Knowledge Organiser

YEAR 9

Believe you can and you're halfway there...

TROY KOTSUR

made history as the first deaf male actor to win an Oscar

THE ENGAGED MIND STAYS SHARP.
BE ENGAGED IN THE HERE AND NOW.

Knowledge Organisers at Redmoor Academy

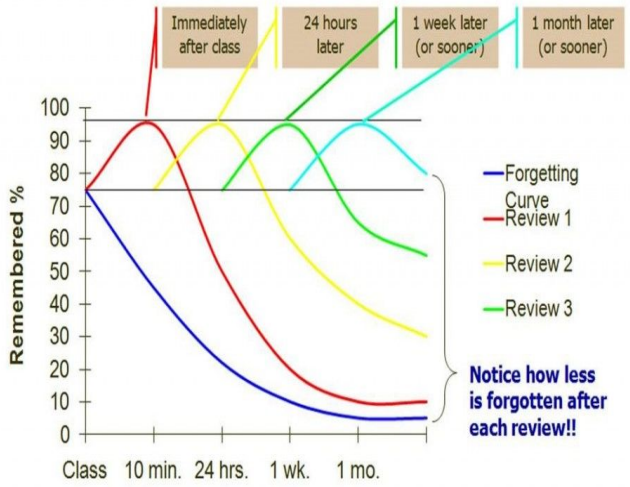
Why do we have knowledge organisers?
Your knowledge organisers help you to be successful in many ways. Firstly, they make clear the key elements needed in a topic to have an excellent understanding of it. If you know these elements, your teacher will help you to understand them.

What are my teachers' expectations of me?
In year 7 and 8 your teachers will give you homework that means you will be spending 20 minutes a week learning information from your knowledge organiser for each subject. In year 9 this will 30-40 minutes. Teachers will test you once a week to make sure that you are completing the homework and remembering your knowledge. Your knowledge organiser exercise book is where you will complete your practising. Each time you revise and practise, you should put the subject as the title and the date. Rule off when you have completed your revising for that subject. Teachers and form tutors will be regularly checking that you are revising.

How will my teachers use them?
Each subject will set homework once a week that will help you to learn your knowledge organiser. They will also test you once a week on certain parts to see how well you have remembered it. Research tells us that this practising is a really good way of helping you make sure that the knowledge stays in your memory. Over time you will build on this knowledge to make sure that you know everything you need to for your subject. Sometimes you may have high stakes quizzes, where teachers will set a certain score that you have to reach to be successful.

How will they help me revise?
When it comes to GCSEs, you have lots of information to remember. Your knowledge organisers will gradually build up this knowledge over 5 years to help support you in year 11 so that when you revise, you are just recalling knowledge that you have already stored. Also, you will have practised lots of revision techniques whilst revising your knowledge organisers over the past 5 years, which will help prepare you for the final exams.

How we learn at Redmoor



Why reviewing your learning is so important

As soon as we are told a new piece of information, most of that information is 'lost' and forgotten. Hermann Ebbinghaus found that repeating information helps us remember more of it.So we need to be be reviewing and going over what we learn in order for us to remember and be able to use the information after a period of time has passed.

This resources summarises some proven strategies that you can use to review your knowledge.

Common methods of revision that are the least effective:

- Highlighting key points
- Re-reading
- Summarising texts

Retrieval practice

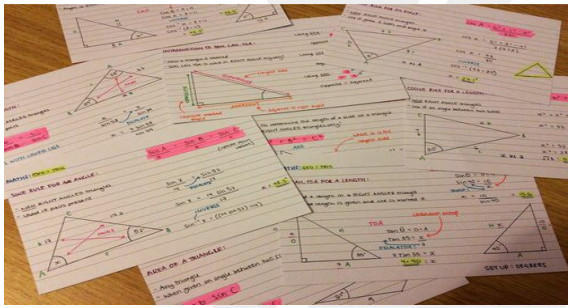
Testing what you know is a powerful tool in revision; the effort to remember something really strengthens your memory. Apps such as Memrise and Quizlet allow you to use or create your own quizzes based on topics. Create them, test yourself or get someone to test you. It works!

Learn more about retrieval practice here: Link to the Learning Scientists

How we learn at Redmoor

Flash cards

Simply create questions on one side, answers on the other. Colour code the cards for specific topics. Post it notes can be useful for keywords and timelines.
Once you have created your flash cards, you need to think about how you will use them effectively. There is a link below to Leitner system of using flashcards:
YouTube: The Leitner Method



Dual coding

Dual coding is the process of combining verbal materials with visual materials.
Simply take information that they are trying to learn, and draw visuals to go with it

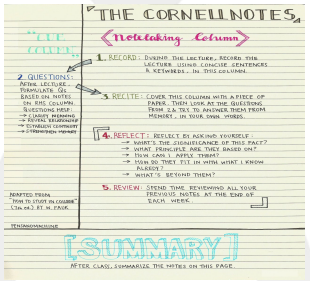
Learn more about dual coding here:
Link To The Learning Scientists

Try to come up with different ways to represent the information. For example: a timeline, a cartoon strip or a diagram of parts that work together.

Cornell Notes

This method can be used in your revision books as a great method to get you to 'think' about your revision.
Simply split your page into 3 sections as shown on the diagram below:

- Note Taking
- Key words / concepts
- Summary



THINK HARD, WORK HARD, GO FAR

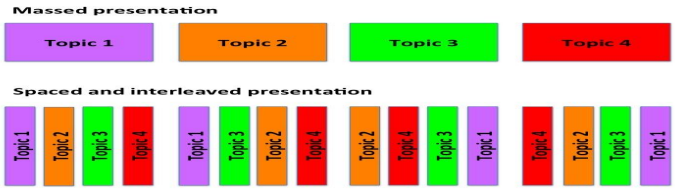
How we learn at Redmoor

Spacing and interleaving

Don't revise your all topics in one go (cramming). Instead, you should revise 'chunks' of a topic for small amounts of time (15-30 minutes) and then move onto another 'chunk' from a different Topic.

Eg. topic 1 cells, topic 2 digestive system

This will improve your memory!



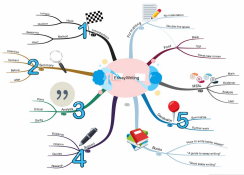
Mind Maps

Mind mapping is simply a diagram used to visually represent or outline information.

It is a powerful graphic technique you can use to translate what's in your **mind** into a visual picture.

Mind maps help with memorisation of jey knowledge as it helps to organise information and begin to make links and connections to different pieces of information.

The use of visual images helps your brain to memorise the information with simple words next to them - links to dual coding!



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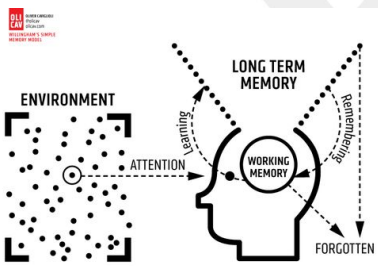
Useful links:

- The learning scientists: https://www.learningscientists.org/
- Memrise: https://www.memrise.com/
- Quizlet: https://quizlet.com/en-gb
- Seneca: https://www.senecalearning.com/



THINK HARD, WORK HARD, GO FAR

Literacy
Proofreading Guidance

When we write, we know what we're trying to say, so our brains might skip out words or punctuation. It is important that we proofread to avoid making silly mistakes.

Full Stops & Commas

- A full stop gives a strong pause. It goes at the end of a whole sentence.
e.g. Jake had four brothers. He got on best with Dan who shared his sense of humour.

- A comma gives a short pause and is used to separate items in a list *e.g. Bring some milk, eggs, butter and flour.*
After introductory words *e.g. However,*
Between the different parts of a sentence: *Gran, who had been a champion boxer in the sixties, stepped forward.*

Spelling Homophones

Words that sound the same but are spelt differently.

there , their , they're
They're silly to have left their coats over there where there is wet grass.

your , you're
You're such a good friend to lend me your phone.

to , two , too
Two of my friends are coming to Alton Towers too.

Capital Letters

- At the start of every sentence
- For days, months and celebrations, e.g. Wednesday, April, Easter
- For proper nouns (names of people and places) e.g. James, London, Rutland Water
- For Titles (except the small words) e.g. The Hunger Games, Match of the Day
- For abbreviations e.g. BBC, RSPCA

Grammar Errors

I have played tennis. ✔ I of played tennis. ❌
I should have / should've played tennis. ✔
I of / should of played tennis. ❌

I/she/he were late. ❌ I/she/he was late. ✔
They were late. ✔ They was late. ❌
You were late. ✔ You was late. ❌

I ran quick, passing the ball brilliant. I played amazing. ❌
I ran quick**ly**, passing the ball brilliant**ly**. I played amazing**ly**. ✔

Correct Tense

Are you using the correct tense? Do not switch from one to another. - For days, months and celebrations,

- **Past:** e.g. I ran to the shops.
- **Present:** e.g. I am running to the shops
- **Future:** e.g. I am going to run to the shops.

Paragraphs

- Change in time, e.g. Later that day, an important letter arrived. - Change in place, e.g. Back at home things were just as bad. / Chile, however, has a population of...
- Change of subject, e.g As well as mountain biking, I also enjoy swimming...
- Each time a different person speaks:
"Hey, that's my phone!"
"No it isn't - I had it for my birthday."

Apostrophes

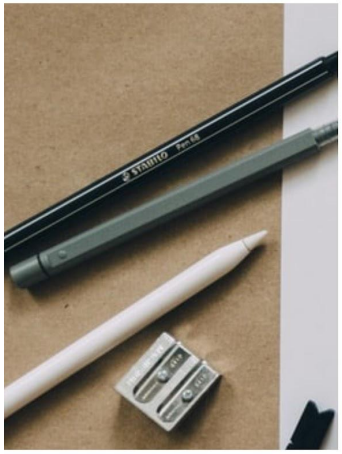
- Use an apostrophe to show possession e.g. John's football is flat.

