

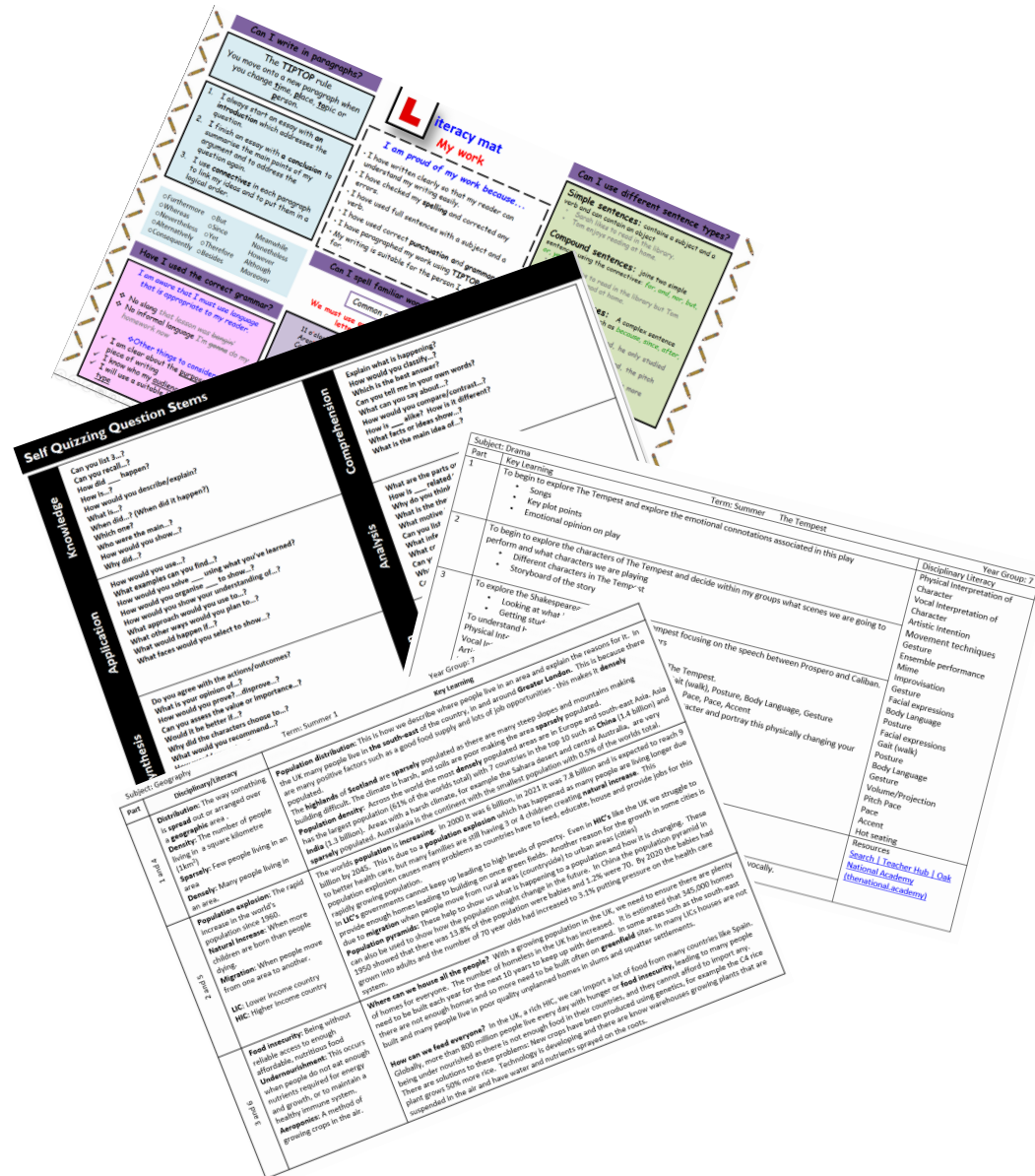
Year 8

Knowledge Organiser

Autumn 2022 - 2

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Self Quizzing Question Stems

Knowledge	<p>Can you list 3...?</p> <p>Can you recall...?</p> <p>How did ____ happen?</p> <p>How is...?</p> <p>How would you describe/explain?</p> <p>What is...?</p> <p>When did...? (When did it happen?)</p> <p>Which one?</p> <p>Who were the main...?</p> <p>How would you show...?</p> <p>Why did...?</p>	Comprehension	<p>Explain what is happening?</p> <p>How would you classify...?</p> <p>Which is the best answer?</p> <p>Can you tell me in your own words?</p> <p>What can you say about...?</p> <p>How would you compare/contrast...?</p> <p>How is ____ alike? How is it different?</p> <p>What facts or ideas show...?</p> <p>What is the main idea of...?</p>
Application	<p>How would you use...?</p> <p>What examples can you find...?</p> <p>How would you solve ____ using what you've learned?</p> <p>How would you organise ____ to show...?</p> <p>How would you show your understanding of...?</p> <p>What approach would you use to...?</p> <p>What other ways would you plan to...?</p> <p>What would happen if...?</p> <p>What faces would you select to show...?</p>	Analysis	<p>What are the parts or features of ...?</p> <p>How is ____ related to ...?</p> <p>Why do you think...?</p> <p>What is the theme...?</p> <p>What motive is there...?</p> <p>Can you list the parts...?</p> <p>What inference can you make...?</p> <p>What conclusions can you draw...?</p> <p>Can you identify the different parts of...?</p> <p>What evidence can you find...?</p> <p>Can you distinguish between...?</p>
Synthesis	<p>Do you agree with the actions/outcomes?</p> <p>What is your opinion of...?</p> <p>How would you prove?...disprove...?</p> <p>Can you assess the value or importance...?</p> <p>Would it be better if...?</p> <p>Why did the characters choose to...?</p> <p>What would you recommend...?</p> <p>How would you rate...?</p> <p>How could you determine...?</p> <p>What choice would you have made...?</p> <p>Why was it better that...?</p>	Evaluation	<p>What changes would you make to solve...?</p> <p>How would you improve...?</p> <p>What would happen if...?</p> <p>Can you elaborate on the reason...?</p> <p>Can you give an alternative...?</p> <p>Can you invent...?</p> <p>How could you change or modify the plot?</p> <p>What way would you design...?</p> <p>Suppose you could ____ what would you do?</p> <p>Can you predict the outcome if...?</p> <p>Can you construct a model of...?</p>

Can I write in paragraphs?

The TIPTOP rule

You move onto a new paragraph when you change time, place, topic or person.

1. I always start an essay with an **introduction** which addresses the question.
2. I finish an essay with a **conclusion** to summarise the main points of my argument and to address the question again.
3. I use **connectives** in each paragraph to link my ideas and to put them in a logical order.

- | | | |
|----------------|------------|-------------|
| ○Furthermore | ○But | Meanwhile |
| ○Whereas | ○Since | Nonetheless |
| ○Nevertheless | ○Yet | However |
| ○Alternatively | ○Therefore | Although |
| ○Consequently | ○Besides | Moreover |

Have I used the correct grammar?

I am aware that I must use language that is appropriate to my reader.

- ❖ No slang *that lesson was bangin'*
- ❖ No informal language *I'm gonna do my homework now*

❖ Other things to consider:

- ✓ I am clear about the purpose of this piece of writing
- ✓ I know who my audience is
- ✓ I will use a suitable layout and text type



literacy mat

My work

I am proud of my work because...

- I have written clearly so that my reader can understand my writing easily.
- I have checked my **spelling** and corrected any errors.
- I have used full sentences with a subject and a verb.
- I have used correct **punctuation** and **grammar**.
- I have paragraphed my work using **TIPTOP**.
- My writing is suitable for the person I am writing for.

Can I spell familiar words accurately?

Common contractions

We must use an apostrophe to replace any letter(s) we have left out.

11 o'clock	I'd	They're	Who'll
Aren't	I'll	Wasn't	Who's
Can't	I'm	We'd	Why'd
Couldn't	Isn't	We'll	Why'll
Didn't	It'd	We're	Why's
Doesn't	It'll	Weren't	Won't
Don't	It's	What'd	Wouldn't
Hadn't	Mightn't	What'll	You'd
Hasn't	Mustn't	What's	You'll
Haven't	Shan't	When'd	You're
He'd	She'd	When'll	
He'll	She'll	When's	
He's	She's	Where'd	
How'd	Shouldn't	Where'll	
How'll	They'd	Where's	
How's	They'll	Who'd	

Can I use different sentence types?

