuses
5	Act 4 Main events?	<ul style="list-style-type: none"> Juliet asks Friar Lawrence for help. Friar Lawrence supplies a potion and a plan. Juliet agrees to marry Paris. Wedding plans are underway but Juliet found 'dead' by the Nurse.
6	Act 5 Main events?	<ul style="list-style-type: none"> Romeo thinks Juliet is dead. He returns to Verona with a poison. Friar Lawrence discovers Romeo did not get his letter. Romeo kills Paris at Juliet's tomb, takes poison and dies. Juliet wakes and finds Romeo, stabs herself. The feud is over.
∞		





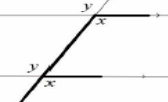
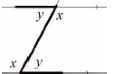
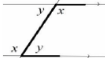
Characters

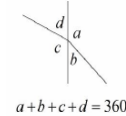
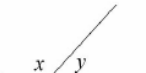


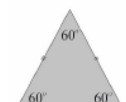

1	Romeo Montague	Young Montague: fall in love with Juliet.	6	Lady Capulet	Juliet's mother. Often cold towards Juliet.
2	Juliet Capulet	Young Capulet: falls in love with Romeo.	7	Nurse	Juliet's nursemaid, they have a close relationship.
3	Lord Capulet	Juliet's father. Loving but also aggressive.	8	Tybalt	Juliet's ruthless, hot-tempered and vengeful cousin.
4	Mercutio	A relative of the Prince and Romeo's loyal best friend.	9	Benvolio	Romeo's cousin: tries to keep the peace.
5	Paris	A rich man determined to marry Juliet.	10	Friar Lawrence	Man of the Church: counsels both families.

Key Vocabulary

1	Petrarchan lover	A hopeless romantic who obsessively admires an idealised, often unattainable, person.
2	Hamartia	Both protagonists can be considered to be tragic heroes: high status, sympathetic characters whose fatal flaws (their impulsiveness) contribute to their inevitable deaths.
4	Sonnet	A poem of 14 lines with a strict rhyme scheme, usually associated with love and romance. R&J speak in a shared sonnet when they first meet.
5	Dramatic Irony	Some things are revealed to the audience before the characters, increasing tension.

Geometry and Measure – Angles

1	Acute Angle 	Acute angles are less than 90°.
2	Obtuse Angle 	Obtuse angles are greater than 90° but less than 180°.
3	Reflex Angle 	Reflex angles are greater than 180° but less than 360°.
4	Right Angle 	Right angles are exactly 90°.
5	Corresponding Angles 	Corresponding angles are equal. They look like F angles, but never say this in the exam.
6	Alternate Angles 	Alternate angles are equal. They look like Z angles, but never say this in the exam.
7	Co-Interior Angles (Also called supplementary) 	Co - Interior angles add up to 180°.

8	Angles at a Point  $a + b + c + d = 360^\circ$	Angles around a point add up to 360°.
9	Angles on a straight line  $x + y = 180^\circ$	Angles around a point on a straight line add up to 180°.
10	<p>Right Angle Triangles have a 90° angle in.</p> <p>Isosceles Triangles have 2 equal sides and 2 equal base angles.</p> <p>Equilateral Triangles have 3 equal sides and 3 equal angles (60°).</p> <p>Scalene Triangles have different sides and different angles.</p>	 Right Angled  Isosceles  Equilateral  Scalene

Key Vocabulary		
1	Integer	A whole number that can be positive, negative or zero.
2	Fraction	A number that represents a part of a whole. It consists of a numerator and a denominator. The numerator represents the number of equal parts of a whole, while the denominator is the total number of parts that make up said whole.
3	Reciprocal	To get the reciprocal of a number, we divide 1 by the number. Eg. the reciprocal of 2 is $\frac{1}{2}$
4	Mixed Number	A number formed of both an integer part and a fraction part . $3\frac{2}{5}$ is an example of a mixed number.
5	Equivalent Fractions	Fractions which represent the same value . $\frac{2}{5} = \frac{4}{10} = \frac{20}{50} = \frac{60}{150}$ etc.
6	Parallel Lines	Two or more lines which are equal distance apart (Think train tracks)
7	Perpendicular	Lines which cross at a 90 degree angle.

Number - Rounding

1	Multiplying Decimals	0.4×0.8 $\times 10 \quad \times 10$ $4 \times 8 = 32$ $32 \div 100 = 0.32$
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2	Dividing Decimals	$14 \div 0.5$ $\times 10 \quad \times 10$ $140 \div 5 = 28$
---	--------------------------	---

3	Round to a given number of decimal places	Round 5.68 to 1dp = 5.7
---	--	-------------------------

4	Round to any significant figure	Round 346 to 1sf = 300
---	--	------------------------

5	Estimate answers to calculations involving decimals	$\begin{array}{r} 7.19 \times 19.7 \\ \underline{0.46} \\ 7 \times 20 \\ = 0.5 \\ = 280 \end{array}$
---	--	--

Number – FDP Equivalence

1	Equivalent fractions, decimals and percentages.	<table border="1"> <thead> <tr> <th>Decimal</th> <th>Percentage</th> <th>Fraction</th> </tr> </thead> <tbody> <tr> <td>0.5</td> <td>50%</td> <td>$\frac{1}{2}$</td> </tr> <tr> <td>0.25</td> <td>25%</td> <td>$\frac{1}{4}$</td> </tr> <tr> <td>0.75</td> <td>75%</td> <td>$\frac{3}{4}$</td> </tr> <tr> <td>0.2</td> <td>20%</td> <td>$\frac{1}{5}$</td> </tr> <tr> <td>0.1</td> <td>10%</td> <td>$\frac{1}{10}$</td> </tr> <tr> <td>0.33</td> <td>33.3%</td> <td>$\frac{1}{3}$</td> </tr> </tbody> </table>	Decimal	Percentage	Fraction	0.5	50%	$\frac{1}{2}$	0.25	25%	$\frac{1}{4}$	0.75	75%	$\frac{3}{4}$	0.2	20%	$\frac{1}{5}$	0.1	10%	$\frac{1}{10}$	0.33	33.3%	$\frac{1}{3}$
Decimal	Percentage	Fraction																					
0.5	50%	$\frac{1}{2}$																					
0.25	25%	$\frac{1}{4}$																					
0.75	75%	$\frac{3}{4}$																					
0.2	20%	$\frac{1}{5}$																					
0.1	10%	$\frac{1}{10}$																					
0.33	33.3%	$\frac{1}{3}$																					

2	Ordering FDP • Convert them all into the same form and then compare	50% $\frac{6}{10}$ 0.45 \downarrow \downarrow \downarrow 0.5 0.6 0.45 \swarrow \searrow \swarrow 0.45 0.5 0.6
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Number – Fractions and Decimals

1	Multiplying Fractions	Multiply the numerators together and multiply the denominators together.
---	-----------------------	--

2	Dividing Fractions	'Keep it, Flip it, Change it – KFC'
---	--------------------	--

3	Adding or Subtracting Fractions	Find the LCM of the denominators to find a common denominator. Use equivalent fractions to change each fraction to the common denominator . Then just add or subtract the numerators and keep the denominator the same .
---	---------------------------------	--

4	Finding the reciprocal	Make the numerator the Denominator and the denominator the numerator. $\frac{1}{2}$ becomes $\frac{2}{1}$
---	------------------------	--

Key Vocabulary

1	Integer	A whole number that can be positive, negative or zero.
---	---------	---

2	Fraction	A number that represents a part of a whole. It consists of a numerator and a denominator. The numerator represents the number of equal parts of a whole, while the denominator is the total number of parts that make up said whole.
---	----------	--

3	Reciprocal	To get the reciprocal of a number, we divide 1 by the number. Eg. the reciprocal of 2 is $\frac{1}{2}$
---	------------	--

4	Mixed Number	A number formed of both an integer part and a fraction part . $3\frac{2}{5}$ is an example of a mixed number.
---	--------------	---

5	Equivalent Fractions	Fractions which represent the same value . $\frac{2}{5} = \frac{4}{10} = \frac{20}{50} = \frac{60}{150}$ etc.
---	----------------------	---

6	Parallel Lines	Two or more lines which are equal distance apart (Think train tracks)
---	----------------	---

7	Perpendicular	Lines which cross at a 90 degree angle.
---	---------------	---

Number – Fractions and Decimals

1	Recurring Decimal	<p>A decimal number that has digits that repeat forever.</p> <p>The part that repeats is usually shown by placing a dot above the digit that repeats, or dots over the first and last digit of the repeating pattern.</p> <p>Eg. $\frac{1}{3} = 0.333 \dots = 0.\dot{3}$</p>
---	-------------------	--

Algebra – Working with Symbols

1	Bracket Expansion	<p>To expand a bracket, multiply each term in the bracket by the expression outside the bracket.</p> <p>$3(m + 7) = 3m + 21$</p>
2	Factorise	<p>The reverse of expanding. Factorising is writing an expression as a product of terms by 'taking out' a common factor.</p> <p>$6x - 15 = 3(2x - 5)$, where 3 is the common factor.</p>
3	Difference of 2 Squares	<p>An expression of the form $a^2 - b^2$ can be factorised to give $(a + b)(a - b)$</p>

Geometry and Measure – Circles and Area

4	Area of Triangle Base x Height ÷ 2	
5	Area of Trapezium $\frac{(a + b)}{2} \times h$	<p>Top add the Bottom x half the height</p>
6	Area of a parallelogram Base x Perpendicular Height	

Key Vocabulary

1	Chord	A line which touches the circumference at each end	
2	Arc	A section from the circumference of a circle	
3	Segment	The region of a circle bounded by a chord and the arc subtended by the chord	
4	Sector	The region of a circle bounded by two radii and an arc	
5	Tangent	A line outside a circle which only touches the circumference at one point	

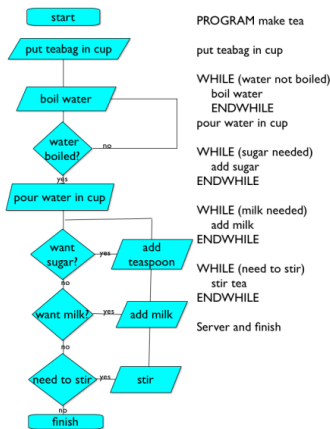
Key Vocabulary

1	Integer	A whole number that can be positive, negative or zero.
2	Fraction	A number that represents a part of a whole. It consists of a numerator and a denominator. The numerator represents the number of equal parts of a whole, while the denominator is the total number of parts that make up said whole.
3	Reciprocal	To get the reciprocal of a number, we divide 1 by the number. Eg. the reciprocal of 2 is $\frac{1}{2}$
4	Expression	Numbers, symbols and operators (such as + and ×) grouped together that show the value of something with no equals sign.
5	Perimeter	Distance around the outside of a shape.
6	Compound Area	An area made up of more than one shape.
7	Area of a Circle	$A = \pi r^2$ which means 'pi x radius squared'.
8	Circumference of a Circle	$C = \pi d$ which means 'pi x diameter'

Algorithms

An algorithm is a sequence of step-by-step instructions used to solve a problem or complete a task. There are two ways to write algorithms:

Flowchart



PROGRAM make tea
 put teabag in cup
 WHILE (water not boiled)
 boil water
 ENDWHILE
 pour water in cup
 WHILE (sugar needed)
 add sugar
 ENDWHILE
 WHILE (milk needed)
 add milk
 ENDWHILE
 WHILE (need to stir)
 stir tea
 ENDWHILE
 Server and finish

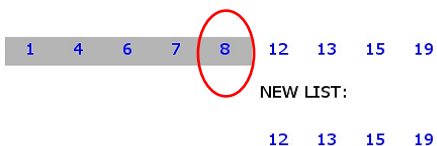
Pseudocode

Searching Algorithms

- Binary Search

A binary search finds an item in a sorted list by repeatedly checking the middle value and halving the list. The list must be sorted. Faster than linear search. Removes half the data after each comparison.

- Find the center of the list
- $N + 1 / 2$
- Compare the middle item

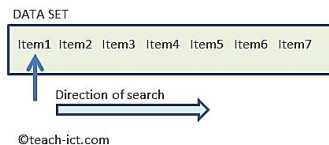


- Discard half of the list
- Repeat until found

Searching Algorithms

- Linear Search

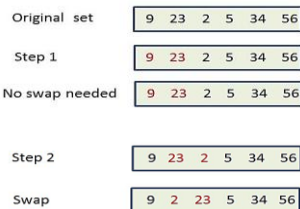
The search starts at the beginning of the list. Each value is compared in order. The search stops when the item is found or the end of the list is reached.



Sorting Algorithms

- Bubble Sort

Bubble sort is a sorting algorithm that repeatedly compares and swaps adjacent items until the list is in order.



- Merge Sort

Merge sort is a sorting algorithm that repeatedly splits a list into smaller parts, sorts them, and merges them back together in order.