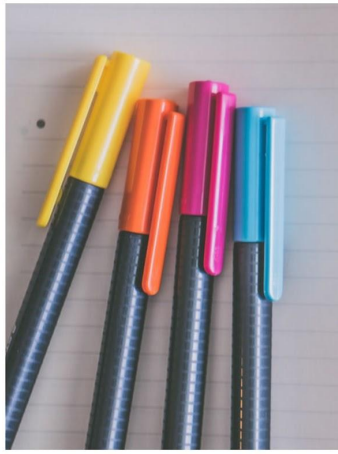
- Also use an apostrophe for omissions (the apostrophe shows where a letter or letters are missing) e.g. I didn't do it. It wasn't me!

Literacy Marking Code:

sp	Spelling mistake
^	Missing word/letter
O	Capital letter/Punctuation
~~~~~	Unclear/poorly worded
//	New paragraph
th	Use a thesaurus

Contents Page





Equipment

all students must have...

Mobile phones are not to be used in lessons without staff permission
No photos or videos to be taken without permission
No school related images or videos to be uploaded on to social media

Black or blue pen
Pencils
Ruler - 30cm
Protractor
Compass
Rubber
Pencil Sharpener
Purple pen
Scientific calculator
Coloured crayons
Student Organiser
Knowledge Organiser
Locker Key

Redmoor English Blood Brothers

BIG QUESTION: To what extent is 'Blood Brothers' a tragedy?	
A tragedy is a type of serious play that deals with sorrowful or terrible events encountered or caused by a heroic individual. Tragedies originated in Ancient Greece but became particularly popular during the Shakespearean era.	
Tragic hero	A main character is cursed by fate and in possession of a fatal flaw (hamartia). Both Mickey and Edward have the characteristics of tragic heroes.
Hamartia	This is the fatal flaw of the tragic hero, the thing leading to their downfall.
Catharsis	The release of the audience's emotions through empathy (understanding/sharing feelings) with the characters.
Internal Conflict	the struggles characters face over their flaws. For example, Mrs Johnstone's struggle after giving her son away.

BIG QUESTION: How does Russell present tragic protagonists?	
Edward Lyons	is raised by the Lyons. He remains down-to-earth despite his upbringing. He attends private schools and university.
Mickey Johnstone	is the son kept by Mrs Johnstone. He has a working-class upbringing. He takes a number of knocks in life and, as the play goes on, becomes cynical and mean.
Mrs Johnstone	is the biological mother of Mickey, Edward and Sammy. She is deeply superstitious.
Mrs Lyons	is the opposite of Mrs Johnstone - she's snobbish and arrogant. She adopts Edward and brings him up as a wealthy boy.
Linda	is a tomboy who enjoys playing with Mickey and Edward, but soon becomes an object for their desire.

BIG QUESTION: How does Russell convey ideas about divisions in society?	
1.	Only mine until the time comes round to pay the bill. Then, I'm afraid, what can't be paid must be returned. **Mrs Johnstone, Act 1**
2.	"You! Why didn't you give me away? I could have been…I could have been him!" **Mickey, Act 2**
3.	"And do we blame superstition for what came to pass? Or could it be what we, the English, have come to know as class?" **The Narrator**
4.	'I wish I could still believe all that blood brothers stuff. But I can't." **Mickey, Act 2**
5.	"I didn't sort anythin' out Linda. Not a job, not a house, nothin'. It used to be just sweets an' ciggies he gave me, because I had none. Now it's a job and a house. I'm not stupid, Linda. You sorted it out. You an' Councilor Eddie Lyons." **Mickey, Act 2**

BIG QUESTION: How does Russell critique modern Britain?	
Context (A03) - *Information about the writer and the circumstances that influenced and inspired his writing.*	
Willy Russell	Russell is a dramatist from Liverpool. Hel was a child from a low-income family and he left school at the age of 15 without any academic qualifications.
Marilyn Monroe	Marilyn Monroe was an extremely glamorous actress in the1950s. She was presented in the media as having the 'perfect life' but the reality was very different.
Social Class	At this time there was a large financial gap between the working and middle class in Britain. There was also a class divide in education; whether you went to a public or private school often decided what job you would get.
Margaret Thatcher	Thatcher was a Conservative politician who was elected Prime Minister in 1979, four years before Blood Brothers was first performed. Thatcher divided opinion: some people admired her strength and tenacity while others felt she was uncaring.

BIG QUESTION: How do form and structure create dramatic effects / meaning?	
Prologue	The opening section of the play that establishes important background information.
Stage Directions	Instructions in a script that indicate how something should be performed and occasionally provide helpful descriptions.
Monologue	A long speech delivered by one character.
Foreshadowing	**T**his is used to give hints or indications about what is to come later in the story.
Dramatic Irony	**T**he audience know what the characters don't.
The 'Fourth Wall'	An invisible, imagined wall separating the characters and audience.
Dramatic Tension	This keeps an audience hooked and feeling involved.

Key Word	Meaning	Use it
Thatcherism	The policies of Prime Minister Margaret Thatcher are given this name.	*Thatcherism* changed many aspects of life for people in Liverpool.
Prejudice	An unfair opinion which is formed beforehand and without knowledge.	Mrs Lyons has a *prejudice* against lower class women.
Social class	A division in society based on social and economic position.	Our power in society is influenced by our *social class.*
Superstition	A belief not based on scientific reason or logic.	Knocking on wood is a *superstition*.
Privilege	An advantage that one person or a group of people has.	Your ability to succeed in life may depend on your level of *privilege.*
Inequality	Where some people have more opportunities than others in society.	There is a lot of *inequality* in the world.

Redmoor English Department: The Art of Rhetoric

The Aristotelian Triad

Writers of texts uses various strategies to appeal to their audiences. The 3 means by which you persuade your audience are ethos, logos and pathos.
Aristotle, the Ancient Greek philosopher (thinker), came up with the idea of the 3 modes of persuasion. It's a framework for understanding how language and structure can be used to persuade an audience.

Ethos 	Appeals to the personality or character. Establishes the author's credibility using: - *Good will* - *Good character* - *Expertise*
Logos 	Appeals to reason. Establishes an argument based on logic using: - *Statistics/Facts* - *Citing authority* - *Data* - *Benefits*
Pathos 	Appeals to the emotions of the author's audience. Writer's play on their audience's: - *Fear* - *Duty* - *Hope* - *Patriotism*

Structuring Persuasive Writing

Introduction
Introduce your argument to your audience.

→ **Ethos**
Establish your ethos. Why are you the best person to present this argument?

→ **Argument #1: Logos**
Present and explain the first point of your argument. Use logos to make your argument clear.

↓ **Counterargument**
Consider what the opposing side would say and explain why their point of view is wrong.

← **Argument #2: Pathos**
Present and explain the second point of your argument. Use pathos to make your audience feel a particular emotion.

← **Conclusion**
Conclude your argument using logos, pathos and ethos for the final time.

The Big Questions

1. *What is rhetoric and how can it be crafted?*
2. *What's the point in punctuation?*
3. *How can language techniques be used to achieve powerful effects?*
4. *Why does structure matter?*

VOCABULARY BOOST!

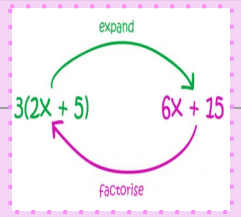
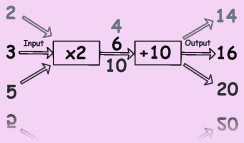
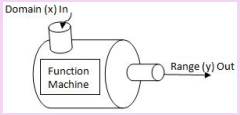
Key Word	Etymology	Definition
Rhetoric	From Greek ***rhetorike,*** meaning the art of a master speaker.	The art of persuasive speaking or writing.
Impassioned	From Italian ***impassionaire,*** *to fill with passion.*	Filled with or showing great emotion.
Manipulate	From the Latin word ***manus,*** meaning hand.	To control or influence cleverly.
Activist	The root word is ***actus,*** meaning a 'driving force' or an impulse.	A person who campaigns to bring about social or political change.

Rhetorical Methods	Example
Analogy: *an analogy can be used to help an audience understand unfamiliar things by linking them to familiar ideas.*	If that politician gets voted in during the next election, it will be like Donald Trump's reign all over again.
Anaphora: *the repetition of a word or phrase at the beginning of multiple sentences.*	Now is the time to make real the promises of democracy. Now is the time to rise from the dark and desolate valley of segregation to the sunlit path of racial justice.
Anecdote: *a short, amusing or interesting story about a real incident or person.*	When I was 13, I decided that I needed to improve my attitude towards my education…
Direct address: *addressing a person or a group of people directly*	Now is the time to lift our nation from the quicksands of racial injustice.
Emotive language: word choices that are made to evoke an emotional response.	The world's wildlife is being brutally slaughtered.
Hyperbole: *exaggerated statements or claims that are not meant to be take literally.*	My shoes are killing me.
Imperative: *a command.*	If there is one thing I know for certain, it is that this has to stop.
Maxim: *a brief expression of a general rule or principle (a short but wise statement)*	Do unto others as you want others to do unto you.
Rhetorical question: *a question which does not require an answer.*	Why, 35 years ago, fly the Atlantic?