Simple sentences: contains a subject and a verb and can contain an object

- Sarah likes to read in the library.
- Tom enjoys reading at home.

Compound sentences: joins two simple sentences using the connectives: *for, and, nor, but, or, yet, so.*

- Sarah likes to read in the library but Tom prefers to read at home.

Complex sentences: A complex sentence contains a conjunction such as *because, since, after, although, or when.*

- Because Robert felt tired, he only studied for an hour.
- Although the rain had stopped, the pitch was still water-logged.
- Paul enjoys Music, however, he is more proficient in Art.

Homophones

I have checked that I have not mixed up my homophones.

Affect/effect	Meat/meet
Bare/bear	One/won
Brake/break	Passed/past
Buy/by	Peace/piece
For/four	Practice (n)/practise (v)
Flour/flower	Read/red
Grate/great	Sea/see
Hair/hare	Sight/site
Hole/whole	Son/sun
Hour/our	To/too/two
Knight/night	Wait/weight
Know/no	Weak/week
	Wear/where

What traffic light am I?
Is my punctuation accurate?

Basics:

- ❑ Every sentence must start with a capital letter.
- ❑ Every sentence must finish with some form of punctuation: ?!
- ❑ Proper nouns need capital letters. These are **unique** people, places or things *e.g. there are many cities so 'city' doesn't take a capital letter. However there is only one London, therefore it takes a capital letter.*
- ❑ When writing titles of works such as books, films or plays:
 - Capitalise the first word
 - Capitalise any main/important words
 - Don't capitalise minor words such as 'and', 'of' or 'the' *e.g. The Sound of Music, The Wizard of Oz, Harry Potter and the Goblet of Fire*
- ❑ When writing speech:
 - ✓ Go to a new line when a different person speaks *e.g. "Good morning" said the Headteacher.*
 - "It's the afternoon!" replied the student.*
 - ✓ Each person's speech is marked with speech marks *e.g. "Walk on the left" said Mr Mathews.*

Can I spell accurately?

- ❑ Sound out the word
- ❑ Think about how it looks
- ❑ Think about a similar word
- ❑ Is there a memory sentence for this word? (*e.g. big elephants cannot always use small exits*)
- ❑ Find the word in a list –
 - Key words list
 - Frequently used words list
 - Your own word bank
- ❑ Look it up in a dictionary/spellchecker
- ❑ Ask a friend or teacher
- ❑ To learn it: look, cover, write, check
- ❑ Once you've solved it, add the correct spelling to your own word bank.



literacy mat

Can I use punctuation?

The Apostrophe

I always aim to use apostrophes correctly.

There are two main reasons why we use apostrophes: for **possession** and to **replace a letter or letters**

Note: Apostrophes are NEVER used to denote plurals

Full stop	.	indicates that a sentence has finished
Comma	,	indicates a slight pause in a sentence, separates clauses in a complex sentence and items in a list
Question mark	?	goes at the end of a question
Exclamation mark	!	goes at the end of a dramatic sentence to show surprise or shock
Apostrophe	'	shows that letter(s) have been left out or indicates possession
Speech marks	" "	indicate direct speech, the exact words spoken or being quoted
Colon	:	introduces a list, a statement or a quote in a sentence
Semicolon	;	separates two sentences that are related and of equal importance
Dash / hyphen	-	separates extra information from the main clause by holding words apart
Brackets	()	can be used like dashes, they separate off extra information from the main clause
Ellipsis	...	to show a passage of time, to hook the reader in and create suspense

Apostrophe for Possession

(To show that something belongs to another)

If a single thing/person owns anything, add an apostrophe + 's'.

- The dog's bone
- The boy's homework
- Jones's bakery
- Yesterday's lesson

However, if it is plural (more than one), an apostrophe comes after the 's'.

- The dogs' bones
- The boys' homework
- Joneses' bakeries (lots of Jones families)
- Many websites' content is educational

There/ their/ they're

Note: special care must be taken over the use of **there**, **their** and **they're** as they sound the same but are used quite differently:

- ❖ **There** shows position *Your seat is over there*
- ❖ **Their** shows that 'they' own something *Their blazers are navy blue*
- ❖ **They're** is short for **they are** as in *They're revising every day*

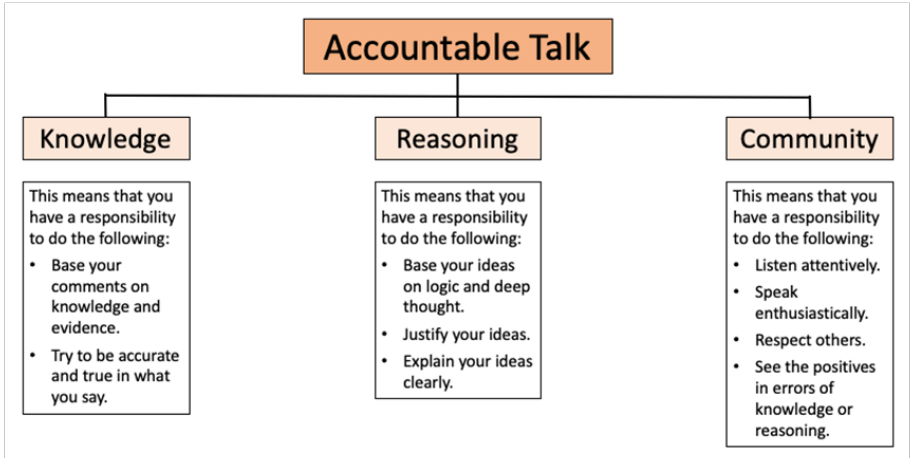
ITS

Note: **its**, which shows that something owns something (like our, his etc), **does not** take an apostrophe: *the dog ate its bone and we ate our dinner*

Your/ you're

Note: special care must be taken over the use of **your** and **you're** as they sound the same but are used quite differently:

- ❖ **Your** is possessive as in *this is your pen*
- ❖ **You're** is short for you are as in *you're coming over to my house*



Stands for...

GOAL

AUDIENCE

TYPE

CRAFT

Gothic Conventions

- Supernatural
- Fear/tension
- Involves past
- Trapped
- Spooky setting
- Gloomy
- Mystery



Creative Writing and Literature

Creative writing is writing as art.

Just like other types of art, it is an attempt by the creator to convey thoughts, feelings, experiences, and/or truths about human existence (i.e. the human condition) in an imaginative, entertaining and powerful way.

Literature is creative writing that is recognised for its artistic value.
Literature usually means works of poetry, drama and prose fiction that are especially well written.

Quality description

When we craft **good quality** descriptive writing, we write with the goal of creating a **vivid** experience for our readers.

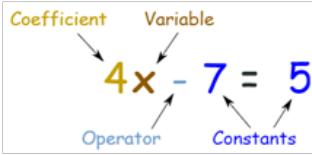
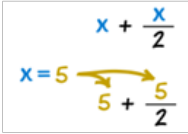
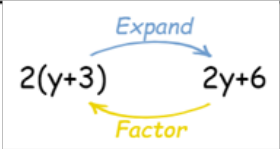
Great writing draws you into it and is, on some level, enjoyable.

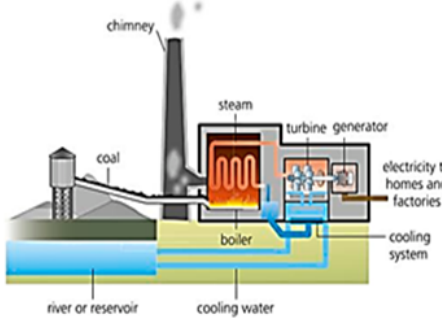
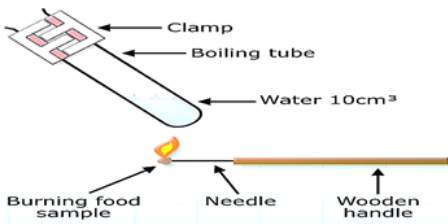


The writer's toolkit


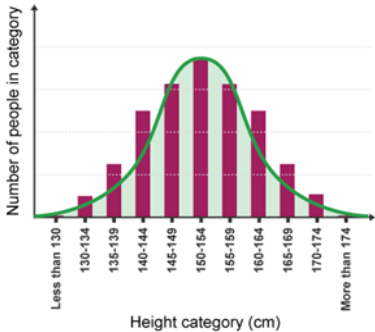
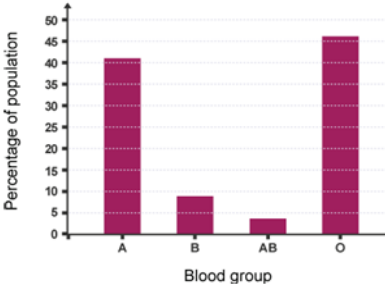
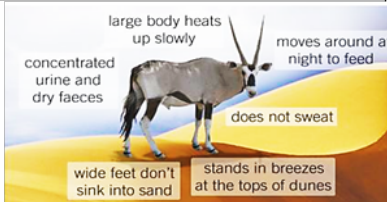
- Content:** what the writer chooses to include in a text (and what they leave out!)
- Language:** which words the writer has selected; what techniques they have used; how they have shaped their sentences; what tone the writer uses
- Structure:** how the writer has organised and put together their text.