Key Vocabulary

Algorithm	An algorithm is a sequence of ordered instructions that are followed step-by-step to solve a problem. This does not need to be on a computer.
Decomposition	Decomposition is the breaking down of a complex problem into smaller more manageable problems that are easier to solve.
Abstraction	Abstraction allows us to remove unnecessary detail from a problem leaving us with only the relevant parts of a problem thereby making it easier to solve.
Pseudocode	Pseudocode is a set of step by step instructions in the style of a programming language but using plain English.
Flowchart	A diagram showing the steps in an algorithm – there are five flowchart symbols.
Sequence	Sequence means instructions are carried out in the correct order, one after another.
Selection	Selection is the use of decisions in an algorithm. A condition is tested and different actions are carried out depending on whether the condition is true or false.
Iteration	Iteration is the repetition of instructions in a loop. Instructions are repeated either a set number of times or until a condition is met.

Energy equations

1	$E_k = \frac{1}{2}mv^2$	Kinetic energy = $\frac{1}{2}$ x mass x speed ²
2	$E_p = mgh$	Gravitational potential energy = mass x gravitational field strength x height
3	$E_e = \frac{1}{2}ke^2$	Elastic potential energy = $\frac{1}{2}$ x spring constant x extension ²
4	$P = E/t$	Power = energy ÷ time
5	$P = W/t$	Power = work done ÷ time
6	Efficiency = useful energy output ÷ total energy input	
7	$\Delta E = mc\Delta\theta$	Energy change = mass x specific heat capacity x change in temperature

Energy stores and systems

1	8 stores of energy	<ol style="list-style-type: none"> 1. Kinetic (movement) 2. Internal (thermal) 3. Chemical (from chemical reactions) 4. Elastic potential (stretched/squashed objects) 5. Gravitational potential (raised objects) 6. Electrostatic (opposite charges) 7. Magnetic 8. Nuclear (energy from an atom).
2	3 methods of energy transfer	<ol style="list-style-type: none"> 1. Mechanically – when work is done (force is used). 2. Electrically – when moving charges are involved. 3. Heating – energy is transferred from a hotter object to a cooler object.
3	Friction and lubrication	When solid objects move over a surface friction is created which leads to the transfer of thermal energy. Lubrication can be used to reduce friction and therefore heat loss.
4	Methods of insulation	Thick walls, loft insulation (reduces convection) cavity walls (reduced convection and conduction) and double glazing (reduced conduction).

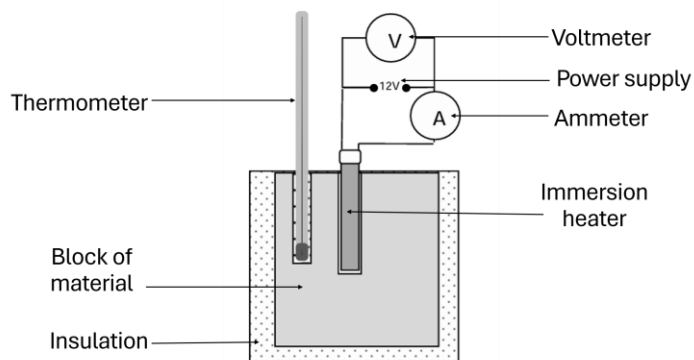
Energy resources

1	3 types of non-renewable energy	Coal, oil and natural gas and all will run out, but give out the most energy.
2	7 types of renewable energy	Solar (from sunlight), Geothermal (heat from earth), Wind (turbines), Hydroelectric (water in dams), Wave, Tidal (river barrages) and Biofuels (burning organic matter).
3	Key advantages	Renewable - (will not run out), less pollution produced. Non-renewable – meet higher energy demands
4	Key disadvantages	Renewable – Impact on environment to build plants, not very reliable, (can't always meet demands) costly so although less pollution not everyone willing to pay higher bills. Non-renewable – greenhouse gas emissions of carbon dioxide (cause global warming) and sulphur dioxide (acid rain).

Required Practical – Specific Heat Capacity

Independent variable – material tested
Dependent variable – Specific heat capacity
Control variables – starting temperature, time taken and insulation.

Linking decrease in one energy store to an increase in temperature and an increase in thermal energy.



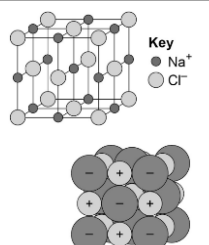
Key Vocabulary

1	Conservation of energy	Energy can never be created or destroyed just transferred from one store to another.
2	Dissipated	A term used to describe ways in which energy is wasted.
3	System	An object or group of objects.
3	Power	The rate of transfer of energy OR the amount of work done in a given time.
4	Specific heat capacity (SHC)	The amount of energy required to raise the temperature of 1kg of a material by 1°C.
5	Conduction	How thermal (heat) energy is transferred in solids by particles colliding.
6	Convection	How thermal energy is transferred in liquids or gases. Relies on density of particles and convection currents.
7	Insulation	Methods to reduce heat loss from an object.
8	Efficiency	When energy is transferred, some is wasted. The less energy is wasted, the more efficient an object is.

PHYSICS ONLY – Required practical – Investigate the effectiveness of materials as thermal insulators.

Independent variable – material tested
Dependent variable – time taken for an object to cool down.
Control variables – starting temperature, size/ thickness of insulation, object that is cooling down.

Ionic bonding

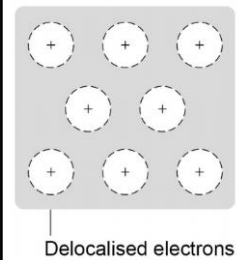
1	Particles involved	Oppositely charged ions
2	Elements involved	Compounds made from metals and non-metals
3	Caused by	Transfer of electrons from metal to non-metal, creating oppositely charged ions.
4	Representation	

Properties of ionic compounds

1	Structure	Giant ionic lattice
2	Do they conduct electricity?	When solid, no – ions cannot move. When molten or in solution, yes – ions can move.
3	Melting and boiling points	High – strong forces of attraction between oppositely charged ions

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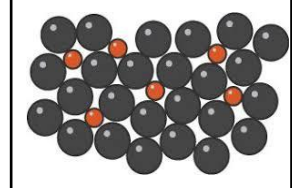
Metallic bonding

1	Particles involved	Atoms sharing delocalised electrons
2	Elements involved	Metallic elements and alloys
3	Representation	

Properties of metals

1	Structure	Regular lattice of positive metal ions in an 'sea' of delocalised electrons
2	Do they conduct electricity?	Yes, delocalised electrons can move through the metal
3	Melting and boiling points	High – strong forces of attraction between positive metal ions and delocalised electrons
4	Hardness	Metals are relatively soft – layers can slide. Alloys are hard.

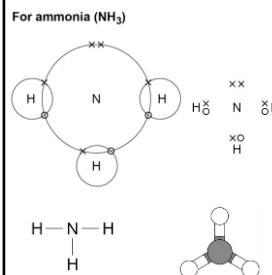
Alloys

1	Structure	Metal atoms mixed with another element (metal or non-metal)
2	Representation	
3	Hardness	Harder than pure metal as layers are distorted and cannot slide

Key Vocabulary

1	Melting point	Temperature at which a solid turns to liquid.
2	Boiling point	Temperature at which a liquid turns to gas.
3	Cation	Positively charged particle
4	Allotropes	Different structural forms of an element.
5	Delocalised	Electrons that are no longer bound to a single atom, and are free to move

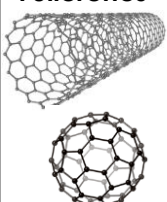
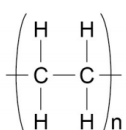
Covalent bonding

1	Particles involved	Atoms sharing a pair of electrons
2	Elements involved	Non-metallic elements and compounds
3	Representation	<p>For ammonia (NH₃)</p> 

Giant covalent structures

1	Bonding	Strong covalent bonds between atoms
2	Do they conduct electricity?	Only those with delocalised electrons
3	Melting and boiling points	High – strong covalent bonds between atoms

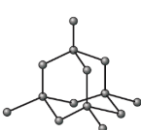

Other giant structures

Fullerenes 	Structure	Molecules of carbon atoms with hollow shapes
	Uses	Fullerenes – drug delivery. Nanotubes – strengthen composite materials.
Polymers 	Structure	Repeating monomers connected by strong covalent bonds
	Properties	Relatively high melting points due to strong intermolecular forces.

Properties of molecular compounds

1	Bonding	Strong covalent bonds between atoms, weak intermolecular forces between molecules.
2	Do they conduct electricity?	No, as there are no charged particles.
3	Melting and boiling points	Low – weak forces of attraction between molecules

Carbon

	Property	Explanation
Diamond 	Hard, high melting point	Every carbon bonded to 4 others with strong covalent bonds.
	Does not conduct electricity	No ions or delocalised electrons.
Graphite/Graphene 	Soft	Layers of carbon atoms can slide.
	Conducts electricity	Each carbon has a delocalised electron, which can carry charge.

Nanochemistry (chemistry only)

1	Nanoscience	Study of particles between 1 and 100 nm in size.
2	Nanometre	A billionth of a metre (1 x 10 ⁻⁹ m)
3	Uses of nanotechnology	Medicine, electronics, cosmetics, catalysts.
4	Advantages	Wide range of applications due to increased surface area to volume ratio and therefore reactivity
5	Disadvantages	Long-term impact on health not fully understood.

Viral diseases

Example	Symptoms	How it spreads	Prevention/ treatment
Measles	Fever and red skin rash	Inhaling airborne droplets from coughs and sneezes	Prevented with a vaccine
HIV	Initially, flu-like illness. Then virus attacks immune system.	Spread by sexual contact or exchange of bodily fluids	Barrier contraception. Treated with antiretroviral medication
TMV (plant disease)	Plant pathogen causes discolouration (mosaic) in leaves and affects growth.	Contact between plant matter	Remove and destroy (e.g. burn) affected plant matter

Bacterial diseases

Example	Symptoms	How it spreads	Prevention/ treatment
Salmonella	Vomiting, diarrhoea, stomach cramps, fever	Bacteria on undercooked food, such as chicken	Good food hygiene (thoroughly cooking foods, such as chicken) Vaccinating poultry
Gonorrhoea	Thick yellow/ green discharge from genitals. Can lead to infertility.	Sexually transmitted disease (STD)	Barrier contraception. Treated with antibiotics (though some strains of gonorrhoea are antibiotic resistant)

Fungal diseases

Example	Symptoms	How it spreads	Prevention/ treatment
Rose black spot (plant disease)	Black spots on leaves	Water or wind spreading fungus spores.	Fungicides Remove and destroy (e.g. burn) affected plant matter

Protist diseases

Example	Symptoms	How it spreads	Prevention/ treatment
Malaria	Severe fever	Mosquitos act as a vector which spread the malaria protist when they bite humans	Mosquito nets, insect repellent, draining standing water (as mosquitos breed in standing water)

Knowledge: Human Defence System

Skin	Acts as a barrier and produces antimicrobial secretions
Nose	Traps particles that contain pathogens
Trachea	Secretes mucus which traps pathogens
Stomach	Produces acid which kills pathogens
White blood cells	Help defend against pathogens by: phagocytosis (engulfing pathogens), making antibodies and antitoxins

Key Vocabulary

1	Communicable Disease	A disease that can be passed on to others
2	Non Communicable Disease	A disease that cannot be passed on to others.
3	Pathogen	Microorganisms that cause infectious diseases.
4	Bacteria	Reproduce rapidly in body and may produce poisons (toxins).
5	Virus	Live and reproduce in cells, causing cell damage.

Antibiotics and painkillers

Vaccination

Antibiotics	Treat bacterial disease by killing bacterial cells	1	Small quantity of dead or inactive pathogen is injected into the body		
	Cannot treat viral pathogens				
Penicillin	The first antibiotic, discovered by Alexander Fleming			2	White blood cells produce antibodies
Painkillers	Treat symptoms of disease but do not kill pathogens			3	If the same pathogen re-enters the body white blood cells can produce antibodies quickly, and in larger quantities.
Antibiotic resistance	Greater use of antibiotics has led to the emergence of strains of bacteria that are resistant to antibiotics. 1. Bacteria which have higher resistance to antibiotics are able to survive and reproduce, 2. Bacteria with low resistance to antibiotics are killed off. 3. Only bacteria with high resistance to antibiotics remain in the population – the population of bacteria is now antibiotic resistant.			4	Antibodies prevent infection
		5	If a large proportion of the population is immune, the spread of the pathogen is reduced greatly.		