Tricolon: *a series of three parallel words, phrases or clauses.*	We can help all people to see it, to draw hope from it, and to move irresistibly towards it.

Powers/Roots/Surds/Formulae & Functions

Keyword	Definition
Product 5 x 4 = 20	The result when you multiply two or more numbers 20 is the product
Multiple (2, 4, 6, 8, 10 and 12)	The **multiples** of 2 are all the numbers in the 2 times table
Lowest Common Multiple (LCM) 9: 19, 18, 27, 36, 45,... 12: 12, 24, 36, 48,...	The smallest whole number which is a multiple of both numbers
Factor 20 1 x 20 2 x 10 4 x 5	A number that divides into another number exactly with no remainders
Highest Common Factor (HCF) 36: 1 2 3 4 6 9 12 18 54: 1 2 3 6 9 18 27 54	It's the largest number which is a factor of two or more numbers.
Prime Number 2 3 5 7 11 13 17	Only has 2 factors; 1 & itself
Rational Number 3 -5 ½ √49 8.45	A number that can be written / rewritten as a fraction
Irrational Number π √10 1.2564...	A number that cannot be written/rewritten as a fraction

Cubed Numbers: $1^3 = 1$,$2^3 = 8$, $3^3 = 27$,$4^3 = 64$, $5^3 = 125$

Keyword	Definition
Variable 3y + 6	A letter used to represent a number
Subject of an equation	The only variable(letter) before the = in a formula **s**= d/t
Expand 	Remove brackets by multiplying
Factorise	Find common factors and write using brackets - opposite of expanding
Function 	Describes what happens to an input variable, in order to get the output result.
Domain Range 	Input & Output values for a function
Quadratic Equation $ax^2 + bx + c = 0$	An expression which has a square term e.g. x^2
Identity **a/2 ≡0.5a**	An equation that is true (always works), no matter what values are chosen. (**≡ identity symbol)**

The cube root of 64 equals 4,

$\sqrt[3]{64} = 4$

because

$4 \times 4 \times 4 = 64$

$\sqrt{9} = \pm 3$ can be + or -

What is a Surd ?

$\sqrt{3}$ root of a whole number = 1.732050808 ... irrational number

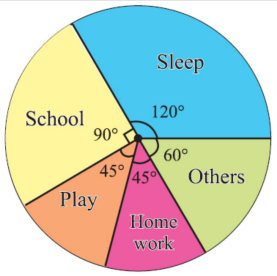
A **surd** is a square root which cannot be reduced to a whole number.

Handling Data

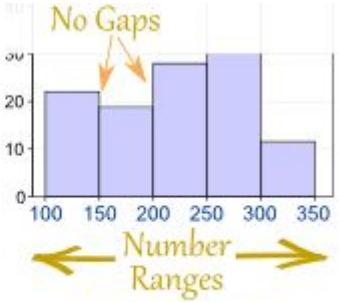
Keyword	Definition
Qualitative data	**non-numerical** data - e.g. eye colour
Quantitative Data	**numerical** data - e.g. shoe size
Discrete Data	Is **counted** (only integers)
Continuous Data	Is **measured** (can take any numerical value)
Grouped Data	Data that has been **bundled in to categories**. Seen in grouped frequency tables, histograms, cumulative frequency etc.
Pie Chart	A graph using a divided circle where each section represents a percentage of the total.
Angle in a Pie Chart	Frequency x 360º (Frequency divided by Total x 360º)
Histogram	A **histogram** looks like a **bar chart**, except **the area of the bar**, and not the height, shows the frequency of the data. Histograms are usually used when the data is a number range and is in groups of unequal width.
Frequency Density	Frequency Density = Frequency / Class Width And is the y axis
Frequency in a Histogram	It is the **AREA** of the bar, and not the height, which shows the frequency of the data. Frequency = Frequency Density x Class Width

Primary Data – **collected yourself** for a specific purpose.
Secondary Data – **collected by someone else** for another purpose.

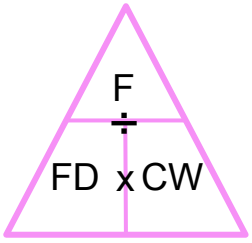
Activity	Duration in hours	Central angle
Sleep	8	$\frac{8}{24} \times 360^0 = 120^0$
School	6	$\frac{6}{24} \times 360^0 = 90^0$
Play	3	$\frac{3}{24} \times 360^0 = 45^0$
Homework	3	$\frac{3}{24} \times 360^0 = 45^0$
Others	4	$\frac{4}{24} \times 360^0 = 60^0$
Total	24	360^0



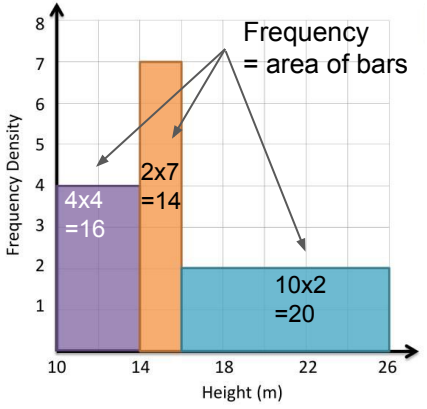
Bar Graph



Histogram



F = Frequency
FD = Frequency Density
CW = Class Width



Redmoor Science Department

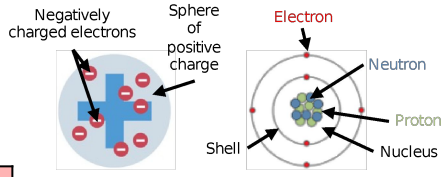
Atomic structure

BIG QUESTIONS:

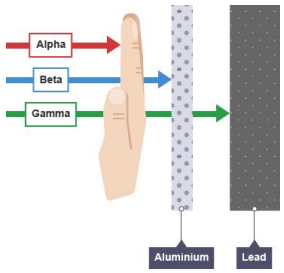
1. What is an atom and how has our understanding of them changed?
2. How does an unstable nucleus change when it becomes stable?
3. What is the half life of a radioactive isotope and how could you calculate it?
4. What are the risks and medical benefits of radiation?
5. What are the differences between nuclear fusion and nuclear fission.

1. What is an atom and how has our understanding of them changed?

Atom	The smallest part of an element that can exist.
Nucleus	Central part of an atom. It contains protons and neutrons.
Proton	Sub-atomic particle with a positive charge and mass of 1.
Neutron	Sub-atomic particle with no charge and a mass of 1.
Electron	Sub-atomic particle with a negative charge and a mass of 1/2000.
Isotope	Forms of an element that have the same number of protons but different numbers of neutrons.
Mass number	Number of protons and neutrons found in the nucleus of an atom.
Proton number	Number of protons sound in the nucleus of an atom.



Plum Pudding model *Nuclear model*



	Symbol	Penetrating power	Ionising power	Range in air
Alpha	α	Skin/paper	High	< 5 cm
Beta	β	3 mm aluminium foil	Low	≈ 1 m
Gamma	γ	Lead/ concrete	Very low	> 1 km

2. How does an unstable nucleus change when it becomes stable?

Radioactive decay	The process in which unstable atomic nuclei break apart or change, releasing radiation.
Radiation	Energy carried by particles from a radioactive substance, or spreading out from a source.
Alpha particle	Subatomic particle comprising two protons and two neutrons (the same as a helium nucleus).
Beta particle	An electron ejected from a nucleus when a neutron becomes a proton.
Electromagnetic wave	A transverse wave caused by oscillations in an electromagnetic field.
Gamma	A type of ionising radiation that is also part of the EM spectrum. It has no mass.
Penetrating power	The power of the radiation that demonstrates how far into a material the radiation will go.
Ionise	To convert an uncharged atom or molecule into a charged particle by adding or removing electrons.

Alpha decay:

Mass number decreases by 4

$$^{219}_{86}Rn \rightarrow ^{215}_{84}Po + ^{4}_{2}He$$

Alpha particle

Atomic number decreases by 2

Beta decay:

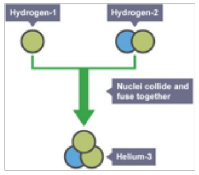
Mass number does not change

$$^{14}_{6}C \rightarrow ^{14}_{7}N + ^{0}_{-1}e$$

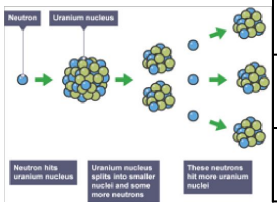
Alpha particle

Atomic number increases by 1

Nuclear fusion

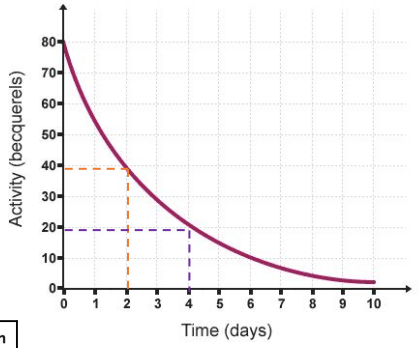


Nuclear fission



3. What is the half-life of a radioactive isotope and how could you calculate it?

Half-life	The time it takes for the number of nuclei of a radioactive isotope in a sample to halve.
	The time it takes for the count rate from a sample containing a radioactive isotope to fall to half its starting level.
Activity	Number of decays of a radioactive element per second. Measured in Becquerels (Bq).



Start activity = 80 Bq

Half of start activity = 80 / 2 = 40 Bq

1 half-life = 2 days

2 half-lives:

= 40 / 2 = 20 Bq

2 half-lives = 4 days

4. What are the risks and medical benefits of radiation?

Irradiation	Process of exposing an object to a source of radiation.
Sterilisation	The process of ensuring that a sample contains no living things.
Contamination	Occurs if an object has a radioactive material introduced into it.
Background radiation	Low level nuclear radiation that is always present from natural and man-made sources.
Mutation	A random and spontaneous change in the structure of a gene, chromosome or number of chromosomes.

5. What are the differences between nuclear fusion and nuclear fission?

Nuclear fusion	The joining together of two smaller atomic nuclei to produce a larger nucleus. Radiation is released when this happens.
Nuclear fission	The splitting of a large nucleus to produce two smaller ones. Two or three neutrons are also released in the process.
Chain reaction	When a neutron splits a nucleus, releasing more neutrons, which in turn go on to split even more nuclei.

Module 4 -Les Loisirs

Qu'est-ce que tu aimes regarder à la télé/au cinéma? What do you like to watch on TV/at the cinema?

Opinion (1)	Verb(2)	Noun(3)	Noun(4)	Connective(5)	Quality Vocab(6)	Verb(7)	Adjective(8)
J'adore I love **J'aime assez** I quite like **J'aime beaucoup** I really like **Je n'aime pas du tout** I don't like at all **Je déteste** I hate **Je préfère** I prefer **Je ne supporte pas** I can't stand	**regarder** to watch / watching	les **actualités** the news les **dessins animés** (the) cartoons les **feuilletons** (the) soaps les **jeux télévisés** (the) game shows les **publicités** (the) adverts les **séries** (the) series les **émissions de télé-réalité** (the) reality TV shows les **émissions de sport** (the) sports shows les **documentaires** (the) documentaries la **météo** the weather forecast	les **films de guerre** (the) war films les **films policiers** (the) crime films les **films d'action** (the) action films les **films de science fiction** t(the) sci-fi films les **films d'amour** (the) love films les **comédies romantiques** (the) Rom-Coms les **films d'horreur** (the) horror films	**parce que** because **car** because **puisque** as	**on me dit que** people say that **il faut admettre que** I must admit that **heureusement** fortunately **malheureusement** unfortunately **je dirais que** I would say that **c'est vrai que** it's true that **ce n'est pas vrai que** it's not true that **pour moi** for me **selon mes amis** according to my friends **j'estime que** I reckon that	**c'est** it is **ce n'est pas** it's not **ça peut être** it can be	**émouvant.** moving. **triste.** sad. **effrayant.** scary. **comique.** funny. **banal.** dull. **romantique.** romantic. **idiot.** stupid. **original.** original. **bizarre.** weird. **formidable.** great.