Key Vocabulary	Definition	Example
Accountable	Someone who is this is responsible for what they do and must be able to give a satisfactory reason for it if asked.	No-one should be above the law. You should be _____ for your actions no matter how rich you are.
Adverbial	A word or group of words that usually describe time, place, or manner.	To add information about where the action took place, she used an _____.
Atmosphere	In literature: the feeling or mood created by a story.	By describing the dark storm clouds and fallen-down house, the writer created a foreboding _____.
Construct	Something that is built, made, or created deliberately for a purpose.	All texts are _____: they are created deliberately with a goal in mind.
Conventions	The ingredients that make a genre.	Old buildings, mystery, and fear are all _____ of the gothic genre.
Epistolary	Works of fiction told through letters, diary entries, and newspaper articles.	Dracula is an _____ novel.
Establish	To set up.	We can use place, the weather, and time to help _____ setting.
Finite vs non-finite verbs	Finite verbs are verbs with tense; non-finite are verbs without tense.	_____ have tense; _____ don't have tense.
Foreboding	The feeling that something bad is going to happen.	Entering the empty house, Emily felt a deep sense of _____.
Genre	A type or category of art, music, or literature	We have been studying texts of the gothic _____.
Human condition	What it means to be human.	Fears about mortality are part of _____

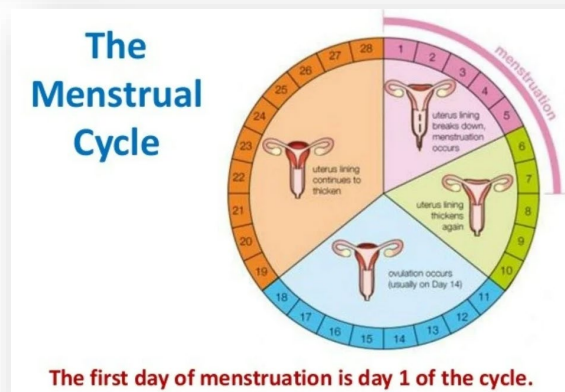
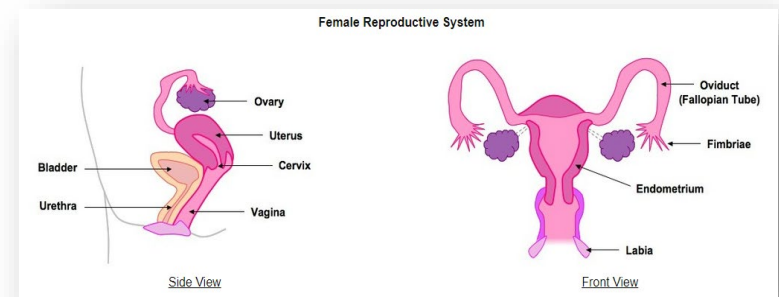
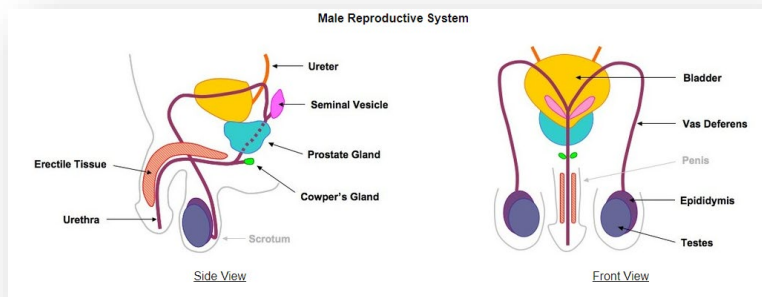
Key Vocabulary	Definition	Example
Imagery	The use of words and phrases to create mental images in order to convey something e.g. a feeling or an idea.	The writer crafted their work carefully and created powerful _____.
Mortality	The way that people do not live for ever.	Her worry about what happens after death meant she was thought a lot about her own _____.
Noun Phrase	A group of words built around a noun.	Using expanded _____ can add detail to a description
Setting	The time and the place in which the action of a book, film, play, etc. happens.	Choosing _____ carefully is crucial. It can influence the atmosphere, the characters' behaviour, and
Stative vs action verbs	Action verbs describe an action. Stative verbs describe a state of being rather than an action.	_____ describe action; _____ describe a state of being rather than an action
Uncanny	Creepy, often in a strangely familiar way.	The strange similarity between the two children was _____
Universal	Existing everywhere and involving everyone.	Literature is about you, me, everyone: it's _____.
Vivid	Producing very clear, powerful, and detailed images in the mind.	The _____ imagery created by the writer brought the story to life.
Word choice	The usage of effective and precise language to create specific meaning.	The writer thought carefully about _____ - it was important to communicate their meaning precisely.

Part	Key Learning			
Algebraic Fractions	Keyword	Definition	Examples	
	Variable	A symbol for a value we don't know yet. It is usually a letter like x or y.	In $x + 2 = 6$, x is the variable.	
	Constant	A fixed value. In Algebra, a constant is a number on its own, or sometimes a letter such as a, b or c to stand for a fixed number.	in " $x + 5 = 9$ ", 5 and 9 are constants.	
	Like Term	Terms that include the same variable raised to the same power are like terms. They can be added together	$7x$ and $2x$ are like terms because they are both " x ". $3x^6$ and $-2x^6$ are like terms because they are both " x^6 ".	But $7x$ and $7x^2$ are NOT like terms (the powers are different), they are unlike terms.
	Substitution	Replacing letters with values	What is $x + \frac{x}{2}$ when $x=5$? Put "5" where "x" is: $5 + \frac{5}{2} = 5 + 2.5 = 7.5$	
	Expanding	Removing brackets by multiplying	To expand $3(a + b)$ we multiply 3 by $(a + b)$ to get $3a + 3b$	
	Factorising	Finding what to multiply to get an expression	$2y + 6 = 2(y + 3)$, so the factors of $2y + 6$ are: 2 and $(y + 3)$	
	Simplify	Process of replacing a mathematical expression by an equivalent one, that is simpler (usually shorter)	$3x + 7x + 10x - 2x = 18x$ $4y + 2x - 3y + 9x + y = 2y + 11x$	
	Numerator	The value on top of a fraction	$\frac{4}{10}$ the numerator is 4 $\frac{7xy}{9}$ the numerator is $7xy$	$\frac{2(x+4)}{3x}$ the numerator is $2(x+4)$
	Denominator	The value on the bottom of a fraction	$\frac{4}{10}$ the denominator is 10 $\frac{7xy}{9}$ the denominator is 9	$\frac{2(x+4)}{3x}$ the denominator is $3x$