Developing new drugs

Origins of medication

Drugs are tested for	<ul style="list-style-type: none"> Efficacy (does it work?) Dosage (how much should a person take?) Safety (Are there any side effects? Is taking too much of the drug toxic?) 	Drug	Treats	Originally from
Stage 1: Pre-clinical trials	<ol style="list-style-type: none"> Drugs are tested on cells/ tissues Drugs are tested on animals 	Digitalis	Heart disease	Foxgloves
Stage 2: Clinical trials (testing on humans)	<ol style="list-style-type: none"> Drugs are tested on a small group of healthy volunteers Drugs are tested on a small group of ill patients Drugs are tested on a large group of ill patients 	Aspirin	Painkiller	Willow
		Penicillin	Antibiotic	Penicillium mould

Monoclonal Antibodies

Definition: Identical copies of one type of antibody produced in laboratory

1	A mouse is injected with pathogen.
2	Lymphocytes produce antibodies.
3	Lymphocytes are removed from the mouse and fused with rapidly dividing mouse tumour cells .
4	The new cells are called hybridomas
5	The hybridomas divide rapidly and release lots of antibodies which are then collected.

Uses of monoclonal antibodies

Pregnancy tests	Measure the levels of hormones in the blood
Detecting pathogens	Can detect very small quantities of chemicals in the blood
Detecting molecules	Fluorescent dye can be attached so it can be seen inside cells or tissues
Treatment of diseases (e.g. cancer)	Bound to radioactive substance, toxic drug or chemical. Cancer cells are targeted to normal body cells are unharmed

Detection and prevention of plant diseases

Detection	Identification
1-Stunted growth	<ul style="list-style-type: none"> Reference using gardening manual or website Laboratory test for pathogens Testing kit using monoclonal antibodies
2- Spots on leaves	
3- Area of decay	
4 -Growths	
5- Malformed stems/leaves	
6 - Discolouration	
7 - Presence of pests	

BIOLOGY ONLY – Required practical – culturing microorganisms

1	Bacteria multiply by simple cell division (binary fission), approximately once every 40mins. Bacteria can be grown in nutrient broth solution or as colonies on an agar plate gel.
2	Aseptic techniques to prepare an uncontaminated culture: <ul style="list-style-type: none"> • Sterilising equipment used to create agar plate • Working near a Bunsen burner to create a convection current of sterilised air. • Sealing the lid of the agar plate at two sides, to allow oxygen to still enter, allowing for aerobic respiration.
3	Required practical: Antibiotics and antiseptics can be used to inhibit the growth of bacteria and zones of inhibition can be calculated. Measure diameter of zone of inhibition (area around antibiotic disc that bacteria hasn't grown) with a ruler. Larger zone of inhibition = more bacteria killed by antibiotic = more effective antibiotic.

Plant defenses

Chemical	Antibacterial substances and toxins made by the plant.
Physical	<ul style="list-style-type: none"> • Thick waxy layers on leaves • Cell walls stop pathogens entering
Mechanical	<ul style="list-style-type: none"> • Thorns • Leaves curling up if touched

Section one : Role-Play

1	I go	Je vais
2	I play	Je joue
3	I go out	Je sors
4	I eat	Je mange
5	at the weekend	le weekend
6	with	avec
7	Do you like?	Tu aimes...?

Section two: Reading aloud – key sounds

1	désolé	ay
2	est	ay – silent t
3	La pollution	sion
4	beaucoup	silent p
5	La paix	silent x
6	maçon	ç - s
7	Les gens	on & silent s

Section three: Photo Card

1	In the 1st photo there is	Sur la première photo il y a
2	In the 2nd photo there is	Sur la deuxième photo il y a
3	You can see	On peut voir
4	They are in the process of	Ils sont en train de
5	On the right	A droite
6	On the left	A gauche
7	In the middle	Au milieu

Section four : Photo Card

1	people	des personnes
2	a man	un homme
3	a woman	une femme
4	a light	une lumière
5	a tree	un arbre
6	a building	un bâtiment

Section five : Photo Card

1	It is inside	C'est à l'intérieur
2	It is outside	C'est à l'extérieur
3	It is nice weather	Il fait beau
4	They are smiling	Ils sourient
5	They are wearing	Ils portent
6	They are talking	Ils parlent

Section one : Role-Play

1	I go	Ich gehe
2	I play	Ich spiele
3	I do	Ich mache
4	I eat	Ich esse
5	every day	jeden Tag
6	with friends	mit Freunden
7	How do you find?	Wie findest du...?

Section four : Photo Card

1	people	Leute
2	a man	einen Mann
3	a woman	eine Frau
4	children	Kinder
5	trees	Bäume
6	a building	ein Gebäude
7	vielleicht ist es ein Park	perhaps it's a park
8	vielleicht ist es eine Schule	perhaps it's a school

Section two: Reading aloud

1	meine	eye
2	die	ee
3	laut	ow
4	Freund	oy
5	Sport	shp
6	groß	ss
7	weil	v
8	Bär	Air
9	möchte	eugh
10	viele	f

Section five : Photo Card

1	sie spielen	they are playing
2	sie chatten	they are chatting
3	sie essen	they are eating
4	sie trinken	they are drinking
5	sie tragen	they are wearing
6	sie lächeln	they are smiling

Section three: Photo Card

1	In the 1st photo there is	Auf dem ersten Foto gibt es
2	In the 2nd photo there is	Auf dem zweiten Foto gibt es
3	There is	Es gibt
4	it's inside	es ist drinnen
5	it's outside	es ist draußen
6	in the background	im Hintergrund
7	in the foreground	im Vordergrund
8	Es gibt ein Handy	There is a phone

1.1.1 The dynamic nature of business		
1	What do we know?	1. Business need to keep evolving
2	Why do new Business ideas come about?	- Changes in technology. - Changes in what consumers want. - Products and services becoming obsolete.
3	How do new ideas come about?	1. Innovation 2. Original new ideas

Key Word	Definitions
Entrepreneur	A person who sets up a business or businesses, taking on financial risks in the hope of profit
Dynamic	Ever changing – businesses need to be dynamic and keep innovating their products/services
Invention	Coming up with a completely new idea
Goods	A product that you can physically touch
Services	A system supplying a need such as transport
Usp	Unique selling point is what makes one business different from another
Profit	Total revenue – total costs

1.1.2 Risk and reward		
1	What do we know?	1. The higher the risk the higher the reward 2. Business must take a risk if they want to be rewarded
2	Example s of Risk	1. Business failure 2. financial loss 3. lack of security
3	Example s of Rewards	1. Business success 2. Profit 3. Independence
4	How to minimise risk	1. Carrying out market research to find out what customers want 2. Writing a business plan to identify potential problems 3. Ensuring that there is sufficient money available
5	What does Business success look like	1. A growing business 2. A positive reputation 3. Winning business awards 4. Becoming a well-known business person

1.1.3 The role of business enterprise		
1	What is the role of an Entrepreneur	1. organises resources 2. makes business decisions 3. takes risks.
2	What is the purpose of Business activity?	1. To produce goods 2. To produce services 3. To meet customer needs and wants 4. To add value
3	What does an Entrepreneur need to be able to make goods or services	1. Capital (money) 2. Enterprise (take risks) 3. Land (a physical area) 4. Labour (staff)
5	Methods to add value	1. convenience, 2. branding, 3. quality, 4. design, 5. unique selling points.

Key Word	Definitions
Risk	a situation involving exposure to loss
Reward	A fair return on a risk taken
Independence	Free from control of others
Needs	Something that is a basic human essential
Wants	Things that make us happy
Innovate	Turning a new idea in to a product or service
Obsolete	No longer exists or is needed

What are factors of production?

- Firms use factors of production and convert them into goods and services

What are the rewards for each factor of production?

- Land – earns rent
- Labour – wages
- Capital – profit
- Enterprise – Profit, dividends

The reward goes to whoever owns/controls the factor of production

Economic resources – Factors of production

Land – natural resources such as agriculture, fishing, forestry, oils

Labour – the skills available and characteristics of the workforce

Capital – investment in man-made aids to production such as factories and machinery

Enterprise – the risk undertaken by an entrepreneur in transforming the other factors of production into output in order to gain a reward, normally profit

<u>Keyword</u>	<u>Definition</u>
Needs	Items essential for survival, such as food, water, shelter and clothing.
Wants	Non-essential items people desire to improve their quality of life, such as mobile phones or designer clothes.
Economic Activity	The production, distribution and consumption of goods and services.
Scarcity	The basic economic problem arising from limited resources and unlimited wants.
Opportunity Cost	The next best alternative foregone when a decision is made.

Making choices

Resources (such as the factors of production) are scarce. This is the problem of scarcity. Scarcity means there isn't enough of something, in this case the factors of production.

However, human wants are unlimited.

Because of scarcity and unlimited wants, choices have to be made.

Key concepts

Opportunity cost	The opportunity cost of a decision is the next best alternative foregone (sacrificed)
Scarcity	Land, labour, capital is scarce. Resources to fulfil our wants and needs are scarce
Trade offs	When more of one thing leads to less of another
Economic choices	Decisions that involve an opportunity cost e.g. Studying for an hour tonight means an hour less playing PS5
Needs	Something that is essential for survival e.g. Food, clothing, shelter
Wants	Things that are not essential but we would love to own or buy e.g. a big house, a sports car

Scenario

Explanation

A government decides to build a new hospital instead of a motorway.

This is an example of opportunity cost – the next best alternative (motorway) is forgone to build a hospital due to scarce resources.

A student chooses to go to university instead of getting a job.

This represents a choice involving opportunity cost – the income from the job is sacrificed to obtain higher education.

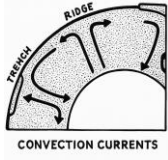
Natural Hazards and Risk

1	Natural Hazard	A natural hazard is any natural event that has the potential to endanger human life, economy and property.
2	Types of Natural Hazard:	
	Tectonic	Earthquakes, Volcanoes, Tsunamis
	Meteorological	Tropical Storms, Flooding
	Biological	Forest Fires, Disease
3	Hazard Risk	<u>Hazards will be worse/more risk if:</u> -There are higher populations -Due to climate change -If the area is poorer (LIC)

Distribution of Hazards

1	Distribution	Spread of something/ where things are found
2	Earthquakes	Found along plate boundaries. E.g., down the West Coast of North and South America
3	Anomalies	Not on plate boundaries usually due to mining or digging for oil/fracking
4	Volcanoes	Found along plate boundaries. E.g., around the Pacific Ocean (Ring of Fire)
5	Anomalies	Not on plate boundaries due to hotspots (weak/thin layers of the Crust the magma breaks through)

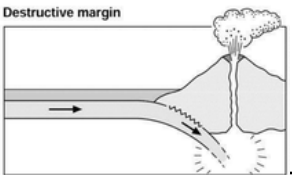
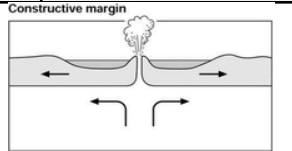
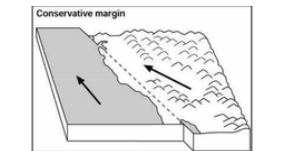
Tectonic Processes

1	Plate Tectonic Theory	The idea that the Earth's crust is divided up into tectonic plates
2	Evidence for this:	
	Jigsaw	Continents fit together like a jigsaw (e.g. South America and Africa)
	Fossils	Fossils from plants and animals are found across different continents
5	Convection Currents	This is the movement of the magma in the mantle- rising from the core (hot) and cooling towards the crust, then sinking 










Causes of an Earthquake

1	Earthquake	Short intense period of shaking of the Earth's crust caused by tectonic movement
2	Focus	Point directly on the Earth's crust where the earthquake starts
3	Epicentre	Point directly above the focus on the top of the crust (surface)
4	Magnitude	The amount of energy released by an earthquake event, measured on the Richter scale
5	Richter Scale	A logarithmic scale that measures earthquakes (10-fold increase in energy on the scale as it increases by 1) E.g. 7.6 is 10 times bigger than a 6.6

Plate Boundaries

1	Destructive Plate Margin/Boundary	
		Plates move towards each other, denser (heavier plate) subducts Crust sinks into the mantle and melts, friction created between plates causes earthquakes Extra magma from melted crust causes pressure to build up, released as volcano
	Mariana Trench- South American and Nazca Plates Hazards include: - Volcanoes - Earthquakes	
2	Constructive Plate Margin/Boundary	
		Plates move away from each other and creates a gap in the crust Magma rises to fill the gap and cools/hardens creating new crust- volcano
	Mid-Atlantic Ridge- North American and Eurasian Plates Hazards include: - Earthquakes - Volcanoes	Movement of the plates sometimes sticks/slips and causes earthquakes
3	Conservative Plate Margin/Boundary	
		Plates move side by side/one faster than the other Friction/pressure builds up between the plates
	San Andreas Fault Line- North American and Pacific plates Hazards include: - Earthquakes	This is then released as they slip as an earthquake- NO VOLCANOES!