Tu aimes quelle sorte de musique? What sort of music do you like?

Opinion (9)	Verb(10)	Noun(11)		Opinion (12)	Connective(12)	Reason (13)
J'adore I love **J'aime assez** I quite like **J'aime beaucoup** I really like **Je ne supporte pas** I can't stand	**écouter** to listen to/ listening to	de la **musique rap** (some) rap music de la **musique RnB** (some) RnB music de la **musique pop** (some) pop music de la **musique rock** (some) rock music de la **musique classique** (some) classical music des **chansons françaises** (some) French songs des **chansons anglaises** (some) English songs	**et** and **mais** but	**mon chanteur préféré est...** my favourite male singer is **ma chanteuse préférée est...** my favourite female singer is... **mon groupe préféré est...** my favourite group is...	**car** (because) **parce que** (because) **puisque** (as)	**j'aime les mélodies.** I like the tunes. **j'aime les paroles.** I like the lyrics. **j'adore les chansons.** I love the songs. **il est génial.** he is great. **elle est fantastique.** she is fantastic.

Present Tense

Qu'est-ce que tu fais? What do you do?

Time Phrase(14)	Verb(15)	PVS(16)	Noun(17)	Subordinate Clause(18)
Normalement, Normally, **D'habitude,** Usually, **Le weekend,** At the weekend, **Pendant la semaine,** During the week, **Quelquefois,** Sometimes, **De temps en temps,** From time to time,	**je joue** I play	**au** at (m) **aux** at (pl)	**foot.** football. **jeux vidéos.** video games.	**avec mes ami(e)s.** with my friends. **avec mes copains.** with my mates (m). **avec mes copines.** with my mates (f). **avec ma famille.** with my family. **avec mon équipe.** with my team. **chez moi.** at my house **chez mon ami(e).** at my friend's house. **chez mon père.** at my dad's house. **au centre sportif.** at the sports centre. **en ville.** in town. **au collège.** at school. **au restaurant.** at the restaurant. **au parc.** at the park. **dans ma chambre** in my room.
	je fais I do	**du** some (m) **de la** some (f) **de l'** some (v)	**vélo.** cycling. **natation.** swimming. **équitation.** horse riding.	
	je regarde I watch	**la** the (f) **un** a (m)	**télé.** TV. **match de foot.** football match.	
	je vais I go	**en** to **au** to the (m)	**ville** town **cinéma** cinema	
	je mange I eat	**du** some (m) **de la** some (f) **de l'** some (v) **des** some (pl)	**poulet.** chicken. **pizza.** pizza. **ananas.** pineapple. **frites.** chips.	
	j'écoute I listen	**de la** some (f)	**musique.** music.	
	je retrouve I meet	**mes** my (pl)	**amis.** friends.	

Future Tense

Qu'est-ce que tu vas faire? What are you going to do?

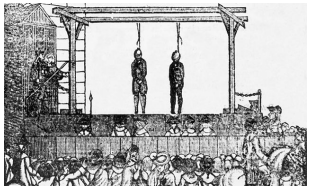
Time Phrase (19)	Verb(20)	PVS (21)	Noun(22)
Demain, Tomorrow, **Ce weekend,** This weekend, **La semaine prochaine,** Next week,	**je jouerai** I will play	**au** at (m)	**rugby.** rugby.
	je ferai I will do	**du** some (m)	**footing.** jogging
	je regarderai I will watch	**la** the (f)	**télé.** TV.
	j'irai I will go	**à la** to the (f)	**bibliothèque.** library.
	Je mangerai I will eat	**des** some (pl)	**chips.** crisps.
	j'écouterai I will listen	**de la** some (f)	**musique.** music.
	je retrouverai I will meet	**mes** my (pl)	**amis.** friends.

Perfect Tense

Qu'est-ce que tu as fait? What did you do?

Time Phrase (23)	Verb(24)	PVS(25)	Noun(26)
Hier, Yesterday, **Ce weekend,** This weekend, **La semaine dernière,** Last week,	**j'ai joué** I played	**au** at (m)	**netball.** netball.
	j'ai fait I did	**de la** some (f)	**danse.** dance.
	j'ai regardé I watched	**une** a(f)	**série Netflix.** Netflix series.
	je suis allé(e) I went	**au** to the (m)	**parc.** park.
	j'ai mangé I ate	**chez** at	**McDo.** McDonald's.
	j'ai écouté I listened	**un** a (m)	**podcast.** podcast.

History Thematic Study: C&P- Punishments





KT1: c1000-c1500 medieval England

1066 William crowned King - end of Anglo-Saxon England
1215 Trial by Ordeal ends
Capital punishment: death penalty / Capital crime: crime carrying the death penalty
Corporal punishment: punishment involving harm to the body, e.g whipping
Mutilation: punishment that maims or removes part of the body
Wergild: a fine that was paid to the family of a victim in Anglo-Saxon England
William of Normandy: becomes William I after Battle of Hastings
Stocks and pillories: devices that put criminals on public view

KT2: c1500-c1700 early modern England

1576 Houses of Correction begin
1605: Gunpowder Plot
1660 Transportation begins
1680's The Bloody Code begins
Carting: criminal is paraded around the streets to shame/humiliate them
Bridewells (Houses of Correction): and hard labour aim to reform
The Bloody Code: series of laws extend the death penalty to many minor crimes
Transportation: removing the criminal to another country (1st US colonies then Australia)
Hang, Draw and Quarter: brutal punishment for treason

KT3: c1700-c1900 18th & 19th C Britain

1776 End of Transportation to America
1778 Transportation to Australia starts
1823 Gaols (Jails) Act (Peel's reforms)
1832 Punishment by Death Act - reduces number of capital crimes to 60
1839 Prisons Act introduces Separate System
1842 Pentonville Prison opens
1865 Prisons Act introduces Silent System
1857 Transportation to Australia ends
1868 End of public executions
Prison Hulk: old ships used as prisons, very unsanitary
Separate System: prison system aimed to reform through useful work
Silent System: harsher evolution of the separate system involving pointless hard labour, aim now changed to deterrence
Pentonville Prison: blueprint for purpose built silent system prisons
Reformers: people who want to change punishments for the better *(be careful not to mix up with reform as an aim of punishment)*
John Howard: Reformer - Inspected prisons and suggested improvements
Elizabeth Fry: Reformer - Visited women's prisons and campaigned to improve them
Robert Peel: Reformer - Home Secretary who introduced prison reform laws
Jeremy Bentham: Reformer - influenced aims of punishment and prison design

KT4: c1900-present modern Britain

1902 First Borstal opens
1933 Hanging of under 18s ended
1933 First open prison
1952 Derek Bentley Case
1965 Death Penalty ends
1972 Community Service introduced
1990s: Electronic tag introduced
Borstal: reform schools for offenders under 18 years old
Attendance Centre: young offenders' last chance before Young Offenders Institution (YOI)
Open prison: Prison where offenders could leave to work in the day
Parole: where a prisoner is released early if they behave well in prison
Probation: where an offender avoids a prison sentence but is closely monitored
Ruth Ellis/Derek Bentley/Timothy Evans: Controversial trials which made the public question the death penalty

Aims of Punishment

Deterrence: To warn others not to commit the same offence
Reform/Rehabilitation To help the criminal improve their behaviour in the future, through making them think about their actions or giving them skills to avoid criminality in the future
Removal: To physically remove the criminal from society or the country
Compensation: The victim, government or society is paid back for the trouble or harm caused by the criminal
Retribution: The punishment should fit the crime so victims are satisfied

The Challenge of Resource

Resource Challenges

Resources are things that humans require for life or to make our lives easier. Humans are becoming increasingly dependent on exploiting these resources, and as a result they are in high demand.

Significance of Water

Resources such as food, energy and water are what is needed for basic human development.

FOOD

Without enough nutritious food, people can become **malnourished**. This can make them ill . This can prevent people working or receiving education.

WATER

People need a supply of **clean and safe water** for drinking, cooking and washing. Water is also needed for food, clothes and other products.

ENERGY

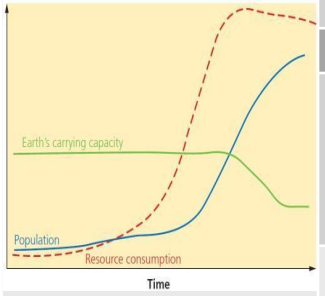
A good supply of energy is needed for a basic standard of living. People need **light and heat** for cooking or to stay warm. It is also needed for

Demand outstripping supply

The demand for resources like food, water and energy is rising so quickly that supply cannot always keep up. Importantly, access to these resources vary dramatically in different locations

1. Population Growth

- Currently the global population **is 7.3 billion**.
- Global population has risen **exponentially** this century.
- Global population is expected to reach **9 billion by 2050**.
- With more people, the **demand** for food, water, energy, jobs and space **will**



2. Economic Development

- As **LICs** and **NEEs** develop further, they require **more energy** for industry.
- **LICs** and **NEEs** want similar lifestyles to **HICs**, therefore they will need to **consume more resources**.
- Development means **more water is required** for food production as diets improve.

Resource Reliance Graph

Consumption – The act of using up resources or purchasing goods and produce.