Part	Key Learning		Disciplinary/Literacy																																			
1	ENERGY IN FUEL <ul style="list-style-type: none">Energy is stored in food and fuel.Energy in fuel is used to heat homes and cook food.Fuel is also burnt in power stations to produce current in order for electrical appliances to work at home.	POWER STATIONS burn coal and gas,  <ol style="list-style-type: none">Fuel is burnt in a furnace to heat water in the boiler.The water turns to steam; this turns a turbine.The turbine turns a generator which generates electricity. <ul style="list-style-type: none">☺ Fossil fuels are reliable and produce lots of electricity.☹ Release carbon dioxide and contribute to global warming.☹ Produce pollutants; sulfur dioxide, nitrogen oxides and particulates.	ENERGY STORES: <ol style="list-style-type: none">ChemicalThermalElasticKineticGravitational potentialNuclearMagneticElectrostatic <p>(<i>Revision tip: use the first letter of each store to write a mnemonic to help you remember them</i>).</p> <p>Energy is transferred by:</p> <ol style="list-style-type: none">HeatingMechanically (by movement/ change in position)Electric currentWaves (sound & light)	<table><tr><th>Tier3 KEYWORDS</th><th>DEFINITION</th></tr><tr><td>Chemical energy store</td><td>Emptied during chemical reactions when energy is transferred to surroundings; e.g. burning fuel.</td></tr><tr><td>Dissipation</td><td>Becoming spread out wastefully to the surroundings.</td></tr><tr><td>Elastic energy store</td><td>Filled when a material is stretched or compressed; e.g. stretching a spring.</td></tr><tr><td>Energy</td><td>Energy is needed to make things happen.</td></tr><tr><td>Energy resources</td><td>Something with stored energy that can be released in a useful way.</td></tr><tr><td>Fossil fuels</td><td>Non-renewable energy resource formed from dead animals and plants, millions of years ago. E.g. coal, oil and natural gas.</td></tr><tr><td>Gravitational potential energy store</td><td>Filled when an object is raised; e.g. book on a shelf or when climbing a ladder.</td></tr><tr><td>Joules</td><td>The unit of energy, symbol J 1 kilojoule (kJ) = 1000 J</td></tr><tr><td>Kilowatt hour</td><td>The unit of energy used by electricity companies, symbol kWh.</td></tr><tr><td>Kinetic energy store</td><td>Filled when an object speeds up/ moves; e.g. when a car accelerates.</td></tr><tr><td>Law of conservation of energy</td><td>Energy cannot be created or destroyed, only transferred between stores.</td></tr><tr><td>Non-renewable</td><td>An energy resource that cannot be replaced and will be used up, such as coal, oil or gas, or nuclear.</td></tr><tr><td>Power</td><td>How quickly energy is transferred by a device (watts).</td></tr><tr><td>Renewable</td><td>An energy resource that can be replaced and will not run out; e.g. solar, wind, waves, geothermal and biomass.</td></tr><tr><td>Thermal energy store</td><td>Filled when an object is warmed up; e.g. heating water in a kettle.</td></tr><tr><td>Watts</td><td>The unit of power, symbol W 1 kilowatt (kW) = 1000 W</td></tr></table>	Tier3 KEYWORDS	DEFINITION	Chemical energy store	Emptied during chemical reactions when energy is transferred to surroundings; e.g. burning fuel.	Dissipation	Becoming spread out wastefully to the surroundings.	Elastic energy store	Filled when a material is stretched or compressed; e.g. stretching a spring.	Energy	Energy is needed to make things happen.	Energy resources	Something with stored energy that can be released in a useful way.	Fossil fuels	Non-renewable energy resource formed from dead animals and plants, millions of years ago. E.g. coal, oil and natural gas.	Gravitational potential energy store	Filled when an object is raised; e.g. book on a shelf or when climbing a ladder.	Joules	The unit of energy, symbol J 1 kilojoule (kJ) = 1000 J	Kilowatt hour	The unit of energy used by electricity companies, symbol kWh.	Kinetic energy store	Filled when an object speeds up/ moves; e.g. when a car accelerates.	Law of conservation of energy	Energy cannot be created or destroyed, only transferred between stores.	Non-renewable	An energy resource that cannot be replaced and will be used up, such as coal, oil or gas, or nuclear.	Power	How quickly energy is transferred by a device (watts).	Renewable	An energy resource that can be replaced and will not run out; e.g. solar, wind, waves, geothermal and biomass.	Thermal energy store	Filled when an object is warmed up; e.g. heating water in a kettle.	Watts	The unit of power, symbol W 1 kilowatt (kW) = 1000 W
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2	ENERGY IN FOOD <ul style="list-style-type: none">Different foods are stores of different amounts of energy.When you are asleep your body needs energy for keeping warm and breathing.Children need more energy than adults so their brain, bones and muscles can grow.If you take in more energy than you need, your body will store it as fat to use in the future.																																					
3	PRACTICAL: Releasing energy in food 	RENEWABLE RESOURCES  <ul style="list-style-type: none">☺ No carbon dioxide released☺ May be free to use (wind and Sun)☹ Equipment may be expensive☹ Unreliable weather, dependent on location 	REDUCING ENERGY USE <ol style="list-style-type: none">Use fewer appliances.Use appliances with a lower power rating.Use appliances for fewer hours.Insulate the home; this reduces the rate at which energy is transferred to surroundings; reducing need to heat the house.Governments can raise awareness; this will make fuel last longer and benefit the environment.																																			
4																																						
5	Once the food stops burning, the water should be stirred with the thermometer and the temperature recorded. By recording the temperature increase in the water, you can work out how much energy the food contains.																																					
6	Energy can be dissipated/wasted due to friction (energy transferred to a thermal store / sound) or when objects get hot and transfer energy to anything at a lower temperature. The efficiency of an appliance can be calculated by: $\text{Efficiency} = \frac{\text{Useful Energy Output}}{\text{Energy Input}} \times 100\%$	ENERGY AND POWER The power rating of an appliance tells you <i>how much energy is transferred per second</i> – the rate of energy transfer. Power (W) = energy (J) ÷ time (s) You can calculate the cost of using an appliance at home using the equation: cost = power (kW) x time (hours) x price (per kWh) NOTE: You may need to convert units when completing calculations.																																				

Part	Key Learning			Disciplinary/Literacy
1	<p>There is lots of variation (different characteristics) between different species.</p> <p>There will also be variation within the same species. Organisms of the same species have more features in common with each other than with other groups.</p>			TIER3 KEYWORDS
2	<p>What causes variation?</p> <ul style="list-style-type: none"> Characteristics can be inherited from parents. Characteristic can be affected by the surroundings and events that happen to you. Many characteristics are affected by both, e.g weight and height. 			<p>Adaptations Characteristic that helps an organism survive in its environment.</p> <p>Continuous variation Where differences in characteristics between living things can have any numerical value.</p> <p>Discontinuous variation Where differences in characteristics between living things can only be grouped into categories.</p>
3	 <p>INHERITED VARIATION</p> <ul style="list-style-type: none"> Children usually share some characteristics with their parents. This is because they get half of their DNA and inherited features from each parent. Each egg cell and each sperm cell contains half of the genetic information needed for an individual. When these join at fertilisation a new cell is formed with all the genetic information needed for an individual. Some examples include: eye colour, hair colour, skin colour, lobed or lobeless ears, ability to roll your tongue, blood group and genetic diseases. <p>ENVIRONMENTAL VARIATION</p> <ul style="list-style-type: none"> Variation caused by the surroundings. Characteristics of animal and plant species can be affected by factors such as: climates, diet, accidents, culture, education and lifestyle. Some examples include: a person's language, their religion, if they have dyed their hair, scars. <p>Plants and animals have to cope with changes in their environment; fire, climate change, disease, food supplies, increased competition.</p>			<p>Environmental variation Variation (differences) between organisms caused by environmental factors.</p> <p>Inherited variation Variation (differences) between organisms caused by genetic factors.</p>
4	<p>CONTINUOUS VARIATION</p> <p>TYPE Can take any value within a range</p> <p>EXAMPLES Height, mass, hair length, hand span (normally characteristics that are a result of environment and genetics)</p> <p>DISCONTINUOUS VARIATION</p> <p>Only result in certain categories</p> <p>Blood group, eye colour and sex (normally inherited characteristics)</p>			<p>How do trees cope with seasons?</p> <p>Some lose leaves in winter (saves energy and fallen leaves provide nutrients). Some grow rapidly in spring.</p>
5	<p>GRAPH</p> <p>Histogram (with a curve added – normal distribution)</p>  <p>Bar chart</p> 			<p>How do animals cope with cold winter temperatures?</p> <p>Hibernation</p> <p>Migration → somewhere warmer / with more food</p> <p>Grow thicker fur</p>
6				<p>How can plants live in a desert?</p> <ul style="list-style-type: none"> Waxy layer → reduces water loss Stems → store/ transport water Widespread roots → collect water from a large area Spines (instead of leaves → small surface area to reduce water loss / protection from being eaten)
				



Part	Key Learning	Disciplinary/Literacy	Linked Assessment	Resources
1	Students will be able to describe some of the long term impacts of being a teenage parent using the acronym PIESE	Long Term Impacts, PIESE - Physical, Intellectual, Emotional, Social, Economic	Self-reflection Assignment on Teams (weekly)	Added to the class Teams Site
2	Students can describe the physical changes that occur during puberty in a male and female body Students can describe the monthly cycle for a female body	Gonadotropins, oestrogen, testosterone, Sexual organs, growth spurts, monthly cycle, Vagina, Cervix, womb/uterus, ovaries, egg, testicles, sperm, semen		





