

20th February 2023	Week A
27 th February 2023	Week B
6 th March 2023	Week A
13th March 2023	Week B
20 th March 2023	Week A
27 th March 2023	Week B

Please note: Maths homework will be on an online platform for this term. It will be set and checked weekly separately from the timetable.

Knowledge Organisers 2022-23 Year 7 – Term 4

Complete your homework on the night stated e.g. if it is a Monday Week A you will complete ICT/DT

	Week A	Week B
Monday	ICT/DT	MFL
Tuesday	English	English
Wednesday	Science	Science
Thursday	History	Geography
Friday	RS	Music/Art

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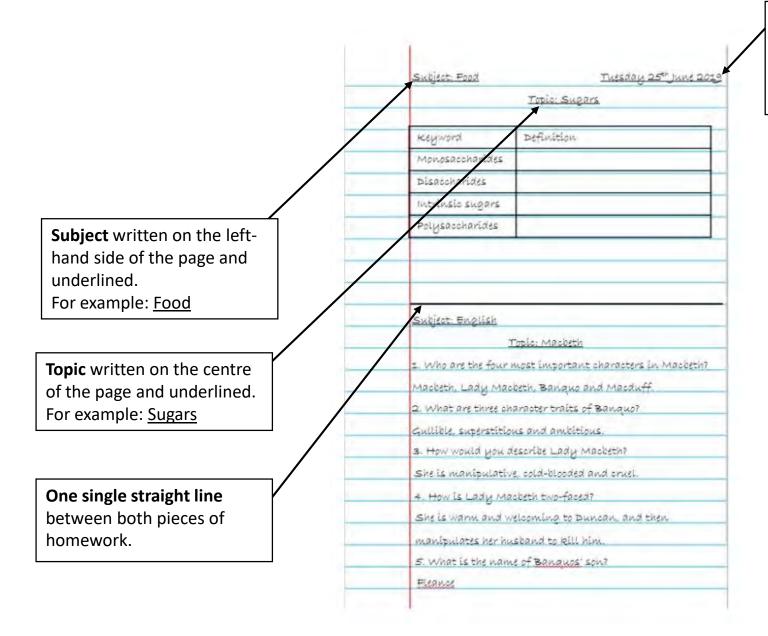
Textiles.....Pg 32

This Knowledge Organiser is to help you see the key information for each subject for this term. You can use this to help you both with homework and with revision, supporting your learning at home. In the table below you will find the instructions for each subject to be completed on the correct day.

Subject	Tasks
Maths	Homework question tasks/sets will be set weekly on an online platform. You will have one
	week to complete this online, before it is checked for competition and the next set is published.
Science	For term 1 this will be directed by your classroom teacher. It could involve an online platform
	too.
English	Using the separate question booklet, divide your homework book page in half length ways,
	write the questions out on the left hand side. First, attempt to answer the questions from
	memory/your own knowledge. Then use your knowledge organiser booklets to check your
	answers and fill in the missing ones.
MFL	Find the correct date in the KO and the question booklet. With the list of 10 key words for that
	week, complete the look – say - cover – write – check method in your homework
	book. Complete this process for each word/phrase 4 times each.
Geog/Hist/RS	Same process as outlined for English above. DT have 5 questions and not 10.
/DT	
ICT	For term 1, continue to use the KO to do revision/key words etc in your homework books.
Music/Art	For music and art, you will have two practical tasks to complete each term for each
	subject. These will be found in the question booklets and will be checked by you classroom
	teacher.

At the back of this booklet, you will find: Sentence starters, a history chronology, DT sentence starters, a periodic table, maps of the world, subject websites, a RAG sheet and a timetable.

How to present your homework:



Date written fully on the righthand side of the page and underlined. This should be the day you complete the homework.

Home Learning Strategies to help you revise

Brain Dump



Write down everything you know about o certain topic on a page. Use your KO to add extra notes in a different colour.

Mind Map



Condense a topic showing the important links and connectors between key parts. Use your KO to add in extra notes.

Diagram



Draw a clear diagram for a subject including labels and key features. Make sure you use correct vocabulary and spellings.

Vocabulary



Learn the key words associated with a topic and commit the word and spelling to memory. Test yourself or ask someone else to test you.

Retrieval Quiz



Write key questions about a topic as well as the answers. Use the content of the KO to help you. Check to see if you can remember the answers without looking.

Compare



Complete a comparison table showing two different sides of a topic. Can you use it to create an argument for one viewpoint?

Year 7 The Natural World

Content: In this project you will

Knowledge—learn about different styles of drawing

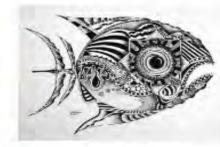
Understand—The processes and techniques artists use to create their work and how to critically analyse artists work.