Carry Capacity – A maximum number of species that can be supported.

Resource consumption exceeds Earth's ability to provide!

3. Changing Technology and Employment

- The demand for resources has driven **the need for new technology** to reach or gain more resources.
- More people in the **secondary and tertiary industry** has

Food in the UK

Growing Demand

- The UK imports about 40% of its food. This increases people's **carbon footprint**.
- There is growing demand for greater choice of **exotic foods** needed all year round.
- Foods from abroad are more affordable.
- Many food types are unsuitable to be grown in the UK.

Impact of Demand

Foods can travel long distances (food miles). Importing food adds to our carbon footprint.
+ Supports workers with an income + Supports families in LICs.
+ Taxes from farmers' incomes contribute to local services.
- Less land for locals to grow their own food.
- Farmers exposed to chemicals

Agribusiness

Farming is being treated like a large industrial business. This is increasing food production.
+ Intensive farming maximises the amount of food produced.
+ Using machinery which increases the farms efficiency.
- Only employs a small number of workers.
- Chemicals used on farms damages the habitats and wildlife.

Sustainable Foods

Organic foods that have little impact on the environment and are healthier have been rising. Local food sourcing is also rising in popularity.

- **Reduces emissions** by only eating food from the UK.
- **Buying locally sourced** food supports local shops and farms.
- A third of people **grow their own food**.

Energy in the UK

Growing Demand

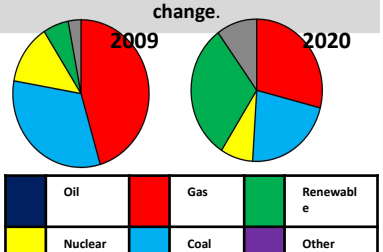
The UK **consumes less energy** than compared to the 1970s despite a smaller population. This is due to the **decline of industry**.

Energy Mix

The majority of UK's energy mix comes from **fossil fuels**. By 2023, the UK aims for 15% of its energy to come from **renewable sources**. These renewable sources do not contribute to **climate change**.

Changes in Energy Mix

- 75% of the UK's oil and gas has been used up.
- Coal consumption has declined.
- UK has become too



Water in the UK

Growing Demand

The average water used per household has risen by 70%. This growing demand is predicted to increase by 5% by 2020.
This is due to:

- A growing UK population.
- Water-intensive appliances.
- Showers and baths taken.
- Industrial and leisure use.
- Watering greenhouses.

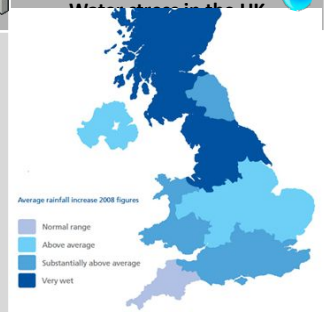
Deficit and Surplus

The north and west have a **water surplus** (more water than is required).
The south and east have a **water deficit** (more water needed than is actually available).
More than half of England is experiencing **water stress** (where demand exceeds supply).

Pollution and Quality

Cause and effects include:

- Chemical run-off from farmland can destroy habitats and kills animals.
- Oil from boats and ships poisons wildlife.
- Untreated waste from industries creates unsafe drinking water.
- Sewage containing bacteria spreads infectious diseases.



Management

UK has **strict laws** that limits the amount of discharge from factories and farms.
Education campaigns to inform what can be disposed of safety.
Waste water treatment plants remove dangerous elements to then be used for safe drinking.
Pollution traps catch and filter pollutants.

Water Transfer

Water transfer involves moving water through pipes from areas of surplus (Wales) to areas of deficit (London).
Opposition includes:

- Effects on **land and wildlife**.
- High maintenance **costs**.
- The **amount of energy** required to move water over long distances.

Energy in the UK (continued)

Significance of Renewables

+ The UK government is investing more into low carbon alternatives.
+ UK government aims to meet targets for reducing emissions.
+ Renewable sources include wind, solar and tidal energy.
- Although infinite, renewables are still expensive to install.
- Shale gas deposits may be exploited in the near future

Exploitation

Nuclear
New plants provide job opportunities.
Problems with safety and possible harm to wildlife.
Nuclear plants are expensive.

Wind
Locals have low energy bills.
Reduces carbon footprint.

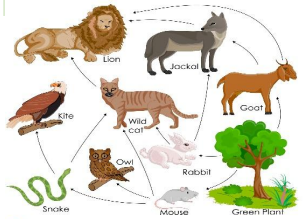
The Living World

What is an Ecosystem?

An ecosystem is a system in which organisms interact with each other and with their environment.

Ecosystem's Components

Abiotic	These are **non-living**, such as air, water, heat and rock.
Biotic	These are **living**, such as plants, insects, and animals.
Flora	**Plant life** occurring in a particular region or time.
Fauna	**Animal life** of any particular region or time.

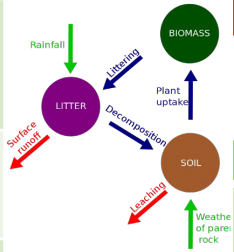


Food Web and Chains

Simple **food chains** are useful in explaining the basic principles behind ecosystems. They show only one species at a particular trophic level. **Food webs** however consists of a network of many food chains interconnected together.

Nutrient cycle

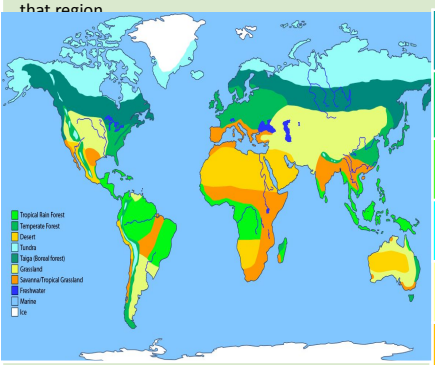
Plants take in **nutrients** to build into new organic matter. Nutrients are taken up when animals eat plants and then returned to the soil when animals die and the body is broken down by **decomposers**.



Litter	This is the **surface layer** of vegetation, which over time breaks down to become **humus**.
Biomass	The total **mass of living organisms** per unit area.

Biomes

A biome is a **large geographical area of distinctive plant and animal groups**, which are adapted to that particular environment. The climate and geography of a region determines what type of biome can exist in that region.



- Coniferous forest
- Deciduous forest
- Tropical rainforests
- Tundra
- Temperate grasslands
- Tropical grasslands
- Hot deserts.

The **most productive biomes** – which have the greatest biomass- grow in climates that are **hot and wet**.

Biome's climate and plants

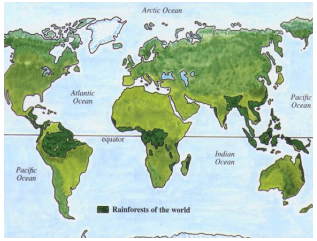
Biome	Location	Temperature	Rainfall	Flora	Fauna
Tropical rainforest	Centred along the Equator.	Hot all year (25-30°C)	Very high (over 200mm/year)	Tall trees forming a canopy; wide variety of species.	Greatest range of different animal species. Most live in canopy layer
Tropical grasslands	Between latitudes 5°-30° north & south of Equator.	Warm all year (20-30°C)	Wet + dry season (500-1500mm/year)	Grasslands with widely spaced trees.	Large hoofed herbivores and carnivores dominate.
Hot desert	Found along the tropics of Cancer and Capricorn.	Hot by day (over 30°C) Cold by night	Very low (below 300mm/year)	Lack of plants and few species; adapted to drought.	Many animals are small and nocturnal: except for the camel.
Temperate forest	Between latitudes 40° -60° north of Equator.	Warm summers + mild winters (5-20°C)	Variable rainfall (500-1500m /year)	Mainly deciduous trees; a variety of species.	Animals adapt to colder and warmer climates. Some migrate.
Tundra	Far Latitudes of 65° north and south of Equator	Cold winter + cool summers (below 10°C)	Low rainfall (below 500mm/ year)	Small plants grow close to the ground and only in summer.	Low number of species. Most animals found along coast.
Coral Reefs	Found within 30° north – south of Equator in tropical waters.	Warm water all year round with temperatures of 18°C	Wet + dry seasons Rainfall vari greatly due location.	Small range of plant life which	Dominated by polyps

Tropical Rainforest Biome

Tropical rainforest cover about **2 per cent** of the Earth's surface yet they are home to **over half of the world's plant and animals**.

Interdependence in the rainforest

A rainforest works through **interdependence**. This is where the plants and animals **depend on each other** for survival. If one component changes, there can be **serious knock-up effects** for the entire ecosystem.



Distribution of Tropical Rainforests

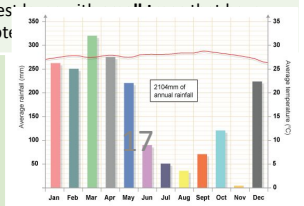
Tropical rainforests are **centred along the Equator** between the Tropic of Cancer and Capricorn. Rainforests can be found in South America, central Africa and South-East Asia. **The Amazon** is the world's largest rainforest and takes up the majority of northern South America, encompassing countries such as Brazil and Peru.

Rainforest nutrient cycle

The **hot, damp conditions** on the forest floor allow for the **rapid decomposition** of dead plant material. This provides plentiful nutrients that are easily absorbed by plant roots. However, as these nutrients are in high demand from the many fast-growing plants, they do not remain in the soil for long and stay close to the surface. If vegetation is removed, the soils quickly become **infertile**.

Climate of Tropical Rainforests

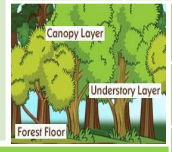
- Evening temperatures rarely fall below **22°C.**
- Due to the **presence of clouds**, temperatures rarely rise above **32°C**.
- Most afternoons have heavy showers.
- At night with no clouds insulating, temperature drops.



CASE STUDY: UK Ecosystem: Epping Forest, Essex

This is a typical English lowland deciduous woodland. **70% of the area** is designated as a **Site of Special Scientific Interest (SSI)** for its biological interest, with **66 %** designated as a **Special Area of Conservation (SAC).**

Components & Interrelationships		Management