Part	Disciplinary/Literacy	Key Learning
1 and 4	<p>Globalisation The process increasing connectedness and interdependence of world cultures (music, food, arts) and economies.</p> <p>The economy The system according to which money, industry and trade of a country or region are organised.</p> <p>Trade the action of buying and selling goods and services.</p>	<p>We are dependant on people working in other countries to produce goods for use. For example a radio bought in USA might have been made in China. Many of our goods, food and services are based abroad. Trade happens between countries on a global scale. It is said the world is getting smaller, this means that the time to get information, goods and to visit other countries is reduced. We can fly to other countries in hours rather than days, e-mail someone in USA and get a response in minutes rather than weeks. This is called globalisation.</p> <p>Many of the goods that we buy come from large Trans-national companies (TNC's), which have factories and offices that operate in many countries around the world. A example would be Nike, their head office is in the USA but they have regional offices, the European one is in the Netherlands. They also have factories around the world in countries like Turkey and Indonesia where sportswear is made.</p> <p>Many goods are manufactured (made) in China. It has many people who work in the secondary industrial sector (in factories).</p> <p>Primary industry = farming, fishing, mining – getting resources</p> <p>Secondary industry = manufacturing – using resources</p> <p>Tertiary industry = service based, teachers doctors, retail</p> <p>Quaternary industry = hi tech industries including IT and pharmaceuticals (making medicines)</p>
2 and 5	<p>LIC – Low income country – a poor country with low wages e.g Bangladesh.</p> <p>Taxes – Money given to the government to help pay for roads, education and health care.</p> <p>Profit – The money made from selling goods, after all costs have been taken out.</p>	<p>The fact that wages are lower in some countries of the world compared to the UK have meant that many TNC's have built factories in LIC's. Also in these countries the taxes the companies have to pay to the government are a lot lower than in countries like the UK. This means that the profits for the companies are a lot higher.</p> <p>In China this has led to the economy growing, meaning it has more money. However this means that the workers demand more money for the jobs they do. This will lower the profit from a company and mean they will move to countries with cheaper wages like Bangladesh.</p> <p>Economic sustainability which balances the needs of the workers now and in the future is important, otherwise people will find that they are out of work as there are not enough jobs. This could happen in China if many of the companies relocated (moved) to other countries.</p>
3 and 6	<p>Investment – Putting money into something to make a profit in the long term.</p> <p>Infrastructure – The basic systems of energy supply, transport, health and education systems needed for a country to function (work).</p> <p>Cycle of poverty – People are stuck at being poor for a long period of time as they do not have the education or jobs to get out of poverty.</p>	<p>To help China have economic sustainability it is investing money into countries within the continent of Africa. China is paying for and building new infrastructure in other countries. A railway in Nigeria so that they can get out the oil and other goods they produce in Nigeria. Also as Nigerians become more wealthy the Chinese companies will be able to sell them the goods meaning greater profits.</p> <p>Two out of every three people in Nigeria still work in primary industry (see week 1). This means that they are not very wealthy and 6 out of every 10 people live off \$1 dollar per day (about 88pence). This leads to the cycle of poverty where by people cannot get out of being poor, often leading to poor health meaning that they cannot work, this leads to less money.</p> <p>The Nigerian government want China to invest in Nigeria and build factories as it will mean more well paid jobs. This will mean that people can get out of the cycle of poverty and have a better quality of life.</p>

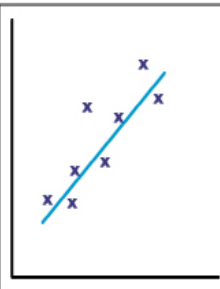
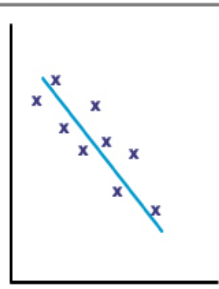
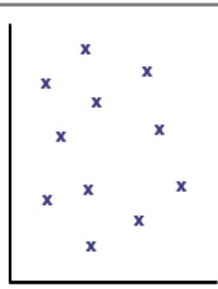
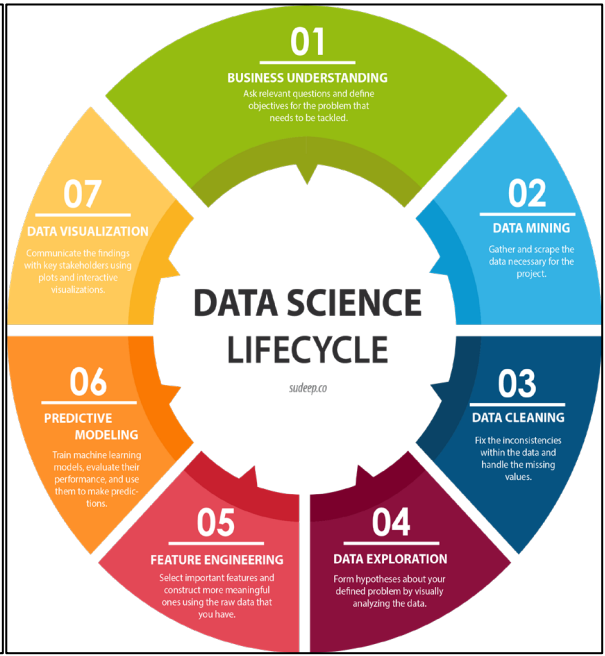
Part	Disciplinary/Literacy	Key Learning: The Slave Trade and its Abolition
1 and 4	<p>Trade: To buy and sell goods</p> <p>Middle Passage: The journey from the west coast of Africa to the Americas.</p> <p>Enslaved: Reduced to slavery by the actions of others.</p> <p>Dysentery: A deadly form of diarrhoea</p>	<p><u>What was the slave trade?</u></p> <p>People (traders) made a fortune from ‘trading’ goods. The slave trade was when human beings were bought and sold for other goods. From around 1500 onwards slavery turned into a profitable international business. Lots of people left Europe to settle in the newly discovered continents of North and South America. The settlers needed workers to grow crops and went to Africa for slaves.</p> <p><u>What were conditions on the Middle Passage like?</u></p> <p>Millions of African men, women and children were forced to make the 4,000 mile trip that lasted 40 and 70 days. Slave ships were very overcrowded and kept in appalling conditions. The enslaved Africans were fed regularly but it was poor quality. Any slaves who died on the journey or were near death were thrown into the sea. Many died from dysentery, heatstroke or smallpox. Approximately 20% of slaves died on the Middle Passage. We know so much about some slave ships because their owners kept detailed records of their journeys.</p>
2 and 5	<p>Plantations: Farms where cotton, tobacco and other raw materials were produced.</p> <p>Auction: A place where ‘goods’ are bought and sold</p> <p>Scramble: A price is agreed for the enslaved Africans. Buyers rush into a cage to grab the best slave they can.</p> <p>Rebellion: A group rising up against those who control them.</p>	<p><u>A life of slavery working on the plantations.</u></p> <p>On arrival in the Americas, slaves were cleaned up and either sold at auction or there was a scramble. Once bought, slaves became the personal property of their owner. Like cattle they were branded with their owners initials and set to work. Many worked on huge farmers called plantations, slaves planted and harvested crops such as sugar, coffee and tobacco. Slaves would be expected to work for most of their lives. Three and four year olds worked in ‘trash gangs’ (weeding) or as water carriers. Working on the plantations was hard work (15 or 16 hours a day). Enslaved people received a poor diet, harsh punishments and no medical attention which meant that few of these people lived to any great age. The live expectancy of an enslaved person was 26.</p> <p>Slaves had no legal rights. They were not allowed to learn to read or write, marry or own property. Some slaves tried to run away but this was very risky. Teams of ‘runaway hunters’ scoured the countryside looking for them. Any runaway slaves who were caught were severely punished. However, many slaves resisted through rebellion. For example, <u>Toussant L’Ouverture</u> led a slave rebellion in Saint-Domingue. The slaves defeated the British and French troops and in 1804 the free slaves renamed their island Haiti. Not all slave resistance was violent, slaves would pretend to be ill, damage tools/machinery and spoke in their native language to one another, often in songs to keep their spirits up and frustrate their owners.</p>
Part 3 and 6	<p>Abolished: Brought to an end.</p> <p>Debate: A discussion between people where they express different opinions about something</p> <p>Campaign: An organised course of action to achieve a goal.</p>	<p><u>Why was slavery abolished?</u></p> <p>This is an area of debate amongst historians. By the late 1700s a campaign had begun to ban the slave trade. This anti-slavery group was very important – but was slavery banned just because of this group? In 1807 the British Parliament abolished the slave trade in the British Empire meaning it was illegal to buy and sell slaves but people were allowed to keep the slaves they already owned. In 1833, Parliament banned slave ownership too but why? Slave owners were compensated for the loss of their ‘property’ by the British government. Enslaved peoples received no compensation for what had happened to them!</p> <p><u>Factors which contributed to the end of the slave trade.</u></p> <ol style="list-style-type: none"> 1. The Slave Trade was not as profitable in the late 18th and early 19th century as it had been earlier. 2. Rebellions and other forms of resistance was an important factor in the end of the slave trade. 3. The Anti-Slavery Campaign was drawing attention to this inhumane trade.