CASE STUDY: L'Aquila, Italy (Earthquake)

1	Where?	Italy, which is a HIC . On a destructive plate margin.
2	When?	2009
3	Magnitude?	6.3 magnitude
4	Deaths? Cost?	308 deaths \$15 billion in damage 
5	Primary Effects	 10,000 buildings collapsed
6		 Gas and water pipes were broken
7	Secondary Effects	 Created 'red zones' in the city centre- loss of business
8		 Broken water pipes caused landslides in nearby towns
9	Immediate Responses	 Italian Red Cross were searching and rescuing within the hour
10		 Money provided by the Italian Government to help pay rent
11	Long-Term Responses	 New housing built for over 20,000 residents
12		 Investigations into why some buildings weren't built to withstand the earthquake










Comparing Earthquakes (HIC v LIC)

1	Wealth	Italy has more money and will therefore be better prepared and able to recover/reduce their impacts than Nepal
2	Magnitude	Nepal had a bigger magnitude- therefore are expected to have worse impacts
3	Buildings	More buildings will fall in Nepal due to not having the money to build them earthquake proof
4	Deaths	More deaths in Nepal due to more damage and destructive and lack of education
5	Aid	Nepal relied on a lot more aid from other countries so will recover/respond slower
6	Cost	Italy will cost more due to them having more to lose, spending more money on their cities

Why Live in Areas at Risk?

1	Despite the risks, some people still live in these areas at risk of tectonic hazards:	
2	Energy	Geothermal energy from volcanoes, e.g. in Iceland is an opportunity
3	Farming	Ash from volcanoes creates very fertile soils, good for farmers
4	Mining	Lots of minerals are found in volcanic areas, e.g. sulphur
5	Tourism	There are lots of people who want to see these places and therefore this creates lots of jobs in tourism

CASE STUDY: Nepal (Earthquake)

1	Where?	Nepal, which is an LIC . On a collision (same as destructive) plate margin.
2	When?	2015
3	Magnitude?	7.8 magnitude
4	Deaths? Cost?	8,841 deaths \$10 billion in damage 
5	Primary Effects	 138000 buildings collapsed
6		 Lots of rice seeds and stores of seeds were destroyed
7	Secondary Effects	 Lack of food led to a famine
8		 Triggered an avalanche on Mt Everest (killed 20 more)
9	Immediate Responses	 Search and Rescue teams were deployed from other countries (UK), took 24 hours to arrive
10		 Temporary shelters set up for the homeless (over 200,000)
11	Long-Term Responses	 Stricter building laws put in place to protect buildings
12		 Ministry of Tourism extended passes to try and attract more visitors

1.1 Types of Care

Health care settings	Dental practice, GP surgery, Health centre, Hospital, Nursing home, Optician, Pharmacy, Walk-in centre
Health Care Examples	<ul style="list-style-type: none"> • Visiting the dentist twice a year for a check-up or A&E (Accident and Emergency) for a sports injury • Pregnant woman visiting the hospital for an ultrasound scan on her unborn baby
Social care settings	Residential home, Retirement home, social services department, support group, community centre, day centre, food bank, homeless shelter.
Social Care Examples	<ul style="list-style-type: none"> • An individual staying at a homeless shelter or struggling to cope with a physically disabled child • Dementia resident cannot care for themselves in their own home, now living in a residential care home.

1.2 The Rights of service users

Choice	<ul style="list-style-type: none"> • Choosing which activities they participate in • Choosing what to eat • Choosing the type of treatment
Confidentiality	<ul style="list-style-type: none"> • Service users have a duty of care to protect service users' personal information (verbal and written) • Service providers cannot discuss service users care with their family and friends not directly involved in their care. Conversations should be in a private room (cannot overhear) • Keep personal information secure in a locked cupboard or filing cabinet. Computers should be password protected. Providers need a log in with a secure email/ password to access data/wear a security badge
Consultation	<ul style="list-style-type: none"> • Service users should be involved in all decisions that are made about them. • Service providers must find out and respect the service users' opinions, beliefs and concerns to build trust. • Service users involved in decision-making will feel more in control reducing fears or worries they have.
Equal and Fair treatment	<ul style="list-style-type: none"> • Every service user can access health and social care services, regardless of who they are (not unfairly because of their colour, age, gender, money available or ability to care for themselves. • Misconception - we should treat everyone in the same way, but this means some will be disadvantaged. E.g., providing information in large print, different language, braille.
Protection from abuse and Harm	<ul style="list-style-type: none"> • Includes health and safety, safe working practices and knowledge of what to do if you have concerns. • Service providers have a duty to prevent harm and abuse - have a clear complaints procedure. • Staff should monitor behaviour, be vigilant and receive the correct training to be able to recognise signs of abuse and how to report them. <p>Harm - Can occur in unsafe or inaccessible to service users (inadequate lighting, slippery floors, missing handrails equipment not checked regularly, procedures not followed)</p> <p>Abuse - Can occur deliberately or accidentally (racism, lack of training, sexual orientation) it could be cruel comments, physical action or isolation.</p>

Key Terms

Consultation	Service providers share information with service users and vice versa, so care decisions can be made together.
Empowerment	Relates to the control or 'power' a service user feels they have over their life
Holistic approach	Consider the emotional and psychological needs as well as the physical health

1.3 The benefits to service users' health and wellbeing when their rights are maintained

Empowerment - Control or 'power' will support the resident to feel stronger and more confident therefore more independent and self-reliant in making their own decisions

Independence and self-reliance	Promoting self-worth and self-confidence. Contributing to self-esteem.
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Feelings of Control	Ensuring their rights are met giving them a sense of control e.g., Am I okay to listen to your chest?
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Choice	To increase their understanding and increase their self-esteem.
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High self-esteem - if rights are maintained they will feel valued and respected increasing their self-esteem

Feeling valued	Feeling worthy of care. More likely to ask for additional support in the future.
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Feeling respected	Asking their preferred name and listening to them properly, developing a partnership
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Positive mental Health	This contributes to a person's self-esteem and self-worth, allowing people to cope with change better Take a holistic approach considering how the person feels about their care.
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Service users' needs are not met - care should be specific and well planned to the service user.

Appropriate care or treatment	Service users receive care that is appropriate to their needs e.g. lifts, wide doorways and ramps.
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Improvements in physical or mental health	Service users' health and wellbeing will benefit
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Trust - service users will feel safe and confident with the care provided.

Safety from harm	Trusting relationships will allow confidence to develop because they feel safe and secure
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Best interests	Care should have their best interest at heart. Gives reassurance and confidence in their care. Staff training makes service users safe
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Confidence in the care received	They will feel worthy, valued, respected and safe. Trust is linked to confidentiality where conversations are not overheard. This creates confidence.
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1. Political situation in the 1920s

1	Which party was in charge?	1. The Republican party
2	What were the Republican policies?	<ol style="list-style-type: none"> 1. Laissez-faire – the government shouldn't interfere with businesses 2. Isolationism – the USA should focus on themselves 3. Low taxes – allowed people to have more disposable income 4. Tariffs – taxes on imported goods pushed people to buy American goods

2. Why did America Experience a Boom?

1	Natural Resources	1. America had lots of natural resources like coal and iron. This meant they didn't need to import materials for production
2	Joining WWI late	1. The USA didn't join WWI until April 1917, so they didn't experience the same loss of men and resources that other countries did
3	Republican Policies	1. Republican policies benefited big businesses and allowed them to make as much money as possible – this fed into the US economy
4	The Stock Market	<ol style="list-style-type: none"> 1. Businesses sold shares on the stock market, which gave them investment to grow 2. Ordinary people increased their wealth by buying and selling these shares
5	Mass Production	<ol style="list-style-type: none"> 1. Henry Ford developed the assembly line to make his cars faster and cheaper 2. Other manufacturers adopted this method 3. It created jobs and encouraged more people to buy products as they were cheaper
5	Consumerism	<ol style="list-style-type: none"> 1. Due to higher employment and lower taxes, more people had disposable income 2. Advertising and hire purchase encouraged everyone to buy the newest and latest products

Key word	Definition
Assembly Line	A production line in a factory where goods are produced in large numbers
Buying on the Margin	A method of buying shares where an investor pays 10% of the share price and repays the rest with their profits
Constitution	The system of laws a country is governed by
Consumer Society	a society centred on buying the newest goods and services
Economic boom	A time when businesses are doing well, sales are high, wages are rising and unemployment is low
Flapper	Usually rich young women who shocked older women with their independent behaviour
Hire Purchase	A way of buying goods by paying in small instalments over a long time
Isolationism	The idea that America should not play an important role in European concerns
Jazz	Popular music style associated with the 1920s
Laissez-faire	A government policy of not getting involved in people's lives
Mass Production	The process of producing goods in large quantities, using machinery
Prohibition	When the production, sale and transporting of alcohol was banned
Republican	One of 2 major political parties in America; seen as more conservative
Share	A part of a business that is sold to get investment in the company
Speculation	Gambling on the stock market, often with borrowed money
Stock Market	Where stocks were bought and sold
Tariffs	A tax added onto the price of goods

3. How did popular culture change in the 1920s?

1	Why did culture change?	1. People had more freedoms and disposable income to spend on leisure activities
2	What new pastimes were there?	1. New crazes like mahjong, dances like the Charleston and even sitting on flag poles became popular
3	How did cinema change in the 1920s?	<ol style="list-style-type: none"> 1. Cinema became increasingly popular 2. By 1929 100 million tickets were sold per week 3. Celebrities like Clara Bow and Rudolpho Valentino became popular and people tried to copy their lifestyle 4. The Hays Code was a set of strict rules about what couldn't be in movies
4	How did radio and music change?	<ol style="list-style-type: none"> 1. Due to mass production, the radio was more affordable 2. Sports got a bigger following as it was broadcast on the radio 3. By 1922, there were over 500 radio stations compared to 1 in 1921 4. Jazz became the most popular form of music. 5. Jazz was disapproved of by the older generation who thought it encouraged immoral behaviour
5	How did life change for women?	<ol style="list-style-type: none"> 1. In 1920, women gained the right to vote in the US 2. This encouraged women to look for other freedoms in life. 3. Women began to dress and act more freely – they were called flappers
6	What was a flapper like?	<ol style="list-style-type: none"> 1. They wore lots of make up and jewellery 2. They cut their hair short 3. They wore short skirts 4. They smoked and drank in public
7	Who disapproved of the flappers?	<ol style="list-style-type: none"> 1. The older generations disapproved of the way the flappers lived 2. There was even an anti-flirt league set up to try to persuade women not to act in this new way

4. What was Prohibition?

1	What was Prohibition?	1. A ban on producing, selling, transporting or importing alcohol between 1920 and 1933.
2	Why was it introduced?	<ol style="list-style-type: none"> 1. Concerns that alcohol was having a bad effect on the nation's morality and health. 2. Many religious organisations believed alcohol contributed to social problems. 3. People in rural areas worried that alcohol fuelled crime and violence in towns. 4. Many German immigrants brewed beer and were unpopular after WW1, so buying beer was seen as unpatriotic.
3	Why was it hard to enforce?	<ol style="list-style-type: none"> 1. It was difficult to police – there were over 18,600 miles of coast for only 3000 Prohls to police 2. Many people wanted to continue drinking 3. Gangs were involved in running speakeasies and selling moonshine 4. Gangs were able to bribe police, agents, border guards and judges.

5. Organised Crime & the success of Prohibition

- | | | |
|---|---------------------------------------|---|
| 1 | What was the role of organised crime? | <ol style="list-style-type: none"> Gangs ran illegal bars called speakeasies and became very wealthy. 'Organised crime' was able to develop as gangs grew wealthy through fixing gambling events, racketeering and running brothels. Al Capone made \$10 million per year from racketeering |
| 2 | Did it work? | <ol style="list-style-type: none"> There were around 200,000 speakeasies in the USA. In New York the number of establishments selling alcohol actually rose during Prohibition. Deaths from alcohol rose from 98 to 8000 by 1926 Prohibition actually created a rise in crime through the growth in gangsters, organised crime and police corruption. Prohibition lacked popular support |
| 3 | Why did some oppose it? | <ol style="list-style-type: none"> They argued that it threatened people's individual rights and encouraged disrespect for the law. They said re-legalisation of alcohol could create legal jobs within the brewing industry. The government could organise the sale and tax of alcohol, taking power out of the hands of criminals. |

6. Immigration Tension

- | | | |
|---|---|--|
| 1 | Why did people move to America? | <ol style="list-style-type: none"> There were plenty of industrial jobs in America. Much of Europe was poor and life was hard and unfulfilling. American living standards were higher and wages were better. There were fewer obstacles for working-class people to improve their lives and many were attracted to the 'American Dream'. Some groups faced political or religious persecution in Europe. |
| 2 | What was the impact? | <ol style="list-style-type: none"> Large ethnic areas developed in cities, for example Little Italy in New York, as various groups from southern Europe moved in large numbers. Many immigrants were often resented as they were poor, did not speak English well, and had unfamiliar religious traditions (e.g. Jewish/Catholic). WWI made Americans more suspicious of foreigners, especially those with Russian links due to the Communist revolution of 1917 in Russia. |
| 3 | What was life like for immigrants? | <ol style="list-style-type: none"> Some became very wealthy or successful by starting businesses. For many, working and living conditions remained very difficult. Many immigrants lacked education and would take any job available. This meant that many Americans felt immigrants were 'stealing' jobs. |
| 4 | How did the government limit immigration? | <ol style="list-style-type: none"> The 1917 Literacy Act banned immigrants over 16 who could not read a sentence of 40 words. The 1921 Immigration Quota Law limited the maximum number of new immigrants per year to 350,000. The 1924 National Origins Act allowed only 150,000 immigrants per year. |