Spring	**Flowering plants** (producers) such as bluebells store nutrients to be eaten by consumers later.	- Epping has been managed for centuries. - Currently now used for **recreation** and **conservation**. - Visitors **pick fruit** and berries, helping to **disperse seeds**. - Trees cut down to encourage **new growth for timber.**
Summer	Broad tree leaves grow quickly to **maximise photosynthesis**.	
Autumn	Trees shed leaves to **conserve energy** due to sunlight hours decreasing.	
Winter	Bacteria **decompose** the leaf litter, releasing the nutrients into the soil.	



Canopy	80% of life is found here as It receives **most of the sunlight and rainfall.**
U-Canopy	Consists of trees that reach **20 metres high.**
Shrub Layer	Lowes… adapte…

Year 9 Computing

Creative Computing Project

Web Page Design	
Web Page	A document that you can download from the Internet
Website	A set of web pages that are linked together all provided by one person or organisation
Web Authoring Software	Software that allows you to create a web site.
Site map	A list of pages on a web site showing which pages connect to other pages
House style	A set of rules for how all pages on the web site will look to try and keep the same style for each page. E.g. colours used, where the logo is placed, where the navigation bar will be
Master Page	Provides a template for all other pages to follow
Visualisation Diagram	A rough sketch of what something will look like, usually drawn by hand
Version Control	Keeping track of the different changes to a file. Each time the file is changed and saved you would update the version number of a file e.g. version 1.0, version 2.0, version 2.1

Components of a Website	
Navigation bar	A set of buttons or images that a user can click on to go to a different page on a web site
Hyperlink	An image or text that can be clicked on that will navigate you to another page
Buttons	Images that can be clicked on to navigate you to another page
Backgrounds	The colour or image that appears behind everything else on a web page
Banners	A short and wide image at the top of a website. This would usually have the title of the website or the company logo in it

Creating Digital Graphics	
Digital Graphics	Images and pictures that have been created using a computer
Pixel	The individual squares that make up an image
Resolution	The amount of pixels in an image. The more pixels the higher the potential quality of the image
Compression	Where a file is made smaller so more files can be stored or so they can be sent quicker
Visualisation Diagram	A rough sketch of what something will look like, usually drawn by hand

Year 9 Computing

Data Science

Data Science Terminology	
Data	A collection of facts and figures
Information	Data that has been given meaning and context
Data Science	Using mathematical and computing techniques to better understand data
Big Data	A vast amount of data, usually stored on the Internet
Data Set	A collection of data that is going to be analysed and processed
Correlation	A connection between two things e.g. there is a correlation between how much time you spent revising and your test score
Insight	An accurate and deep understanding of something
Data visualisations	Visual representations of data (such as charts and graphs) intended to help an audience process the information more easily
Infographic	Infographics are visual representations of data, often involving pictures that reflect patterns and help tell a story.
Statistics	The science of collecting and studying numbers that give information about particular situations
Real Time Data	Data that is live and is presented as soon as it is updated

Spreadsheet Terminology	
Cell	A single rectangle on a spreadsheet that can hold a single value
Range	A collection of cells
Formula	A calculation that can be written to work something out based on what is in a range
Function	Like a formula but preset and part of the software. They usually have a keyword e.g. SUM, AVERAGE, IF
Worksheet	A collection of cells organised in rows and columns
Workbook	A collection of worksheets

Database Terminology	
Database	An organised store of data, either paper based or electronic
Record	All of the data about one person or thing (also known as a row)
Field	One specific piece of data about a group of things (also known as a column)
Table	A collection of records storing data about one type of thing
Query	A search for a specific piece of data in a database

Year 9 Art - Drawing Skills

Accuracy in Drawing

Why do we study the work of Artists?

1. British painter Sarah Graham was born in Hitchin in 1977, and works almost **exclusively** in oil on canvas.
2. She completed a BA (hons) in Fine Art painting from De Montfort University, Leicester in 2000, and has been pursuing her practice ever since.
3. Her work typically depicting a host of sweets and toys.
4. In 2012, Sarah was **commissioned** by the British band Kaiser Chiefs to paint the album cover of their singles collection Souvenir, which was released worldwide.
5. Sarah uses photographs as **reference** and scales up by eye and sketching out in yellow acrylic.

Does all art need to be realistic?

- One of the principal **genres** of Western art – essentially, the subject matter of a still life painting or sculpture is anything that does not move or is dead.
- Still life includes all kinds of man-made or natural objects, cut flowers, fruit, vegetables, fish, game, wine and so on. Still life can be a celebration of material pleasures such as food and wine.
- In modern art simple still life arrangements have often been used as a **relatively neutral** basis for formal experiment, for example by Paul Cézanne, the cubist painters and, later in the twentieth century, by Patrick Caulfield.

How does composition affect artwork?

The grid method involves drawing a grid over your reference photo, and then drawing a grid of equal **ratio** on your work surface (paper, canvas, wood panel, etc). Then draw the image on your canvas, focusing on one square at a time, until the entire image has been transferred. Once you're finished, you simply erase or paint over the grid lines, and start working on your painting, which will be now be in perfect **proportion**.

Why is hand eye coordination important in art?

The more you look at your subject matter, the better your drawing will be. When you are making a closely **observed** drawing spend more time looking than you do drawing. Remember to look carefully at:

- edges
- spaces
- relationships between objects
- light and shadows

A **contour** drawing uses the outline of shapes to show the subject. It is made up entirely of lines, with no shading or tones.

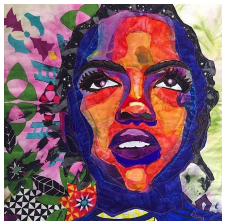
Blind contour drawing - This involves drawing while you look at your subject not the drawing. This helps you concentrate on what you see rather than what you think it should look like.

Continuous line drawing is a similar technique, however there must be continuous contact between the drawing tool and the surface that is drawn on. This technique helps you concentrate on varying the weight of line produced by changing the pressure you apply while drawing.Monoprinting.

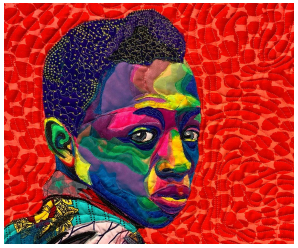
Year 9 Art - Portraits

How does the use of colour generate an emotive response?

1. Artist Bisa Butler draws from an **array** of vibrant patterned fabrics to create portraits of everyday people.
2. She uses **representational** colours, favoring layered jewel-toned hues to form the skin of her Black subjects, and often groups figures together into strong **silhouettes**.
3. She began using fabric in her paintings in college, and then converted to quilting as a way to continue her dedicated art practice while protecting her young daughter from toxic materials and fumes.
4. She would often start her pieces with a black and white photo which would allow her to tell the story.
5. The portraits tell stories that may have been forgotten over time.



Colour



Why capture a portrait?

A portrait is a **representation** of a particular person. A self-portrait is a portrait of the artist by the artist. Portraiture is a very old art form going back at least to ancient Egypt, where it **flourished** from about 5,000 years ago. Before the invention of photography, a painted, sculpted, or drawn portrait was the only way to record the appearance of someone.
But portraits have always been more than just a record. They have been used to show the power, importance, virtue, beauty, wealth, taste, learning or other qualities of the sitter.

How can line express meaning?

Mark making describes the different lines, dots, marks, patterns, and textures to create in an artwork. It can be loose and **gestural** or controlled and neat. It can apply to any material used on any surface: paint on canvas, ink or pencil on paper, a scratched mark on plaster, a digital paint tool on a screen, a tattooed mark on skin. Artists use gesture to **express** their feeling and emotions in response to something seen or something felt – or gestural qualities can be used to create a purely **abstract composition**.

For pencil or pen-and-ink drawing, using *hatching* is one of the easiest and cleanest ways to fill in the dark areas. By drawing fine lines that are more or less parallel, the area as a whole is perceived as being darker than the individual lines are in reality.