Part	Key Learning: Ce que j'aime regarder							
1	Give an opinion		Adverbs of frequency		TV programmes		Justifications	
	J'aime	I like	je regarde	I watch	une émission	a programme	c'est amusant	it is fun
	J'aime beaucoup	I really like	je ne regarde pas	I don't watch	une émission de sport	a sports programme	c'est génial	it is great
	Je déteste	I hate	toujours	always	une émission musicale	a music programme	c'est marrant	it is funny
	J'adore	I love	souvent	often	un jeu télévisé	a TV gameshow	c'est déprimant	it is depressing
	Je dois avouer que	I must admit that	fréquemment	frequently	un feuilleton	a soap	c'est barbant	it is boring
	Je dirais que	I would say that	de temps en temps	from time to time	un documentaire	a documentary	c'est nul	it is rubbish
	Selon moi	According to me	quelquefois	sometimes	les informations	the news	c'est intéressant	it is interesting
	A mon avis	In my opinion	rarement	rarely	la météo	the weather	c'est une perte de temps	it is a waste of time
	J'évite de regarder	I avoid watching	je ne regarde jamais	I never watch	mon émission préférée	my favourite programme	c'est captivant	it is enthralling
2	J'essaie de regarder	I try to watch			une série	a series	ça va être	it is going to be
					un dessin animé	a cartoon	c'était	it was
							effrayant	scary
	More opinions: Je suis fan de... I am a fan of... Je suis passionnée de... I am passionate about... J'ai une passion pour... I have a passion for...		Expressions of Time: normalement/ d'habitude normally/usually parfois occasionally quelquefois sometimes tous les semaines every week une fois par semaine once a week					
	Normalement (normally)		Un documentaire (a documentary)				Vraiment (truly)	
	Quand il pleut (when it is raining)		Un dessin animé (a cartoon)		Puisque (since)	Je crois que c'est (I believe that it is)	Très (very)	émouvant (moving)
	En famille (With my family)	J'ai une passion pour (I have a passion for)	Un feuilleton (a soap)		Vu que (given (seen) that)	Je trouve que c'est (I find that it is)	Assez (quite)	Captivant (captivating)
	Entre copains (Between friends)	Je regarde (I watch)	Une émission de variété (an entertainment programme)		mais (but)	Selon moi c'est (according to me it is)	Trop (too)	Ennuyeux (boring)
	A 22 heures (At 22 pm)	Je ne suis pas fan de (I am not a fan of)	La météo (the weather forecast)				Plutôt (rather)	
	Après le collège (After school)	Je déteste regarder (I hate watching)	Les informations (the news)					
3	De temps en temps (From time to time)							

Part	Key Learning: ¿Qué hay en tu ciudad? (What is there in your city?) ¿Cómo es? (How is it?) ¿Cómo era (How was it?)						Resources	
1		place	adjective	Expressing your opinion		como era		
2	En mi ciudad hay <i>In my city there is</i>	un castillo <i>a castle</i>	grande <i>big</i>	Pienso que <i>I think that</i> Creo que <i>I believe</i> A mi parecer <i>in my opinion</i> A mi modo de ver <i>To my way of thinking</i>	PRESENT	genial <i>great</i>		https://quizlet.com/555653336/year-7-five-keys-flash-cards/
3		un mercado <i>a market</i>	pequeño/a <i>small</i>		mi ciudad es <i>my city is</i>	divertido/a <i>fun</i>		
4		un estadio <i>a stadium</i>	feo/a <i>ugly</i>		mi pueblo es <i>my town is</i>	guay/chulo/a <i>cool</i>	bonito/a <i>pretty</i>	
5		un centro comercial <i>a shopping centre</i>	hermoso/a <i>beautiful</i>		moderno/a <i>modern</i>	antiguo/a <i>old</i>	precioso/a <i>beautiful</i>	
6	un polideportivo <i>a (multi) sports centre</i>	entretenido <i>(entertaining)</i>	nuevo/a <i>new</i>	PAST	industrial <i>industrial</i>	rural <i>rural</i>	y (and)	
	un cine <i>a cinema</i>	moderno/a <i>modern</i>	antiguo <i>old</i>	Antes before En el pasado	ruidoso <i>noisy</i>	tranquilo <i>quiet</i>	además (what's more)	
	un museo <i>a museum</i>	moderno/a <i>modern</i>	antiguo <i>old</i>	mi ciudad era <i>my city was/used to be</i>	sucio/a <i>dirty</i>	limpio/a <i>clean</i>	aunque (although)	
	una piscina <i>a swimming pool</i>	caro/a <i>expensive</i>	divertido/a <i>fun</i>	mi pueblo era <i>my town was/used to be</i>	la leche (awesome)		pero (but)	
	una bolera <i>a bowling alley</i>						si (if)	
	una universidad							
	muchos parques <i>lots of parks</i>							
	muchas plazas <i>lots of squares</i>							


Week	AO	Key Learning – Landscape	Disciplinary literacy in Art and Design	Definition	Resources
8	1	Using own Landscape photo Enlarge to create a drawn outcome using a grid technique, sharp pencil and faint lines	Hue	Pure colour	
9	1	Atmospheric perspective Aerial perspective art Britannica	Tint	Pure colour + white	
10 & 11	2	Creation of outcome using enlarged image and a range of media using increasing levels of control Students able to practice in sketchbook if needed	Shade	Pure colour + black	A3 paper Paint – watercolour block, powder and acrylic Pencil Black biro Fineliner Marker pen Felt pen
			Rule of Thirds	A rule for composing visual images such as designs, paintings, and photographs. The guideline says that an image should be imagined as divided into nine equal parts by two equally spaced horizontal lines and two equally spaced vertical lines. Important elements should be placed at these intersections.	
12	4	Creation of outcome Review of outcome and project so far	A1 – A5	Sizes of paper that we use at ECC	
			Atmospheric perspective	the effect the atmosphere has on the appearance of objects when you look at them from a distance.	
13 & 14	4	DIRT – to review work and complete to the best of your ability Evaluation	Outcome	a final product or end result;	 SCAN ME
			Evaluation	to judge or determine the significance, worth, or quality of; assess:	




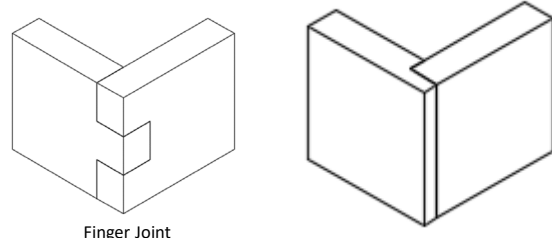




Hockney
sketchbooks






Part	Key Learning	Disciplinary Literacy	Resources
1	<p>Data science- Part 1</p> <div data-bbox="161 142 866 485"> <div> <p>Positive correlation</p>  </div> <div> <p>Negative correlation</p>  </div> <div> <p>No correlation</p>  </div> </div> <div data-bbox="161 521 866 763"> <div> <p>The points lie close to a straight line, which has a positive gradient.</p> <p>This shows that as one variable increases the other increases.</p> </div> <div> <p>The points lie close to a straight line, which has a negative gradient.</p> <p>This shows that as one variable increases, the other decreases.</p> </div> <div> <p>There is no pattern to the points.</p> <p>This shows that there is no connection between the two variables.</p> </div> </div> <div data-bbox="880 142 1481 792">  </div>	<p>Data Science: uses scientific methods, processes, algorithms and systems to extract knowledge and insights from structured and unstructured data and apply knowledge and actionable insights from data across a broad range of application domains.</p> <p>Correlation: is a relationship or connection between two or more things.</p> <p>Outlier: is a data point that differs significantly from other observations. An outlier may be due to variability in the measurement, or it may indicate experimental error.</p>	<p>SharePoint platform:</p> <p>https://eggbuckland.sharepoint.com/:f:/g/ict/EoYFKngQjKZHIvNnXiGjIJ0BwCrMbGkvVVPmIZplHeH8BQ?e=LmKmtC</p>
2	<p>Data Science- part 2</p> <p>The process of cleaning up the data is divided into five successive steps):</p> <ol style="list-style-type: none"> 1. Make a backup copy of the file/table 2. Data Quality – Setting Data Requirements 3. Analysis of the data 4. Standardization 5. Cleanup of the data 	<p>Data cleansing: is a process in which you go through all the data within a database and either remove or update information that is incomplete, incorrect, improperly formatted, duplicated, or irrelevant.</p>	<p>SharePoint platform:</p> <p>https://eggbuckland.sharepoint.com/:f:/g/ict/EoYFKngQjKZHIvNnXiGjIJ0BwCrMbGkvVVPmIZplHeH8BQ?e=LmKmtC</p>