Key word	Definition
Bootlegger	People who smuggled alcohol in their boots into the USA
Jim Crow Laws	Laws that discriminated against black people and enforced segregation
KKK	A racist organisation popular in the 1920s
Lynch	To kill without a trial – usually by hanging
Melting Pot	A place where different peoples are mixed together.
Racism	Prejudice or discrimination against a racial group
Racketeering	An illegal activity in which gangsters demand payment from a businessman or shopkeeper in return for 'protection'
Segregate	To keep black and white people separate
White Supremacy	The belief that white people are better than other races

6. The Red Scare & Sacco and Vanzetti

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|---|--------------------------------------|--|
| 1 | What was the Red Scare? | <ol style="list-style-type: none"> In 1917, there was a Communist Revolution in Russia. Communism worried people because it contradicted American ideas of freedom and individual wealth. With many immigrants from Russia and Eastern Europe arrived in, people feared communism gaining popularity in America. |
| 2 | How did the Red Scare affect the US? | <ol style="list-style-type: none"> In July 1919 a Communist suicide bomber attacked the house of US Attorney General A. Mitchell Palmer. Later in 1919, an unidentified bomber blew up 30 people in New York. Communists were suspected. Palmer was in charge of the US legal and police systems. He vowed to get rid of Communists. Around 6000 suspected Communists in 33 cities were arrested during the 'Palmer Raids'. However, little evidence of Communist plots was found. This period of Communist paranoia became known as the 'Red Scare' |
| 4 | Who were Sacco and Vanzetti? | <ol style="list-style-type: none"> Sacco and Vanzetti were Italian anarchists who were found guilty in May 1921 of robbing a shoe factory and killing two people in April 1920. There was no conclusive evidence, but they were found guilty and sentenced to death. Both spoke little English and it was claimed that they did not understand the charges. The judge said even if they had not committed that specific crime they were 'the enemy' and 'morally to blame'. |
| 5 | Why was their case so important? | <ol style="list-style-type: none"> It was reported worldwide and there were huge protests against the verdict. Protestors said the men were innocent and had been found guilty because of their race and their politics. Despite this, Sacco and Vanzetti were executed by electric chair in August 1927. |

7. Racial Tension

- | | | |
|---|---|--|
| 1 | What was life like for African Americans? | <ol style="list-style-type: none"> Black people in the South faced discrimination and segregation under the Jim Crow laws. They had to use separate restaurants, hotels, swimming pools and cemeteries as white people. Lots of effort was expended on stopping them voting. These laws also stopped inter-racial marriage Many judges, sheriffs and police supported the Jim Crow laws. |
| 2 | Why did they leave the South? | <ol style="list-style-type: none"> Nearly 2 million African Americans left the southern states in the hope of a better life away from segregation/ By the 1920s the African American population of Chicago and New York had more than doubled since 1900 |
| 3 | What was life like in the North? | <ol style="list-style-type: none"> They still experienced racism in the north – they were the last to be hired for particular jobs and the first to be fired. They occupied the worst housing in the worst areas of cities. Black workers were often underpaid or unable to get jobs in certain industries or workplaces. In 1919 there was a race riot in Chicago after an African American youth entered a 'whites-only' beach |
| 4 | What was the Black Renaissance? | <ol style="list-style-type: none"> Harlem in New York became famous as a centre for black poets, writers, artists and creativity White customers were attracted to these areas due to their vibrant and lively nightclubs and music venues. Some African Americans entered politics. WEB DuBois set up the NAACP in 1910, which worked to improve black rights |
| 5 | What was the KKK? | <ol style="list-style-type: none"> A white supremacist terror group founded in the 1860s by Southern Civil War veterans. By 1925, their popularity had reached 5 million. Most of their members were poor white people They felt African-Americans and immigrants were taking their jobs |
| 6 | What did they do? | <ol style="list-style-type: none"> They attacked and intimidated the people they believed to be inferior. Their tactics included whipping, kidnapping and lynching They had many supporters in important places, like the police force and judges Their popularity decreased after a local Klan leader was found guilty of rape and murder. Within a year membership fell to 300,000 |

Subject: RE	Topic: Crime and Punishment	Year Group: 10
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Knowledge Key concept : Crime							
Define		Explain		Evidence			
1	What is crime?	Action which breaks the law; can be against the person (eg murder), against property (eg vandalism), or against the state (eg treason).	Responses to people committing crime	Seek help to reform the person, use places such as prison for rehabilitation. Punishment such as prison	Explain one religious scripture	'let everyone be subject to the governing authorities' Bible NT	You must follow the law of your country as well as your religion
2	What is hate crime?	Crime against a person because of race, gender, sexuality etc.	How do religions respond to hate crime?	Hate crime is not accepted and should be punished Victims should be supported	Explain one religious scripture	'made in the image of God' 'neither male nor female in the kingdom of heaven'	Christians believe everyone is made equal by God and is special therefore no one should be cruel to another.
3	What is Murder?	Unlawfully killing another person	How do religions respond to murder?	Punishment such as prison or going to hell	Explain one religious scripture	'do not kill' 10 commandments	Killing another is a great sin and should be punished.. This is a command from God.
4	What is theft?	Taking something without the owner's consent.	How do religions respond to theft?	Punishment then reformation, help the person if its through desperation	Explain one religious scripture	'do not steal' 10 commandments	Taking what is not yours is wrong in accordance with Gods commands

Knowledge Key concept : Reasons for Crime							
Define		Explain		Evidence			
1	What are good intentions?	When an action intends to have a good consequence	What is the impact or influence?	You will be rewarded for thinking positively and for always having a good intention, even if the action is wrong.	Explain one religious scripture	'Allah hears your hearts intentions' Quran	God is omniscient so knows your thoughts and intentions as well as sees your actions.
2	What are evil intentions?	Having the desire or thought to intentionally harm someone else	What is the impact or influence?	You will be severely punished for bad intentions even if you do not go through with the actions. Thoughts matter.			

Subject: RE	Topic: Crime and Punishment	Year Group: 10
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Knowledge Key concept : Reasons for Crime

		Define	Explain		Evidence		
3	What is upbringing?	The environment a child lives in, and the instructions they receive, while they are growing up; can be a cause of crime.	Why is it a reason for crime?	People may be brought up thinking crime is acceptable.	Explain one religious scripture	'Anyone who does not do what is right is not a child of God' Bible	You are in control of your own actions and if you chose to do bad you will be punished
4	What is poverty?	The state of being without the things needed for a reasonable quality of life; can be a cause of crime.	Why is it a reason for crime?	May use crime to better their lives e.g.: selling drugs for money	Explain one religious scripture	'Better is a poor man who walks in his integrity than a rich man who is crooked in his ways' Bible	Being poor is not sinful but doing bad actions as. You are judged on good deeds not material possessions
5	What is mental illness?	A medical condition that can cause changes to a person's behaviour; can be a cause of crime.	Why is it a reason for crime?	People are less aware of their actions and the consequences.	Explain one religious scripture	"Come to me, all you who are weary and burdened, and I will give you rest." – Bible	God will support all those who are struggling and sick. He will show compassion and love
6	What is addiction?	Being addicted to/dependent on a particular substance; can be a cause of crime (eg stealing money to pay for illegal drugs).	Why is it a reason for crime?	Desperation for drugs may take over their desire to be moral.	Explain one religious scripture	'Do not cast yourself into destruction with your own hands' Quran	If you commit crime due to an addiction, then you have brought on the bad deed yourself- you should not give in to desires and addiction
7	What is greed?	Wanting or desiring something or more of something.	Why is it a reason for crime?	People want what they don't have so take it instead	Explain one religious story	The parable of the rich man	A rich man who worships money will not get into money. Greed is against the 10 commandments.
8	What is an unjust law?	A legal requirement within a society that is believed to be unfair; a cause of crime if a person believes they cannot follow (or must act against) a law they believe is unjust.	How do people oppose an unjust law?	They believe the law is wrong so will break it. E.g. stealing from the rich	Explain one religious scripture	'let everyone be subject to the governing authorities' Bible NT	Religious people must always uphold the law and

Characterisation & Rehearsal Techniques

1	Off Text Improvisation	Making up a scene on the spot, without a script, imagining what happens before or after the text.
2	The Leading Technique	Using different body parts to lead (push forward) when moving in character.
3	Seven Levels Of Tension	How much we relax or tense our muscles to show a character. 1. Exhausted – Heavy, like a jellyfish 2. Laid back – No worries, relaxed on a sunny beach 3. Neutral – No story, blank 4. Alert – Curious, lost something, confused 5. Suspense – Suspicious, Cautious 6. Passionate – Melodramatic, despair 7. Tragic – Grief, petrified, frozen with fear
4	Tempo and Rhythm	Walking/moving/speaking at different speeds and on different beats to explore how it communicates your character's mood/personality.
5	Emotion Graph	Plotting a character's different emotions throughout the play on a graph to show their emotional journey.
6	Role on the Wall	An outline of a person. On the inside, you write the character's inner thoughts and feelings. On the outside, you write what other people see about the character.
7	Status Game	Giving your character a number status (from 1 -10) and exploring how they act with others OR an object (e.g. a chair) who are of different status
8	Hot Seating	Asking a character questions about their background, situation or motivation.

Warm-Up Exercises

1	Relaxing the face	Massaging the face and jaw to make sure there is no tension.
2	Larynx	Larynx = Voicebox We reduced tension and strain in the larynx by gently sirening and yawning.
3	Breath Control	We use our diaphragm to support our breathing so we have enough breath when speaking our lines.
4	Body Movement	Begin with aerobic exercise to increase heart-rate. Move onto warming up the joints with circular motions. Finish with stretches (60 seconds each).
5	Exploring Resonance	When the voice is vibrating in your body to create difference voice sounds and voice qualities. E.g., a nasal voice or a deep powerful voice.
6	Tongue Twisters	A phrase or sentence which is difficult to say out loud because it involves similar sounds close together. They can help warm-up the face muscles and voice, ready for a performance.

Contextual links: - Warm up videos from The National Theatre

- [AnActor'sWarm-Up | Voice | National Theatre - YouTube](#)
- [Vocal Warm-Up | #1 Breathing | National Theatre \(youtube.com\)](#)
- https://www.youtube.com/watch?time_continue=3&v=0E9-UHcwgVA

PHYSICAL SKILLS - GGSPEED			
1.	G	<u>G</u> ESTURES	Using your hands and arms to communicate
1.	G	<u>G</u> AIT	The pattern or manner of how a person walks
2.	S	<u>S</u> TANCE	Where you place your feet and legs.
3.	P	<u>P</u> OSTURE	How you hold your body, using your back and head.
4.	E	<u>E</u> XPRESSION	How parts of your face are positioned.
5.	E	<u>E</u> YE CONTACT	Where you are looking. For example, into somebody's eyes or looking at the audience.
6.		<u>D</u> YNAMICS	How you move. For example, sharply / smoothly.

VOCAL SKILLS - DEPARTT			
1.	D	<u>D</u> ICTION AND <u>P</u> ROJECTI <u>O</u> N	How clear your speech is Projection means making your voice heard
2.	E	<u>E</u> MPHASIS	Making words stand out
3.	P	<u>P</u> ITCH	How high or low your voice is
4.	A	<u>A</u> CCENT	The way you pronounce your words to show where you are from
5.	R	<u>R</u> HYTHM	How the speech flows and where have pauses
6.	T	<u>T</u> ONE	The emotion behind the speech
7.	T	<u>T</u> EMPO	How fast or slow the speech is

SPACE AND BLOCKING - PLEASED			
1.	P	<u>P</u> ROXEMICS	The distance between actors / objects / the audience (how close or far away they are)
2.	L	<u>L</u> EVELS	How high or low an actor is positioned
3.	E	<u>E</u> NTRANCES	Where an actor comes onto the stage
4.	A	<u>A</u> UDIENCE	Where the people watching are positioned and being aware of what they can see
5.	S	<u>S</u> ET AND <u>P</u> ROPS	How the actor uses and moves around the furniture and objects on stage
6.	E	<u>E</u> XITS	Where an actor goes off the stage
7.	D	<u>D</u> IRECTION	Which way an actor is facing e.g. up stage / down stage / left / right / centre

HIGH LEVEL PERFORMANCE SKILLS FOR DETAILED CHARACTERISATION - QUIT			
1.	Q	<u>Q</u> UALITY	How the voice sounds – the colour of the voice. For example: nasal, breathy, hoarse, squeaky.
2.	U	<u>U</u> NIQUE TRAIT	Characters often have a ' trait ', something that they do which is unique to them.
3.	I	<u>I</u> NTONATION AND <u>I</u> NFLECTION	Intonation – The change of pitch and tone in person's voice throughout a phrase / sentence. Inflection – The change of pitch within a word.
4.	T	<u>T</u> ENSION	How tense the body or voice is. This relates to the muscles in our body. When our muscles are 'tense' they are contracted.