Cross Hatching adds a second layer of lines that are drawn in the opposite direction. The second layer of lines are applied at right angles. Using cross hatching builds the **illusion** of darker tones.

Stippling involves placing individual dots across a surface in a pattern that will be identifiable, especially when viewed from a distance; the further you are, the more your mind is forced to fill in the gaps on its own. Basically, instead of drawing a circle, you compose this shape with tiny dots, and shade it the same way to create the **impression** of depth.

How has impressionism influenced work of today?

- Impressionism developed in France in the nineteenth century and is based on the practice of painting **spontaneously** 'on the spot' rather than in a studio from sketches. Main impressionist subjects were landscapes and scenes of everyday life
- Instead of painting in a studio, the impressionists found that they could capture the momentary effects of sunlight by working quickly, in front of their subjects, in the open air rather than in a studio. This resulted in a greater awareness of light and colour and the shifting pattern of the natural scene. Brushwork became rapid and broken into separate dabs in order to **render** the fleeting quality of light.

Year 9 Design - Footwear design

Footwear Design

Why should designers consider sustainable solutions?

The basic objectives of **sustainability** are to reduce negative impacts on the environment. to reduce **consumption** of non-renewable resources, minimize waste, and create healthy, productive environments.

Sustainable design is the approach to creating products and services that have considered the environmental, social, and **economic** impacts from the initial phase through to the end of life.

There is a well-quoted statistic that says around 80% of the **ecological** impacts of a product are made at the design phase. Making the designer highly responsible for the impact of their ideas.

What is Design and how does it impact our lives?

Design is EVERYWHERE. Almost everything that is made, is well thought out. Who is using the product? Why are they using it? Is it making their life better? From a tea-cup, lamp, or staircase, to the roof of a railway station or concert hall, a duvet cover, a company logo, or computer mouse, design, whether it is good or bad is a part of everyday life.

Aesthetic Design refers to the beauty of something. Products are usually designed in an artistic or aesthetic way. What does the product look like? Is it nice to look at? Is it interesting to look at? Does it fit a style or genre? If something is nice to look at, it is aesthetically pleasing.

Artistic Design is the **prettification** of objects, rather than the improvement of their **function**, performance or cost. Using the same function of a product, but changing the way it looks.

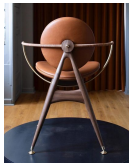
Design Thinking means the plan involved in creating something according to a set of requirements. Designers use many techniques to create products and solve problems. What are you aiming to achieve by designing that piece of work?

A designer plays a key role in a creative company. Using the principles of design a designer always has an extremely creative mind that can absorb visual **trends** and **deploy** them in fresh and exciting ways.

Product designers discuss designs with colleagues and clients, as well as working closely with engineers, model makers, sales and marketing staff and other skilled people. They use drawings, 3D models and computer designs to express their ideas.

How do the principles of design impact aesthetics?

These are the standards or rules to be observed by Designers; they are used to successfully design product and concepts.



Balance
A distribution of visual weight. Symmetrical balance uses the same characteristics on either side (it looks the same.) Asymmetrical uses different but equally weighted features in the design.

Contrast
The arrangement of opposite elements. A feature may stand out against another. eg, light vs dark, smooth vs rough or small vs large.

Emphasis
Used to make certain parts stand out. It creates the center of interest or a focal point. Your eyes are drawn towards it first.

Movement
How the eye moves across the piece. Leading the attention from one aspect of the work to the other. This can also create an illusion.

Pattern
The repetition of, or alternation of elements creating interest.

Unity
Visually pleasing arrangement of all elements of design. Everything works together and looks like it fits.

Year 9 Design - Form vs Function

Form VS Function

Why do we study the work of Designers?

- By finding and seeing works by other contemporaries or past designers or artists we give ourselves reference. Subliminally we will then incorporate it into our own designs, but that is the point.
- If we are good at what we do we will problem solve and create new solutions to these influences and take it a further step in order to make it our own and then it will be wholly new, a fresh perspective.
- If all we ever view is unsuccessful design, there is a good chance that unsuccessful design is what we'll regurgitate.
- It is important for us as designers to constantly be seeking and absorbing good design, different perspectives and even examining design in nature to help us improve and develop successful design ideas.

How does iterative lead to success?

Iterative design is a circular design process that models, evaluates and improves designs based on the results of testing. Most product designers use this to improve ideas and is often used when designers are creating something for a client. Manufacturers cannot risk investing large amounts of money into the production of a product that has not had adequate design, modelling, testing, prototyping and evaluation.

Analysis → Design Ideas → Modelling → Testing → Evaluation → Modifications

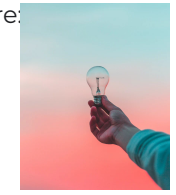
Inspiration or imitation, what's the difference?

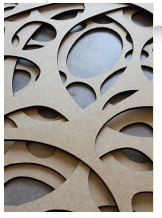
Inspiration is the process of being **mentally stimulated** to do or feel something, especially to do something creative.

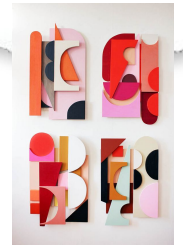
Inspiration gives us the energy to create new **designs** and to work hard to ensure they fit with our image or vision. It is when we are **inspired** that we produce our best work. **Inspiration** assists us with brainstorming, mapping out new ideas and with bringing these new ideas to life.

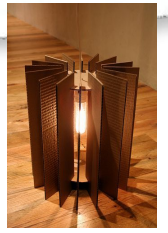
In design, inspiration can be sourced from many places. Some examples are:

- A theme or topic eg. nature
- An era or time in history
- Looking at the work of others eg. Using a source like Pinterest
- Our surroundings and environment









Can function follow form?

For designers, **form** is the element that makes up our designs and our pages. **Function** is the objective of the design whether it is a sign giving directions or a book that entertains with a story.

The phrase "form follows function" was created by architect Louis H. Sullivan in 1896.

Back then, the statement referred to the idea that a skyscraper's exterior design should reflect the different interior functions.

Often called America's first truly modern architect, Sullivan argued that a tall building's exterior design (form) should **reflect** the activities (functions) that take place inside its walls,.

"All things in nature have a shape," Sullivan said, "that is to say, a form, an outward **semblance**, that tells us what they are, that distinguishes them from ourselves and from each other." That these shapes "express the inner life" of the thing is a law of nature, which should be followed in any **organic** architecture.

Sullivan suggested that the exterior "shell" of the skyscraper should change in appearance to reflect interior functions.

A lot of designers would argue that function needs form in order to **accomplish** its goal, as form without function is just something pretty to look at.

Drama Keywords

Narration	To tell a story, information of what is happening to the audience
Mime	Acting out a moment, action, feeling without WORDS.
Physical Theatre	Use of the body & Movement to show a story, feeling, situation & object.
Expression	Use of Facial Expression to SHOW how you feel.
Body Language	To show your emotion & TOWARDS others in your body.
Tone of Voice	To show your feelings of your character to the audience through expression, body and voice.
Accent	To respond to each other as characters, on stage. Reacting to their words, feelings, actions.
Gesture	Body or facial movements of a character during a play.
Epic Theatre/Brechtian Style	Showing the audience the 'Mechanics' of a performance- seeing the costume & scene changes, multi-rolling (playing more than 1 character.
Wash/Flood	Covers the whole stage in light, allowing the audience to see everything.

Drama techniques, skills and lighting.

Year 9 Drama: Unit 5: Teechers (Prep for GCSE) Knowledge Organiser (Term 3a&b- May-July)

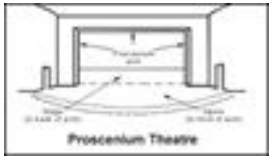
Themes & Context:

GCSE Prep: AO1 Devising, AO2 Performance Skills, AO3 Technlques, AO4 Written