PARTS	KEY LEARNING	DISCIPLINARY/LITERACY
Part 1	<p>CHARACTERISATION and building a character. Facial expressions and body language to convey character/ stereotypes. Being able to convey believable and exaggerated characters. Focus on voice, movement and facial expressions in TABLEAUX.</p> <p>How is music used in Pantomime? Creating atmosphere (underscore), sound effects, theme tune, emotion, on-screen musicians, represent a character or event (leitmotif), popular music etc.</p>	<p>Facial Expression Characterisation Body Language Tableaux Exaggeration Movement Believable Underscore Sound Effects Emotions</p>
Part 2	<p>Introduction to PANTOMIME and the traditions/ history of this performance type. Introduction to storytelling and the NARRATOR in performance.</p> <p>Introduction to STOCK CHARACTERS in Pantomimes and creating exaggerated Characterisation. Introduction to the explorative technique of HOT SEATING.</p> <p>Listening to different film themes and character themes in films to introduce a genre or a type of character</p>	<p>Pantomime Narration Storytelling Tradition Stock characters Hot Seating.</p> <p>Leitmotif, Repetition, Diegetic & Extra-Diegetic</p>
Part 3	<p>Developing understanding of additional stock characters. Looking at relationships between characters in well-known fairy tales. Introduction to THOUGHT TRACKING.</p> <p>Introduction to the use of ASIDE in Pantomime to create tension and engage an audience.</p> <p>G&T: Dramatic Irony.</p> <p>Understanding musical scales to depict mood and emotion. How does music changes the feeling of the scene?</p>	<p>Stock characters Thought tracking Fairy tales Aside Tension Dramatic irony Audience engagement</p> <p>Major Minor Chromatic Whole-tone scales.</p>
Pat 4	<p>Introduction to AUDIENCE PARTICIPATION in Pantomimes and how this engages an audience. Looking closely at the DAME and comedy.</p> <p>Developing understanding of COMEDY used in pantomimes and SLAPSTICK COMEDY. Looking closely at comic characters and understanding why these are funny.</p> <p>Revision of the Elements of Music. How would we start to build a piece of music that was funny? What elements would we need? Fast or Slow? High or Low? Long or Short notes.</p>	<p>Audience participation Comedy Pantomime Dame Slapstick Pitch Dynamics Texture Timbre</p>

PARTS	KEY LEARNING	DISCIPLINARY/LITERACY
Part 5	<p>Introduction to SCRIPT WORK. Pupils will learn how to read and perform scripts, including stage directions. Pupils will develop an understanding of how to write their own scripts and perform these.</p> <p>Writing Song Lyrics. How is a song structured using verse and chorus?</p>	<p>Reading, writing and performing scripts. Stage Directions Lyrics Verse Chorus Section A Section B</p>
Part 6	<p>Pupils will gain knowledge and understanding of the Pantomime STRUCTURE; i.e. introduction to characters, crisis, rescue, happy ending. Pupils will understand why Pantomimes have this structure and be able to use this in performance</p> <p>ASSESSMENT PREPARATION. Pupils should continue to develop their Pantomimes for their assessment next lesson focusing on clear characterisation skills and incorporating as many Panto techniques as possible, i.e. Aside, Comedy, Audience Participation.</p> <p>Pupils will begin to structure their COMPOSITIONS and musical input</p>	<p>Structure Crisis Rescue Happy Ending Rehearsal Refinement</p> <p>REVIEW OF ALL PREVIOUS LEARNING OBJECTIVES</p>
Part 7	<p>ASSESSMENT of pupils' pantomimes and musical compositions. Brief peer assessment of pieces. Peer and self-assessment, and EVALUATION of performance pieces. Pupils are able to set targets for future development and understand what they have achieved so far.</p>	<p>Evaluation Reflection Development Targets</p>

Part	Key Learning	Disciplinary/Literacy	Resources
1	Pasta bake - HBV and LBV proteins Protein is a very important Macronutrient in the diet it is essential for growth and repair of the body and for the maintenance of good health. It is also needed in the production of body chemicals such as enzymes and hormones. Protein can be obtained from both animal and plant sources. Animal sources are often referred to as high biological value (HBV) protein and the plant sources are often referred to as low biological value (LBV) protein.	Protein – needed for growth and repair of body cells. HBV – High biological value LBV – Low biological value	 SCAN ME
2	Pasta is a food that contains starch, a carbohydrate which provides energy for our bodies. Starch is a complex carbohydrate, providing slower release of energy than simple carbohydrates such as sugars. Pasta especially wholemeal pasta is a source of fibre. Durum wheat flour is also used to make pasta as it is high in protein, holds its shape during cooking, making a stretchy dough. Basic pasta dough is made from flour, salt, eggs, oil and water. Pasta is available in different shapes and varieties – for example Farfalle – bow ties, Penne – tubes, Fusilli – twists. Different shaped pasta is designed to hold different styles of sauce.	Carbohydrate – one of the five nutrients – a macro nutrient. Whole grain – All the edible parts of the grain – the germ, endosperm and bran Al dente – firm to the bite, a description of the texture of correctly cooked pasta.	
3	Lemon drizzle cake - The benefits of eating fruit. A diet rich in a variety of fruits and vegetables can make us healthier. The aim is to eat at least five portions of fruit and vegetables each day. Try eating a rainbow of coloured fruit everyday to provide you with all the micronutrients your body requires. Fruits contain a variety of micronutrients especially vitamin C. They are also a good source of fibre. Adding fruit such as sultanas, strawberries, blueberries and lemon to a cake can add flavour, texture and colour to the dish as well as improve the nutritional value.	Creaming – the process of creaming fat and sugar together, which traps tiny air bubbles into the mixture Juice – to squeeze the juice from fruits or vegetables Zest - scrape off the outer coloured part of the peel of (a piece of citrus fruit) for use as flavouring.	
4	Stir fry is a traditional Chinese method of cooking that cooks food quickly, keeping vegetables crunchy and conserving nutrients, especially vitamin C. Stir frying involves using a wok on a very high heat. High risk foods such as chicken, beef, prawns and rice can be incorporated into stir fried dishes. In order to keep food safe high risk foods should be prepared on the correct coloured chopping boards – red for raw meat and blue for raw fish. High risk foods should be stored in the fridge at 5C prior to cooking. High risk food should be cooked to 75C or above to ensure bacteria is killed during the cooking process. Once cooked the food should be served immediately or quickly cooled to 5C within 90 minutes and stored in the fridge.	High risk - Foods that are ready to eat, foods that don't need any further cooking, and foods that provide a place for bacteria to live, grow and thrive Wok - a bowl-shaped frying pan used typically in Chinese cooking. Cross contamination - the process by which bacteria or other microorganisms are unintentionally transferred from one substance or object to another, with harmful effect.	
5	Meal planning - The body needs food for growth and repair of body cells, energy, warmth, protection from illnesses and keeping the body working properly. The Eatwell guide shows how eating different foods can make a healthy and balanced diet. It divides foods into groups and shows how much of each food group is needed for a healthy diet. The main nutrients in food are carbohydrate, protein and fats. These are called macronutrients. Vitamins and minerals are called micronutrients. A diet refers to the foods you eat. To have a healthy diet it must contain a good balance of all the necessary nutrients. If too much of one nutrient is eaten then the diet becomes unbalanced and possibly unhealthy.	Multicultural made up of or include more than one ethnic group or culture. Balanced diet - a diet consisting of a variety of different types of food and providing adequate amounts of the nutrients necessary for good health.	