Standard conventions in **BS 8888** and how these are applied

Meaning Of Line Types:

Outlines		Visible outlines & edges
Hidden Detail		Hidden outlines and edges.
Centreline		Chain thin: Centre lines and lines of symmetry.
Projection, Leader Line		Continuous thin line
Dimension		Continuous thin line

Abbreviations

Across Flats	AF	Width across flats is the distance between two parallel surfaces on the head of a screw or bolt, or a nut.
Centre Line	CL	Centre lines denote a circular feature such as a shaft or a hole. Or a plane of symmetry.
Diameter	∅	
Drawing	DRG	
Material	MATL	
Square	SQ	□ If preceding a dimension

Standard Conventions For Dimensions

Linear Measurements		
Radius		
Diameter		
Tolerances		
Surface Finish		Known as a 'tick' symbol.

Representation Of Mechanical Features

Threads	Male	Female
Holes	Through Hole	Blind Hole
Chamfers	Chamfer at 45°	A Symmetrical Sloping Surface At An Edge Or Corner
Countersinks	Countersink Plan view	Countersink Side view
Knurls		Knurling is a manufacturing process, whereby a pattern of straight, angled or crossed lines is rolled into the material

Knowledge Group 1: Mediums

1	Grades of pencil	Graphite pencils are classified as either soft black (B), hard (H), hard black (HB), and firm (F). The degree of these qualities is then further classified by numbers, the higher the number the higher the intensity.
2	"B" Pencils	Pencils which feature softer and darker graphite.
3	Prismacolor Pencil Crayons	High-quality coloured pencils with soft, easy to blend cores that artists use to create rich colours, smooth shading and detailed drawings.

Key Vocabulary

1	Observational drawing	Observational drawing is drawing what you see and typically implies drawing from life.
2	Key Concept	The main idea, message or theme that an artwork explores and communicates to the viewer.
3	Relief (sculpture)	A type of sculpture where shapes and figures are raised from a flat background surface rather than standing freely in space.
4	Tonal Modelling	Tonal modelling is a means for the artist to create a sense of three-dimensional form in a drawing or painting.
5	Hatching	Artistic technique used to create tonal or shading effects by drawing (or painting or scribing) closely spaced parallel lines.
6	Cross-hatching	A method of line drawing that describes light and shadow. Light is represented with the openness of the lines, while shadow is recorded using the density of crossed lines.
7	Contour-hatching	When the lines follow the contours of the subject recording form.
8	Highlights	The areas on an object where light is hitting.
9	Shadows	The darker areas on an object where light is not hitting.
10	Depth	The perceived distance between the background and the foreground of a composition
11	Detail	A distinctive feature on a piece of art which can be seen most clearly up close.
12	Implied texture	Texture in art that cannot be felt by touch, but which resemblance is instead achieved through the masterful use of artistic tools and materials.
13	Realism	Art Style that aims to show people objects and scenes as they appear in real life with accurate detail and observation.

Knowledge Group 1. Photoshop Tools

1	Layer Stack	The order of layers in Photoshop that controls what appears in front of behind allowing designers to build and edit images in separate organised ways.
2	Free Transform (Ctrl T)	An action tool used to scale, rotate, flip, skew, distort, and warp images all using the free transform command.
3	Hand Tool	Used to move around and navigate different areas of an image without changing the artwork itself.
4	Marquee Tool	Selection tool used to select rectangular, elliptical or single-row areas of an image so they can be edited, moved or adjusted.
5	Rulers (Ctrl R)	Digital rulers used to overlay precise and measured lines.
6	Eye dropper tool	Tool used to sample and select a colour from an image so it can be used elsewhere in the design.
7	Rasterize	Process of converting a vector shape or text into pixels so it can be edited like a normal image but it will lose scalability.

Knowledge Group 2. Presentation

1	Consistency (presentations)	The use of the same visual style, layout, colours, fonts and design elements throughout a project to create a clear and professional appearance.
2	Margins & Borders	Evenly spaced, minimal and consistent. Always aligned.
3	Balanced Composition	Content carefully positioned to look well-balanced and visually pleasing.
4	Alignment	Arrangement in a straight line or in correct relative positions
5	Constrain Proportions	Scaling whilst keeping original proportions (aspect ratio – not squashing or stretching.)

Key Vocabulary

1	Design Brief	A clear statement that outlines what you need to design, who it is for and the purpose of the final outcome.
2	Typography	Art of arranging and designing text using different fonts, sizes, spacing and layouts to communicate a message clearly and effectively.
3	Font Style	Refers to the visual design of text such as bold, italic or decorative variations which changes how written words look and feel in a design.
4	Aspect Ratio	The ratio of the width to the height of an image or screen.
5	High Resolution	A large amount of detail. This would contain a lot of pixels to create.
6	Search Engine Tools	Built in search engine (Google, Bing etc.) tools that enable content to be filtered.
7	Assessment Objectives (DRRP)	Four areas that measure how well you develop ideas, experiment and refine work, record observations and create a final personal outcome.

Knowledge Group 3 Research

1	Investigating	The process of gathering and exploring information, images and ideas to help develop understanding and inspire your creative work.
2	Critical Reflection	The process of carefully thinking about and evaluating your own work explaining what works well, what could be improved and why you made certain creative decisions.
3	Contextual Analysis	

Health & Safety

1	Personal Hygiene	Consideration for personal cleanliness and PPE such as hairnet, handwash, apron.
2	Equipment Hygiene	Consideration to identify unclean equipment before using to prepare foods. These must be washed before using.
3	Environment Hygiene	Evaluating your immediate work area to highlight any unclean surface areas before you start to prepare foods. E.g. worktops, sinks.
4	Hazard Analysis	Identifying possible hazards that could occur during preparing, cooking or storage of foods.
5	Knife skills	Using appropriate skills to ensure safe preparation of foods. E.g. bridge, claw, filleting, chiffonade
6	Appropriate equipment selection	Being able to identify, choose and select the correct piece of equipment for the job. E.g. zester, pasta winder, grater, colander
7	Safe storage	Helps to preserve the quality and nutritional value of the foods and saves money. Proper food storage can prevent harmful bacteria multiplying.
39	Temperature zones	A range of temperature zones that inform us how bacteria act within foods. E.g. danger zone = 5-63C = germs grow Freezing = -18C = germ dormant (sleep) Boiling = 121C = germs are killed

Sweet Garnish techniques

1	Tuile	A tuile is a baked wafer, French in origin, generally arced in shape, that is made most often from dough, often served as an accompaniment of other dishes
2	Quenelle	A quenelle is a presentation technique which makes a three-sided oval shape out of soft, malleable dish components, like pâté, cream Chantilly or ice cream.
3	Coulis	A coulis is a form of thin sauce made from puréed and strained vegetables or fruits
4	Piping	Use icing with a solid structure add into a piping bag and squeeze to create shapes, rosettes and lines. Choices of nozzles can benefit the decoration.
5	Honeycomb	Honeycomb, also referred to as cinder toffee, is a light, airy sweet made from sugar, golden syrup and bicarbonate of soda
6	Chocolate curls	Made with melted chocolate that is spread thinly. Leave to cool then use a blade to slowly scratch off curls.
7	Edible soils	This can be made with almost any ingredients you want, as long as the result is a mixture of edible items that resembles soil.
8	Caramelising	Caramelisation is the browning of sugar, a process used extensively in cooking for the resulting sweet nutty flavour and brown colour

Savoury Garnish techniques

9	Crouton	Is a piece of re-baked bread, often cubed and seasoned. Croutons are used to add texture and flavour to salads
10	Veloute	means velvet, and the sauce is just that. Velvety, full of flavour, Creamy, French sauce made without dairy.
11	Dauphinoise	A dish of finely sliced potatoes baked in milk, cream and cheese served as accompaniment.




Savoury Garnish techniques

12	Jus	Juices that occur during the cooking process (in particular when roasting meat)
13	Puree	To change the texture of solid food so that it is smooth. Used to as décor.
14	Tempura	a popular Japanese dish in which food (most commonly seafood, vegetables, or sushi) is lightly battered and deep fried to create a light, crispy coating.
16 40	Sauces	Panada = Thick to combine ingredients Coating = coats the back of a spoon Pouring = Glazes the back of a spoon

Key Vocabulary

1	Gelatinisation	A process of breaking down starch in the presence of water and heat,
2	Setting	The time that it takes until a liquid reaches a state of firmness.
3	Emulsification. (Mayonnaise)	To combine two ingredients together which do not ordinarily mix easily. E.g. vinegar and oil
4	Julienne	A knife technique used to prepare vegetables by cutting them into matchstick-shaped pieces
5	Brunoise	Is the finest dice and is derived from the julienne cut. Used in fine garnish
6	Garnish	Is an item of food used as a decoration or embellishment to a prepared food dish or drink.
7	Glazing	Is reducing a cooking liquid until it coats your vegetables with a deeply flavoured, glossy and beautiful sauce.








1. Music notation

1	Staff /Staff	The five lines and four spaces that music is written on.
2		Bass Clef used for notating notes for low-sounding instruments, or the left-hand part of piano music.
3		Tenor Clef where middle C is on the fourth line. It is used for instruments such as the cello
4		Treble Clef used for notating notes for high-sounding instruments, or the right-hand part of piano music.
5	Bar line	The vertical line on a staff that divides the music into bars.
6	Repeat marks	Indicated by a double bar line and two dots, an instruction to the player to play a section of music again
7	Slur	A curved line joining notes together, showing they must be played smoothly.
8	Tie	A curved line between two notes of the same pitch, showing that the note should be held for the value of both notes together.

2. Intervals and degrees of the scale.

1	Semitone	The smallest step in Western music, white to black note on a keyboard.
2	Tone	Also called a major 2nd interval, the distance between two notes that are two semitones apart, e.g. C-D.
3	Tonic	The first note of a scale.
4	Supertonic	The second note of a scale.
5	Mediant	The third note of a scale.
6	Subdominant	The fourth note of a scale.
7	Dominant	The fifth note of a scale.
8	Submediant	The sixth note of a scale.
9	Leading note	The seventh note of a scale.
10	Sharp (#)	A symbol showing that the note must be raised by a semitone.
11	Flat (b)	A symbol showing that the note must be lowered by a semitone.
12	Natural (♮)	A symbol that cancels a sharp or flat.

3. Key vocabulary - Rhythm

1		Crotchet = 1 Beat
2		Quaver = ½ Beat
3		Minim = 2 Beats
4		Semibreve = 4 Beats
5		Rest = Rest for 1 beat (Crotchet rest)
6		Rest = Rest ½ beat (Quaver rest)
7	Dotted note	A note that is held for its full length plus an extra half. E.g. A dotted crotchet would last for 1 ½ beats.
8		A pause, meaning the player/s hold the note on for longer – normally twice as long.
9	G.P.	Grand pause, meaning the players hold silence for as long as needed.
10	Triplet	A group of three notes played in the time of two. A group of triplet quavers would fit into the same amount of time as two normal quavers.

Other points of interest: Every piece of music we work on will use these terms, so it is really important you learn them. Some interesting rhythmic pieces to listen to include Clapping Music by Steve Reich and Take 5 by Dave Brubeck.

1. Melody

1	Arch shaped	First half goes up, second half goes down or vice versa.
2	Arpeggio/Triadic	A chord with the notes played one at a time.
3	Ascending	Going down
4	Conjunct	Melody that moves by mainly by step.
5	Descending	Going down
6	Disjunct	Melody containing leaps.
7	Ornamentation	Musical decoration, including trills, turns, mordents, acciaccaturas and appoggiaturas.
8	Riff	A short, repeated musical pattern in rock, pop and jazz.
9	Fanfare	Music usually played by trumpets or other brass instruments to announce the arrival of an important person or the start of an event.
10	Imitation	Parts copy each other, normally overlapping
11	Interval	The distance between two notes.
12	Leap	Distance between two notes which is larger than one step.
13	Melodic device	A composing technique where the melody is developed/altered in several different ways, e.g. sequence, imitation.
14	Ostinato	A short, repeated musical pattern in classical music.
15	Scalic / step wise	Notes moving up or down through a scale.
16	Sequence	A motif or phrase which is repeated at a higher or lower pitch.
17	Theme	A musical idea, often a melody, that forms the basis for a piece.