- **Writer of 'Teechers': John Godber. It is a play in a Brechtian Style (They multi-role on stage & change characters, costumes, characterisation on stage.**
- **It is about 3 Students (Salty, Hobby & Gail)-** They are leaving their school & they have created a play about their teachers!! They 'mock' them, which makes this piece a Comedy!
- You will need to play multiple characters, as the students 'mock' their teachers, through acting different scenarios. Therefore, you will need to change your voice, posture, gestures, manner for each character played.
- You will need to READ the STAGE DIRECTIONS, as this tells you when to change to the next character & the different scenes created within a school setting.
- You will need to use lots of EXAGGERATED GESTURES, VOICE & MIME!!

Use of Practitioners, Performance Spaces:

Brecht- Showing that your performance is not real- showing costume/set changes & changing characters/roles (Multi-Role of showing different characters) on stage.



Proscenium Arch Staging:
Audience have one viewpoint to watch the Performance, creating a 'fourth wall'.

Philosophy and Ethics - MEDICAL ETHICS

Euthanasia

Euthanasia is illegal in the UK, It can be seen as assisted suicide, therefore breaking the **Suicide Act of 1961. It can be viewed as manslaughter or murder and carries a prison sentence.** However a medical decision may be made to withhold treatment if it is considered to be in the patient's best interests.

FOR	AGAINST
• God gives people free will to end their own life. • It may be the most loving and compassionate thing to do – 'Love your neighbour' • Allows a dignified death	• Only God should take life at the time of his choosing • Open to abuse and may be against the will of the ill person. • Inheritance issues may encourage relatives to pressurise the ill to agree to euthanasia.

Genetic Engineering

Scientists can now alter the genes of any living thing = plants for example, crops which are genetically modified to resist disease, animals and human beings. They can create new kinds of plants and animals by changing or engineering their genetic make-up, for example, by using human genes.

It is now possible to modify genes in order to create people of superior intelligence, perfect weight and happy personalities. Your surroundings, wealth, education and diet can all be overcome if you are created with the right combination of genes in the laboratory. Environment and upbringing do not matter.

Abortion

The law defines abortion as ***"the deliberate expulsion of a foetus from the womb, with the intention of destroying it"***. In the UK abortion is allowed up until 24 weeks of a pregnancy under special circumstances, i.e. if two registered doctors agree that there is a danger to the women's mental or physical health, the foetus will be born with disabilities, or the mental or physical health of existing children will be put at risk.

However, many people believe that it is the woman who should have the choice as to what happens to her body and therefore it is for her to make up her own mind. There are also circumstances such as rape, genetic abnormalities or failed contraception which cause debate on both sides of the argument.

Pro-Life: term used for arguments against abortion.

Pro-choice: arguments in favour of having the CHOICE to choose an abortion

FOR	AGAINST
• Some Christians agree with abortion if the baby will have a very poor quality of life. • CoE and the Methodist church say that sometimes it is 'the lesser of two evils'. • The woman's life comes first – she has the right to choose whether she continues the pregnancy.	• The Catholic Church believes life begins at conception so abortion is taking away life. • Jeremiah 1:5 shows that God has a plan for everyone – abortion takes this away, so is considered wrong. • "Before I formed you in the womb I knew you, before you were born I set you apart.

Fertility Treatment

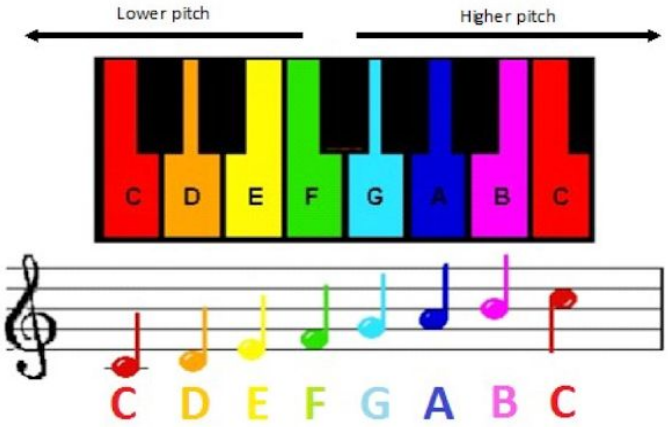
There are 3 main procedures that you need to be aware of:

•**I.V.F (In Vitro Fertilisation)** – This is the process of joining a human egg and sperm together in laboratory conditions to produce an embryo, which is then placed in the woman's womb where it is able to develop into a foetus and then a baby. To be successful, often several embryos are created although only one or two will be successfully used to create life.

•**Donor Eggs:** If a woman is unable to produce healthy eggs, she may need to use donor eggs.

•**Donor Sperm:** If a man is unable to produce healthy sperm, he may need to use donor sperm.

BLUES IMPROVISATION

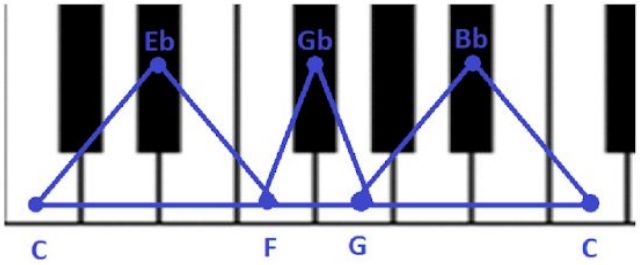


Walking Bass

The bass part in Blues 'walks' up the notes of a chord creating a 'walking bass' part.

Blues Scale

The melody of a blues piece, uses a special scale. This blues scale is built using: **C Eb F Gb G Bb C** (remember the 3 triangles below)



Improvisation

To make music up on the spot without planning. This was widely used in Blues music.

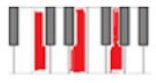
Syncopation

When music is played on the off-beat (i.e. not played on the main beats of the bar). Syncopation create a disjointed feel.

12 Bar Blues

Traditional style of music, using 3 chords (C, F, G) over a 12 bar cycle. See the diagram below.

12 BAR BLUES CHORDS

Chord	Keyboard	Ukulele	Notes
C			C E G
F			F A C
G			G B D
Am			A C E

Song Structure

A typical pop song consists of: Verse - Chorus - Verse - Chorus - Middle 8 - Chorus - Instrumental - Chorus

Accompaniment

The accompaniment is the background music that supports a melody. This is provided by the chords, played either on Piano or Guitar

Chord

A chord is 3 notes played at the same time. This type of chord is called a ***triad***. Only certain notes sound nice as a chord. The notes have to have a space of 1 keyboard key between them. There are 2 types of chord: Major and Minor. Major chords sound happy, Minor chords sound sad.

Chords in the 12 Bar Blues

C (CEG) C (CEG) C (CEG) C (CEG) F (FAC) F (FAC) C (CEG) C (CEG) G (GBD) F (FAC) C (CEG) G (GBD)

Year 9 Music: African Drumming

Key terms	
Call and Response	Where the leader of the group plays a pattern which the rest of the band then repeat back
Master Drummer	The leader of the percussion group who leads the changes of the patterns
Ostinato	A repeated rhythmic or melodic pattern
Polyrhythm	Where several rhythms are played simultaneously
Syncopation	Where the rhythm emphasises the weak beats of the bar
Texture	The layers of sound within a piece
Timbre	The different tonal qualities of sounds

Djembe

Djembe are hand drums, where playing in the centre of the skin makes a 'bass' sound and playing the edge creates a 'tone' sound.

Dundun are a type of talking drum as the tension of the outer strings can change the pitch of the drum.

Dundun

Talking Drum

Talking drums were historically used to communicate over distance. They are played with curved sticks and squeezed to change pitch.

BIG question: How should we listen to music?

Year PE 9 - Athletics

The sport of competing in track and field events, including running races and various competitions in jumping and throwing.

Track Events

Sprint 100m, 200m, 300m, 400m

Middle Distance 800m,1500m, 3000m

Hurdles 80m (G), 100m (B), 300m (G), 400m (B)

Field Events

Shot Put

Discus

Javelin

Long Jump

Triple Jump

High Jump

Key terms

Jump

Run up

Take off

Flight

Landing

Throw

Initial stance

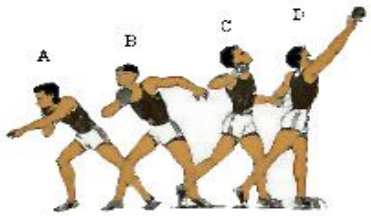
Grip

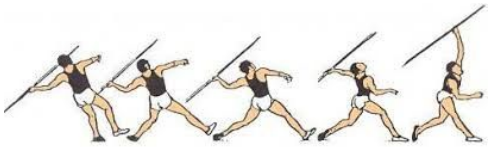
Preparation

Movement

Release

Recovery





Key terms

Skills / technique

Start

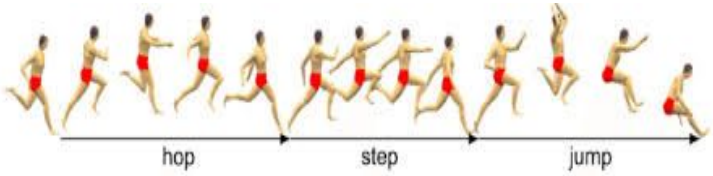
Posture

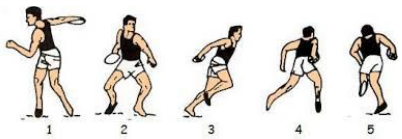
Pacing

Leg and arm action

Coordination of legs and arms

Stride pattern

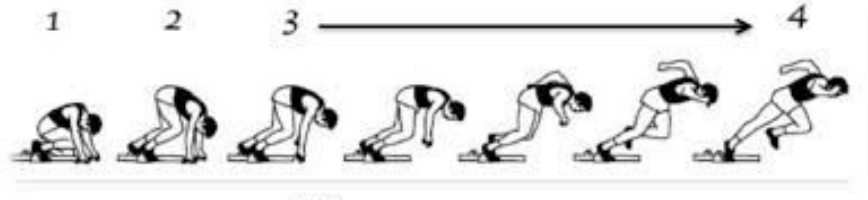




You can find out more about British athletics by visiting this website: www.britishathletics.org.uk/athletes

Questions

1. Can you lead track or field warm up to a small group?
2. Can you demonstrate a sprint start?
3. Can you improve your pace on long distance running?
4. What are the 4 phases of a throwing event?
5. Can you identify and carry out correct safety for throwing events?



PE - Striking and Fielding Y9

Bowling and Pitching

?

1. Can you lead a S&F specific warm up to at least half of the class?
2. What skills do you need to have to outwit your opponents?
3. Can you evaluate and justify your fitness component strengths in S&F?
4. Can you evaluate and justify your fitness component weaknesses in S&F?
5. Can you apply tactical strategies to a game?

Cricket - Bowler

1. The bowler must not throw the ball, but bowl the ball overarm at the stumps, which are at either end of a 22-yard area called a wicket.
2. A batter is declared out if the bowler knocks off the bails of the stumps with a delivery.

Rounders - Bowler

1. Must bowl under arm
2. They must bowl from inside the bowling square
3. The ball must be between the batter's shoulder and knee
4. The ball must travel through the batting square

Softball - Pitcher

1. Must bowl under arm
2. Must reach 6f in flights
3. Must be between batters shoulder and waist at the base
4. Must travel through the base

Keywords / Skills

Grip	Umpire
Stance	Call
Shot	Out
Catch	
Swing	
Hips