Part	Key Learning	Disciplinary/ Literacy	Resources
1	<p>Timber is the term given to natural and manufactured wood used in products because timber comes from the natural source of trees. It's recyclable, renewable and reusable. There are two categories of natural wood; hardwoods and Softwoods. These names reflect the cell structure of the tree the wood comes from and not the strength or hardness of the wood.</p> <p>Hardwoods come from deciduous trees which can take hundreds of years to mature. For this reason, the timber from these trees is generally more expensive.</p> <p>Softwoods come from coniferous trees. These trees grow quickly, making softwood a highly sustainable readily available and less expensive than hardwoods. Softwoods absorb moisture more easily than hardwoods, so they're more likely to rot, this means they are most suitable for use in products designed to be used indoors. Softwoods aren't available in as many colours as hardwoods, but can easily be stained or painted to make them look like a more expensive hardwoods. Softwoods are commonly used in the construction industry as they are cheap and readily available.</p> <p>Pine is one of the most common softwoods. It has a straight grain and is a light yellow colour. Pine is easy to work and is used in interior construction, such as joinery and window frames, and for making low-cost furniture. If its surface is treated, pine can be used outside too, however it can be knotty and prone to splitting.</p>	<p>Hardwoods Softwoods Manufacture Timber Recyclable Renewable Reusable Sustainable Pine Plywood Veneer Laminated</p>	
2	<p>Manufactured boards use natural timber waste that is processed to form sheets. Manufactured boards are used to produce cheaper and lower quality products than those made with natural timber. Waste wood or low grade or recycled timber is used to give the product a natural pale brown finish. A veneer can be added to cover the rough finish of the manufactured timber and give the appearance of a better quality wood. A veneer is a thin slice of high quality wood that is bonded to the surface of a cheaper material to enhance its appearance.</p> <p>Plywood is a laminated board. Layers of wood veneers are glued at 90 degree angles to each other so the grain direction alternates. This makes plywood strong even when thin and means that it's stable in all directions. A layer of higher quality outer material is applied on the top and bottom to improve the appearance. Because of its stiffness and stability, plywood is often used for furniture, shelving and flooring.</p> <p>Manufactured boards have many advantages over natural timber. They can be produced using lower grade timber, making them more environmentally friendly. Manufactured boards have consistent properties throughout the board, making them more stable, less likely to warp or deform, and suited to high volume production. They are also manufactured in larger sheets than natural timber.</p>		
3-6	<p>Be able to use and name the following tools:</p>  <p>Be able to identify, describe and make a finger joint and a lap joint</p>  <p>Joint in wood provide a variety of levels of strength and structure. Joints are often glued with PVA to make them secure and permanent.</p> 	<p>Dimension Working Drawing Try Square Rule Tenon Saw Bench Hook Bench Vice Chisel Coping Saw Lap Joint Finger Joint</p> <p>Evaluate Criteria Specification</p>	  

Part	Key Learning	Disciplinary/Literacy	Resources
1	<p>Ferrous metals contain iron and may rust. Iron and steel can corrode – this is known as rust Rust is a compound called iron oxide and is formed when iron and oxygen react in the presence of moisture or water. Most ferrous metals are magnetic. Non-ferrous metals such as Aluminium don't contain iron. They are often more expensive than ferrous metals owing to their desirable properties which include: Lightweight, good conductivity, ductile and malleable and resistant to corrosion.</p> <p>Designers and engineers need to communicate sizes of components on an orthographic drawing. To avoid any confusion when reading these, it is important that sizes of parts are clearly labelled. To make sure of this, a standard, common method is used to show the sizes of an object. These standard 'rules' must be followed when recording sizes. In the UK, we follow the rules outlined in British Standards 'BS 8888'.</p>	Ferrous Non Ferrous Corrosion Hardness Toughness Malleability Oxide Orthographic Dimension	
2	<p>Marking out consists of transferring the dimensions from an orthographic drawing to a workpiece in preparation for the next step, machining or manufacture. The use of marking out is to provide guide lines to work to, to control the size and shape of a component, and to position and size any features, such as holes, required in the component.</p> <p>An orthographic drawing represents a three-dimensional object using several two-dimensional views of the object. It is also known as an orthographic projection. Orthographic projections are working drawings in either a first or third angle (we use third angle in the UK) projection and show each side of a design without perspective. They are essentially a 2D drawing of a 3D object. They are used to show an object from every angle to help manufacturers plan and carry out production.</p>	Scriber Centre punch Steel rule Radius Diameter Circumference	
3	<p>Steel can be joined by using a technique called brazing. A high temperature is needed for this and a brazing hearth is normally used. Brazing gives a permanent joint that is ideal for most metalworking projects in schools and colleges. In industry this technique is used on products such as bicycle frames where there is a need for a certain amount of flexibility in the joint.</p> <p>In simply terms, two steel parts are joined by heating them to a 'red' heat/colour and followed by applying a brazing rod to the joint. The brazing rod melts at a lower temperature than the steel and so it melts to form a molten liquid. This liquid brazing rod then flows along the joint between the two steel parts, aided by capillary action, filling any gaps and creating a strong and permanent joint.</p>	Capillary action Annealing Ferrous Brazing Flux Oxidation	
4	<p>Plastic dip coating provides a cost effective finish to metals. This type of coating offers surface protection combined with a decorative appeal, due to the vast range of colours that are available. Further to this, in many cases a powder coating improves the functionality of the product. Bike frames and car wheels are often powder coated as they spend the majority of their time outdoors and in conditions that will cause them to corrode/rust..</p>	Dip coating Corrosion Polymer Plastic	
5	<p>Structures All forms of civil engineering, mechanics or architecture requires the designers and engineers to have an understanding of materials, forces and structures. The complex world of making structures relies on understanding the mathematics of forces. Tensile strength, compression, torsion, load are all things that need to be considered when creating the built environment around us. As well as forces, understanding what properties a material possesses is vital to the functionality of a structure.</p>	Tension Tensile strength Compression Torsion Load	
6	<p>Engineers research An engineer uses science, technology and maths to solve problems. We can see engineering everywhere in the world around us, improving the ways we work, travel, communicate, stay healthy, and entertain. Today, the field of engineering offers more career choices than any other discipline! In the past, there were four major engineering branches: mechanical, chemical, civil and electrical. Today, the number of available engineering careers/degrees is vast.</p>	Mechanical Chemical Civil Electrical	

My Diary :							
Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1	31/10/2022	01/11/2022	02/11/2022	03/11/2022	04/11/2022	05/11/2022	06/11/2022
2	07/11/2022	08/11/2022	09/11/2022	10/11/2022	11/11/2022	12/11/2022	13/11/2022
3	14/11/2022	15/11/2022	16/11/2022	17/11/2022	18/11/2022	19/11/2022	20/11/2022
4	21/11/2022	22/11/2022	23/11/2022	24/11/2022	25/11/2022	26/11/2022	27/11/2022
5	28/11/2022	29/11/2022	30/11/2022	01/12/2022	02/12/2022	03/12/2022	04/12/2022
6	05/12/2022	06/12/2022	07/12/2022	08/12/2022	09/12/2022	10/12/2022	11/12/2022
7	12/12/2022	13/12/2022	14/12/2022	15/12/2022	16/12/2022	17/12/2022	18/12/2022

My Homework

Week						
31/10/2022						
07/11/2022						
14/11/2022						
21/11/2022						
28/11/2022						

My Homework

Week						
05/12/2022						
12/12/2022						

My Reading Record - To be completed at the end of each DEAR session

Date	Book Title	Pages	Main Events
01/11/2022			
02/11/2022			
03/11/2022			
04/11/2022			
07/11/2022			
08/11/2022			
09/11/2022			
10/11/2022			
11/11/2022			
14/11/2022			
15/11/2022			
16/11/2022			
17/11/2022			

My Reading Record - To be completed at the end of each DEAR session

Date	Book Title	Pages	Main Events
18/11/2022			
21/11/2022			
22/11/2022			
23/11/2022			
24/11/2022			
25/11/2022			
28/11/2022			
29/11/2022			
30/11/2022			
01/12/2022			
02/12/2022			
05/12/2022			

My Reading Record - To be completed at the end of each DEAR session

Date	Book Title	Pages	Main Events
06/12/2022			
07/12/2022			
08/12/2022			
09/12/2022			
13/12/2022			
14/12/2022			
15/12/2022			
16/12/2022			

November	Friday 4 th	Friday 11 th	Friday 18 th	Friday 25 th
	THIS WEEK: %	THIS WEEK: %	THIS WEEK: %	THIS WEEK: %
	OVERALL: %	OVERALL: %	OVERALL: %	OVERALL: %
December	Friday 2 nd	Friday 9 th	Friday 16 th	CHRISTMAS HOLIDAYS
	THIS WEEK: %	THIS WEEK: %	THIS WEEK: %	
	OVERALL: %	OVERALL: %	OVERALL: %	

How often have you been in the 100% Club this half term?

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
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Are you a Rising Star?



Attendance Matters: record your attendance at the end of each week and track your progress!

[illegible]