2. Form and structure

1	Call and response	A phrase is played by a soloist and then others play a phrase back in reply.
2	Retrograde	Musical device where the music is played 'backwards', from the last note to the first.
3	Strophic	A vocal form where the same music is used for each verse.
4	Ternary	A three-part (ABA) form where the A section is heard twice with a contrasting middle section between them.
5	Through-composed	A vocal form where the music is not repeated for each verse, but changes to reflect the mood of the lyrics.
6	Binary	A musical structure with two contrasting sections, A and B
7	Rondo	A structure where the main theme is heard at least three times, alternating with contrasting sections, e.g. ABACA in its simplest form.
8	Verse and chorus	A structure with verse and chorus sections, often called strophic.
9	Introduction	Opening section of a piece.
10	Sonata form	A large-scale three-part structure with exposition, development and recapitulation, used for the first movements of many sonatas, symphonies and concertos.

1. Harmony


1	Anticipation	A note played just before the rest of the chord enters.
2	Appoggiatura	A clashing note that then drops in pitch to be part of the chord.
3	Auxiliary notes	An extra note played above or below a note in a chord, and then it returns to the note of the chord.
4	Diminished 7th	Four-note chord consisting of minor 3rds, e.g. A–C–E flat–G flat.
5	Diminished triad	Three-note chord consisting of two minor 3rds, e.g. A–C–E flat.
6	Dissonance	Chords that have notes that clash.
7	Drone	Two notes held for a long time.
8	Imperfect cadence	Chord progression at the end of a phrase (I/II/IV–V), the music sounds like it will carry on.
9	Interrupted cadence	Chord progression at the end of a phrase (V – VI), a 'surprise' sound as it suddenly carries on.
10	Perfect cadence	Chord progression at the end of a phrase (V– I), a final ending.
11	Plagal cadence	Chord progression at the end of a phrase (IV–I), a gentle 'amen' sound.
12	Suspension	A 3 step chord progression. Preparation sounds a note, dissonance with a clashing note and resolution.
13	Ground Bass	A bass line that repeats throughout a whole piece.
14	Cadence	Chord progression that signifies the end of a musical phrase.
15	Chord	Two or more notes played together.
16	Chord sequence	The order the chords are played in.
17	Harmony	The chords used in a piece.
18	Murky Bass	A term used in eighteenth-century piano music, where the left hand plays slow-moving chords in octaves.
19	Pedal	Held or repeated note used in music.

Wider listening: For harmony in a range of styles then listen to Bach (set up the system we know), Beethoven (challenged the system we know) and Webern (new ideas).

3. Tonality

1	Chromatic	Harmony where the notes of chords are outside the key. E.g. in C major, chords with sharps/flats.
2	Dominant	Key starting on the 5th note of a scale and containing one more sharp or one fewer flat.
3	Major	A happy sounding key.
4	Minor	A sad sounding key.
5	Modal	Music based on scale systems such as Ionian or Aeolian, popular in renaissance, world and jazz music.
6	Modulation	When a piece of music changes key.
7	Pentatonic	A five-note scale often using only degrees 1, 2, 3, 5 and 6 of the major scale.
8	Relative major	Has the same key signature as minor key, but the tonic is three semitones higher.
9	Relative minor	Has the same key signature as major key, but the tonic is three semitones lower.
10	Atonal	Music that is without any key or home-base.
11	Key	In Western classical music, sounds that are organised into major or minor keys.
12	Tonality	The mood of the music.
13	Tonic	Home key, where a piece usually starts and ends.

1. Texture

1	Basso Continuo	A type of instrumental accompaniment in the baroque period played by a bass and chord instrument.
2	Chordal / Tutti	A musical texture where the parts move together at the same time, e.g. a hymn.
3	Dominant pedal	Repeated or held note (5th note of scale).
4	Fugal	Instruments come in one after the other, imitating each other.
5	Homophonic	Musical texture where there is a tune supported by harmony.
6	Imitative	Texture where a melody or phrase is heard again immediately in a different part.
7	Monophonic	One single melody is heard, either in unison or octaves.
8	Polyphonic	More than one tune playing at the same time.
9	Tonic pedal	Repeated or held note (Root note of scale).
10	Unison	More than one instrument playing the same part together.
	Accompaniment	Part that supports the tune.

2. Texture continued

12	Heterophonic	Two or more parts playing different versions of the same tune, at the same time.
13	Solo	A leading part in piece for one instrument.
14	Texture	The layers in the music.
15	two-part texture	Music that consists of two independent melodic lines.

3. Sonority and Music technology terms

1	Staccato	Playing detached notes.
2	Articulation	How the notes are played e.g. legato or staccato.
3	Legato	Notes played smoothly.
4	Chorus	Effect created when several sounds of almost the same timbre are heard as one.
5	Multitrack recording	A studio technique where sounds can be recorded separately and then combined, allowing the sound engineer to adjust each one on its own.

4. Sonority and Music technology terms

7	Overdu bbing	A musician plays over the top of a guide track and records final versions of the recording.
8	Pitch shift	A recording technique where a note that has been recorded is raised or lowered, often to correct the tuning.
9	Retake	Repeating a recording of an audio or video section.
10	Sonority	A word used to label sound, which could be an instrument, a combination of sounds or the tonal quality of a performer.
11	Staccati ssimo	Music that is extremely separated and detached.
12	Studio effects	Musical effects, such as distortion, added in the recording studio.
13	Timbre	The sound of a particular instrument or voice.
14	Track	(1) One of the songs on a CD or record. (2) One of the separately recorded parts in a multitrack recording.

1. Tempo

1	Accelerando	Speeding up gradually
2	Allegro	A fast and lively tempo.
3	Andante	Walking pace
4	Grave	A very slow tempo
5	Largo	A slow tempo
6	Moderato	A medium tempo
7	Presto	A fast tempo
8	Pulse / Beat	The regular, underlying beat in music.
9	Rallentando	Slowing down gradually.
10	Tempo	The speed of the music
11	Vivace	A very fast tempo.

2. Metre

1	Alla Breve	The time signature of two minim beats per bar (2/2).
2	Compound time	Time signatures where the beat is a dotted note dividing easily into three quavers.
3	Simple time	Time signatures where the beat is a single note, such as a minim, crotchet or quaver.
4	Metre	How many beats in a bar.
5	Irregular metre	Time signatures outside the normal duple, triple and quadruple metres.

3. Rhythm/rhythmic devices

1	Rubato	Literally means 'robbed', speeding up a part of the bar to slow down another.
2	Shuffle	Rhythmic pattern for drummers in 4/4 time where the beats are played in triplets.
3	Syncopation	Music that emphasises the off beat.
4	Triplets	A rhythmic figure, indicated by a '3' where three equal notes are played in the time of two of the same note value.
5	Accented	Beats in a bar which have a stronger emphasis than others, e.g. the first beat of a bar has a natural emphasis.
6	Duration	The length of a note or rest.
7	Dotted rhythm	A rhythm created when note lengths are increased by half their value.
8	Pause	Note or chord held for longer than written, normally twice the length.
9	Swung rhythm	A relaxed rhythm used in jazz where the beat has a triplet feel.
10	Anacrusis	Phrase that starts before the first beat of the bar.
11	Cross rhythm	Instruments playing different rhythms that cross each other. E.g. quaver vs triplet
12	Scotch snap	A note played quickly on the beat, followed by a longer note 3 times its length.
13	Free time	A type of rhythm that has no regular metre or constant pulse.

4. Dynamics

1	<i>pp</i>	Pianissimo = Very soft & very quiet
2	<i>p</i>	Piano = Soft & Quiet
3	<i>mp</i>	Mezzo Piano = Medium soft & quiet
4	<i>mf</i>	Mezzo Forte = Medium loud
5	<i>f</i>	Forte = Loud
6	<i>ff</i>	Fortissimo – Very loud
7	Crescendo	Getting louder
8	Diminuendo	Getting quieter
9	Terraced dynamics	Abrupt and sudden changes from forte to piano and vice versa, a key feature of Baroque music instruments.

Wider listening: For great examples of pieces that feature changes in tempo, dynamics and rhythms listen to pieces from the Romantic period and the nationalist composers of Russia.

1. Performance matters

1	Glissando /Slide	Slide over a series of notes, commonly found in piano, harp and string music.
2	Improvisation	Making music up as you go along, jazz does it a lot!
3	Phrasing	Often shown by a curved line over the music, it is like a musical sentence.
4	Melisma	Singing technique where two or more notes are sung on one syllable.
5	Hammer on	Guitar technique where the left hand strikes the string percussively, causing the note to sound on its own.
6	Pizzicato	Plucked strings
7	Pull off	A guitar technique where the left hand releases a note while it is still sounding, causing a lower note to sound.
8	Double stopping	Playing of two notes together on a stringed instrument, either by bowing or plucking.
9	Doubling	The same part played by two instruments, either in unison or in octaves.

2. Performance matters continued

1	Dynamics	The volume of the music.
2	Harmonics	A flute like sound created on a string instrument by lightly touching the string.
3	Range/tessitura	The span of notes possible on an instrument/voice.
4	Tab	A way music is written for guitar, with six lines representing the string, and numbers representing frets.
5	Tremolo	Rapidly repeating the same note.
6	Wah wah	Effect used on guitar and brass where there is a closed and open sound that quickly changes
7	Word painting	Feature of vocal music depicting the literal meaning of the lyrics, e.g. a descending run on the lyric 'down'

3. Types of musical work

1	Sonata	Work for solo instrument, in 3 or 4 movements.
3	Cantata	A medium-length multi-movement work for soloists, choir and orchestra, often with a religious text.
4	Chorale	Type of hymn for four voice parts – soprano, alto, tenor and bass.
5	Concerto Grosso	A Baroque form which contrasts a groups of soloists against the main body of the orchestra, usually in three movements.
6	Gigue	A quick Baroque dance, usually in compound metre and frequently used as the last movement in a suite.
7	March	Music with a strong rhythmic beat designed to synchronise walking steps, often used in military music.
8	Prelude	A piece that is often used to open a work, often followed by a fugue.
9	Solo concerto	A piece for a soloist with accompaniment.
10	Suite	A set of dances used in the Baroque period.

1. Genres

1	Fusion	Music that combines two or more styles.
2	Musical theatre	A stage performance that includes singing, talking, acting and dancing.
3	Rock	A genre of popular music that emerged in the 20 th century.
4	Jazz	A general term to 20 th century improvisatory music.
5	Oral tradition	Music passed down generations by playing and listening, rather than writing it down.
6	Samba	A dance and music style with African and Brazilian influences.

2. Musical periods

1	Renais- sance	Music period from 1400 and 1600. Byrd and Palestrina
2	Baroque	Music period from 1600-1750. Bach and Handel.
3	Classical	Music period from 1750-1820. Mozart and Haydn.
4	Romantic	Music period from 1820-1900. Wagner and Chopin.

3. Instrumental music 1700-1820

1	Alberti Bass	Accompaniment style found in the left hand of many Classical piano works, where the chord is split into four notes – low, high, medium, high.
2	Counter point	The combination of two or more independent melodic lines.
3	Figured Bass	A type of Baroque musical shorthand where numbers are written below a continuo part to indicate the harmonies.
4	Fortepiano	The first type of piano, invented and popular in the classical period.
5	Fugue	A complex polyphonic genre for any number of parts, where a theme is stated and copied by others.
6	Harpsichord	A Baroque stringed keyboard instrument.
7	Movement	An independent, self-contained piece which is part of a larger work such as a symphony concerto or sonata.
8	Overture	Opening orchestral section of an opera.
9	String quartet	A small ensemble made up of two violins, a viola and a cello.
10	Symphony	Large-scale work for orchestra, usually in four movements (fast–slow–dance–fast).

4. Vocal music

1	Chorus	The catchy, repeated section of a song that comes between the verses.
2	A cappella	Choral music that is sung without any accompaniment.
3	Accompaniment	Music played by the instruments backing the melody.
4	Aria	A song, usually found within a larger work, such as an opera or oratorio.
6	Four-part harmony	Music written for soprano, alto, tenor and bass voices, each singing a different part and sounding together as chords.
7	Oratorio	Piece based on the bible for soloist, choir and orchestra.
8	Recitative	A style of setting words to music where the singer follows the natural inflections of speech, often with sparse accompaniment.
9	Round	Song which can be sung by two or more singers with staggered entries, and often repeated.
10	Syllabic	Singing only one note per syllable.
11	Vocal counter point	The combination of two or more independent sung melodic lines.

1. Music for stage and screen

1	Action songs	Songs involving movement, often linked to the meaning of the lyrics.
2	Character song	A song where the lyrics reflect the mood or image of the singer.
3	Cue	A signal given by a conductor or band leader to indicate the entrance of a player.
4	Diegetic music	Music which characters hear in a piece.
5	Film score	Original music which is composed to accompany a movie.
6	Leitmotif	A short musical idea linked to a person, place or feeling.
7	Libretto	The words or text for the music of an opera or oratorio.
8	Mickey-Mousing	A movie technique that synchronises the music and the acting.
9	Non-diegetic music	Music which characters don't hear in a piece.
10	Orchestration	The art of writing or arranging music for a variety of instruments.
11	Underscoring	Soft music in movies heard as background to dialogue or visuals.

2. Fusions

1	Groove	The 'feel' of the music, created mainly by the rhythm.
2	Bolero	A Spanish dance in moderate tempo and with three beats per bar.
3	Cubop	A genre that combines Cuban traditional music with bebop.
4	Danzon	A genre of Cuban instrumental dance music with complex rhythms.
5	Experimental music	Twentieth-century music that bypassed normal boundaries and tried to achieve something brand new.
6	Idiomati c	Music that is well suited to a particular instrument.
7	Jazz fusion	Genre that combines elements of Jazz with other popular styles.
8	Salsa	Popular Latin American dance and musical style
9	Aeolian Mode	A scale system going from A-A using the white notes.
10	Bebop	A jazz style featuring complex rhythms and melodies with an emphasis on improvisation.

3. Fusion continued

1	Celtic	Term generally used to describe the distinctive sound of Irish and Scottish music.
2	Dorian mode	Scale system from D-D using the white notes.
3	Electronic dance music	Term for music produced for clubs and raves – often combined with other styles to create fusions.
4	Folk Rock	Genre that combines folk songs with modern styles.
5	Latin Jazz	A genre that combines jazz and Latin American rhythms.
6	Loop	Where a sample is digitally repeated continuously.
7	MIDI	Musical instrument digital interface. A device used to transfer musical information between electronic instruments and computers.
8	Son	A Cuban song and dance genre that combines Hispanic and African music.
9	Folk music	Songs, dances or instrumental melodies of a particular region or country.
10	Worldbeat	Genre that combines traditional world music elements with Western styles such as pop and rock.

Wider listening: For stage and screen listen to Lloyd Webber, Schwartz, Hans Zimmer and John Williams. For fusions listen to Dizze Gillespie and Afrocelt sound system

Knowledge Group 1. Consistency

1	Title	Name of the artist. Displayed formally. Size 28.
2	Composition	Content carefully positioned to look well-balanced and visually pleasing.
3	Margins & Borders	Evenly spaced, minimal and consistent. Always aligned.
4	Images	High resolution with an original aspect ratio (not stretched or squashed). Search for 'large' images on google.
5	Font/ Typography	Art of arranging type to make written language legible, readable and appealing.

Knowledge Group 2. Photography Content

1	Contact Sheet	A sheet with 35 thumbnail sized photographs. Annotated in green and red pen.
2	Sketching/ Drawing	Part of A03. Drawing to plan out ideas before photographing.

Knowledge Group 3. Critical Reflection

1	Contextual Analysis (Analysing the work of artists)	Annotations or keywords from a critical and analytical perspective about the artist's work. This will consist of a <i>Personal Response</i> and reflections on the <i>Aesthetics, Meaning and Context</i> .
2	Critical Reflection (Analysing your work as it develops)	The process of reflecting critically on your work as it develops. Annotations should explain how you have gone from one idea to the next. (<i>What, How, Why?</i>)

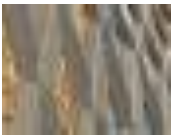
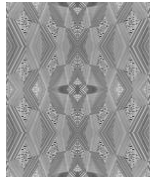

Knowledge Group 4. Photography Content

1	Force of Nature	The interaction between nature and the manmade environment. Techniques developed: Aperture, depth of field and focus.
2	Experimentation	Experiment with a range of different photography techniques and different media. e.g. Photoshop, collage, sewing, painting etc.




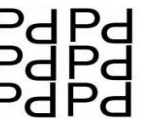
Key Vocabulary

1	Artist Study	A student's response emulating the techniques and approaches of the artist.
2	Digital Image	An image made of pixels. Printed text, photographs and artwork. Amount o pixels define high quality.
3	Macro Setting	A mode on an analogue or digital point-and-shoot camera that enables shooting close up.
4	Consistency	The consistency of measurement techniques. Same font, style, spacing, etc
5	Aperture	The opening that controls the amount of light the camera receives.
6	Worm's-eye view	Low to the ground shot, subject above horizon.
7	Birds eye view	An elevated view of an object from above, with a perspective as though the observer were a bird.
8	High Resolution	A large amount of detail. This would contain a lot of pixels to create.
9	Depth of field	The distance between nearest and furthest object, a focused image.
10	Typography	The style and appearance of printed matter.
11	Focus	How clear the image is e.g. blurry/not blurry.


1. Process of creation

1		Use a primary photograph of a structure.
2		Abstract to create a pattern: Repeat Half drop Reflect Rotate
3		Transfer the image onto polyester fabric using the sublimation printer and the heat press.

2. Technical knowledge

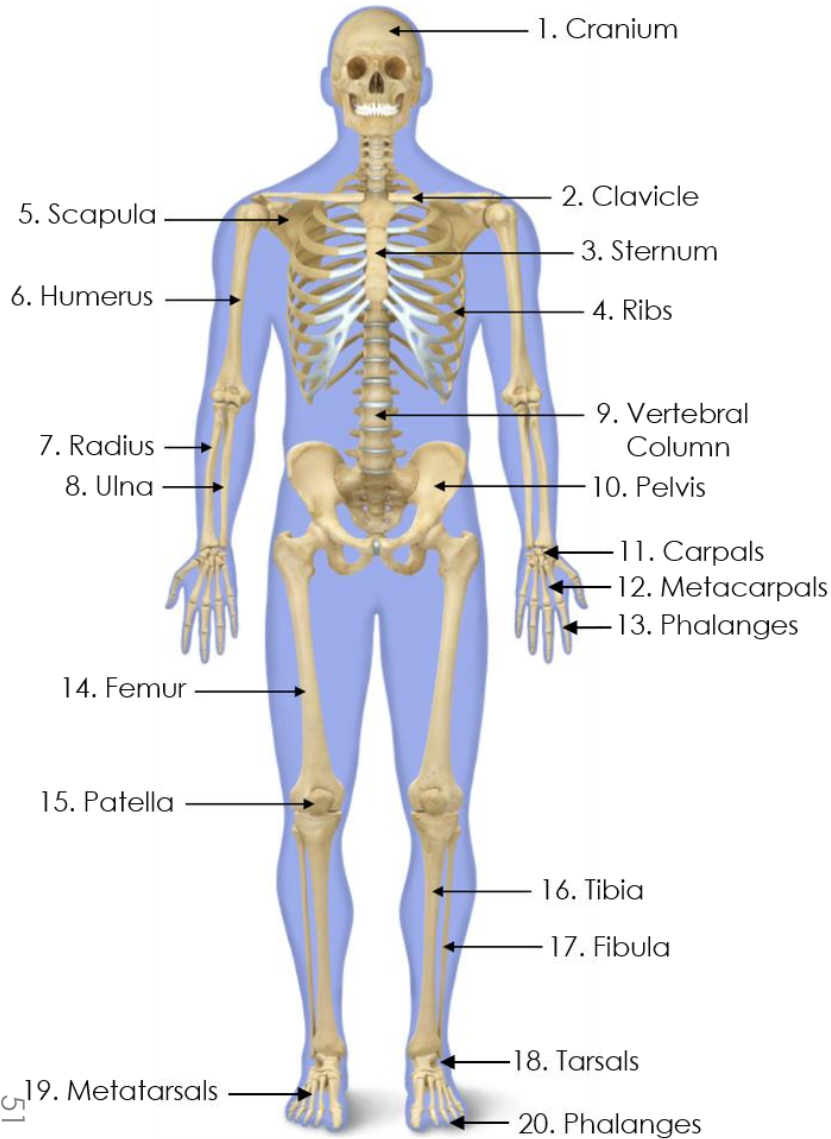
1	Repeat		A rigid motion of repeating a motif over and over along horizontal or vertical lines.
2	Half drop		A rigid motion where every other line of the motif is staggered.
3	Reflect		A rigid motion where the original motif is reflected across a line or axis.
4	Rotate		A motion where the original motif is rotated around a single point.

3. Key Vocabulary






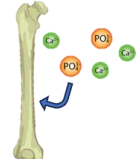
1	Pattern	A repeating motif.
2	Sublimation Printer	A printer that prints images onto paper, the images can be transferred using heat onto fabric/wood or metal.
3	Heat Press	A piece of equipment that heats up and can be used to transfer images onto fabric/wood or metal.
4	Helder Santos	A Portuguese graphic designer
		
5	'Shift'	A repeating pattern.
6	Primary Image	An image you have taken yourself. (This could be a primary photographs you have taken)
7	High Resolution	An image that is not distorted or pixelated.
8	Distorted	Something that is not clear to the eye.
9	Pixelated	An image that appears to have lots of small dots or sections.
10	Contact Sheet	35 photographs that are annotated to say which are good and why and which are not so good and why.

1.1.a The structure and function of the skeletal system

KG1 – Location of major bones









KG2 – Functions of the skeleton




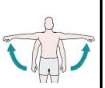
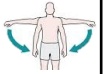
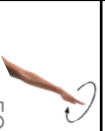
	Function	Description
21	 Support	Skeleton provides a supportive framework Supports the muscles and organs of the body
22	 Posture	Vertebral column keeps us upright and gives us good posture
23	 Protection	Our skeleton provides a rigid structure to protect our vital organs
24	 Movement	Joints allow our skeleton to move. Bones allow attachment for skeletal muscles/tendons. Bones act as levers for muscles to pull on.
25	 Blood cell production	Blood cells are produced in the marrow of long bones
26	 Storage of minerals	Bones store minerals such as calcium, potassium and iron

1.1.a The structure and function of the skeletal system




KG3 – Types of Synovial Joints

Definition								
27	<table border="1" style="width: 100%;"> <tr> <td>Synovial Joint</td> <td>A freely moveable joint where two or more bones articulate</td> </tr> </table>	Synovial Joint	A freely moveable joint where two or more bones articulate					
Synovial Joint	A freely moveable joint where two or more bones articulate							
Types of Synovial Joint		Description		Joint		Articulating bones		
28	 Hinge Joint	Allows movement in one plane only		Elbow	Humerus	Radius	Ulna	
29				Knee	Femur		Tibia	
30	 Ball and Socket Joint	A ball shaped bone that fits into a socket of another bone. Allows a large range of movement		Shoulder	Scapula		Humerus	
31				Hip	Pelvis		Femur	

KG4 – Movement Types

	Movement type		Description	Hinge Joint	B&S Joint
32		Flexion	Decreasing the angle of a joint	✓	✓
33		Extension	Increasing the angle of a joint	✓	✓
34		Rotation	Turning a joint around the longitudinal axis		✓
35		Abduction	Moving a joint away from the centre line		✓
36		Adduction	Moving a joint towards the centre line		✓
37		Circumduction	A combination of Flexion, Extension, Rotation, Abduction and Adduction A continuous circular movement of a limb		✓

KG6 – Components of a Joint

	Type		Description	Function
42		Ligament	Strong bands of connective tissue that connects bone to bone	Keep joints stable
43		Cartilage	Tough, flexible tissue found on the ends of articulating bones	Reduces Friction Acts as a shock absorber
44		Tendon	Tough bands of tissue that connects muscle to bone	Transmits force of the muscle to pull on bones

Managing Change

Types of change

Expected Change

- Moving into Year 9
- Growing older
- Starting a new school year
- Learning new subjects
- *Joining* a new club or team

Unexpected Change

- Illness
- Family separation
- Losing a pet
- Moving house suddenly
- An accident

Why might someone fear change?

Rejection
Loss of control
Loss
Unknown
Criticism
Failure

How might we feel stress & change?

Body	Mind	Feelings
Headaches	Worrying thoughts	Anxiety
Feeling tired	Difficulty concentrating	Frustration
Stomach aches	Forgetfulness	Mood changes

What can you do to help you adapt to change?

Control - you can only control what you can control
Laugh - keep your sense of humour
Act don't react - take ownership of the change
Anticipate - expect setbacks so you can be prepared
Perspective - identify what is staying the same
Prepare - break the change down into smaller chunks
Similar Experiences – use the tips learnt previously

British Values

What are the 5 British Values?



SMSC

1	Spiritual	Ability to be reflective about your own beliefs (religious or otherwise) and perspective on life.
2	Moral	Ability to recognise the difference between right and wrong and to readily apply this understanding in your own lives, recognise legal boundaries and, in so doing, respect the civil and criminal law of England.
3	Social	Use of a range of social skills in different contexts, for example working and socialising with other pupils, including those from different religious, ethnic and socio-economic background.
4	Cultural	Understanding and appreciation of the wide range of cultural influences that have shaped your own heritage and that of others.

British Governance

1	What is a political party?	A political party is a group of people who share a common view on issues.
2	What do political parties do?	Run the country, represent voters, help people understand politics
3	What is an election?	A time when people vote in order to choose someone for a political or official job
4	Basic voting rules	You have to be 18 years old on the day of the election 'polling day'. You must be either a British, Irish, Commonwealth or EU citizen*. You can register to vote from the age of 16. You must be registered at an address in the area you want to vote in. You can't vote if you are serving a prison sentence.