Skills—observational drawing, illustrative drawing, shading, mark making, and print making showing the influence of other artists in your own work and presentation.





Dmojo is a street artist from Kuala Lumpar, Malaysia. He uses acrylic paint and spray paint to create his murals. He draws his designs in a sketch book small before creating his murals (wall art). He uses pattern and colour in the background of his work for decoration.





MARK MAKING IDEAS

Mark making is a term used to describe the different lines, patterns, and textures we create in a piece of art. It applies to any art material on any surface, not only paint on canvas or pencil on paper.



Printmaking is the process of creating artworks by printing, normally on paper. A printing block can be carved from wood, lino, foam or even a potato. Artists use print making so they can reproduce the same image several times. Artists sometimes use print making to create a repeat pattern.



Natural—existing in or derived from nature; not made or caused by humankind.

Mural-a painting or other work of art executed directly on a wall.

Illustration-a picture illustrating an idea in a book, newspaper or leaflet etc.















Louis Renard's 'Book of Fantastical Fish' was first published in 1719. This was the first known book of colourful fish illustrations.

The book supposedly shows marine life from the East Indies in 1719 when Europe knew very little about nature in that region. The marine life and fish paintings in the book have received a certain amount of artistic license. A few are even completely fictitious including a portrait of a mermaid.

Louis Renard's created these fish paintings without ever visiting the East Indies. He based the paintings on drawings and scientific notes of other artists.

Year 789 - Data Representation

ASCII TABLE

Number Bases

Denary

Base 10 Numbers - 23, 5

Binary

Base 2 Numbers -01010101

128	64	32	16	8	4	2	1		1
0	0	0	0	1	0	1	0	130	10
0	0	1	1	1	1	1	0	=	62
1	0	0	0	1	1	1	1	=	143
0	0	0	0	0	0	0	1	=	1
1	1	4	1	1	1	1	1	=	255

Binary Arithmetic

Rules of Addition

0	+	0	=	0
•		-		~

$$0 + 1 = 1$$

$$1 + 0 = 1$$

OVERFLOW ERROR

When and extra bit is created to represent a number

Storage Units

The more bits of Binary you use, the higher the file size.

*8	1	Bit		
+1000	1	Byte	1	x8
+1000	1	Kilobyte	+	x1000
+1000	1	Megabyte	1	×1000
+1000	1	Gigabyte	1	x1000
	3	Terabyte	1	×1000

				1	1	1		
	.0	0	0	0	1	1	1	0
+	1	0	1	0	0	0	1	0
	1	0	1	1	0	0	0	0
			1	1	1	1		
	1	1	0	1	0	0	1	1
+	0	0	0	0	1	1	1	0
						1 400	70.00	- 3

0

			2Mb	to	Bits			
2	x	1	0	0	0	=		
2	0	0	0					
2	0	0	0	X	1	0	0	0
2	0	0	0	0	0	0		
2	0	0	0	0	0	0	×	8
1	0	0	0	0	0	0	0	

2Mb = 10000000 Bits

0

ASCII and Unicode ASCII

7 bit ASCII used to represent 128 characters in binary. Only enough for English language.

Unicode

Created to extend binary values for other languages using 16 bit numbers. This allows for 65,536 characters to be encoded.

	A	S	C	1	9/		T		10									1	
	C	Ξ.	67	=	0	1	0	0	0	0	1	1	=	8	bits		8	×	4
	A	=	65	=	0	1	0	0	0	0	0	1	=	8	bits		=	32	bits
ī,	T	=	84	=	0	1	0	1	0	1	0	0	=	8	bits	-	32	1	8
٦	J	=	33	=	0	0	1	0	0	0	0	1	=	8	bits		=	4	bytes
	U	N	1	C	0	D	E	į.			1							1	
	0	=	0	0	0	0	1	0	0	1	1	1	1	1	1	0	1	0	(2554)
	稿	=	0	0	0	1	0	0	0	0	0	1	0	0	0	1	1	1	(4167)

Representing Images

Pixel - Small dot on of colour on an image Resolution - Amount of pixels on an

image

0

0

0

Colour/Bit Depth - Amount of bits in each pixel (amounts of colours available)

Factors that affect the quality and file size:

Increasing resolution and colour depth means the quality will improve. It also means the file size will increase.

g out file size:

(bits) = Resolution x Bit Depth



Playwright	This is the name given to the person who writes the play,
Performer	A performer is an actor or entertainer who plays a role or performance in front of an audience.
Understudy	An actor who studies another's role so that they can take over when needed.
Lighting designer	Responsible for designing the lighting states and, if required, special lighting effects for a performance. The final design will result in a lighting plot which is a list of the lighting states and their cues.
Sound designer	Responsible for designing the sound required for a performance. This may include underscoring, intro and outro music as well as specific effects. The final design will result in a sound plot which is a list of the sounds required and their cues.
Set designer	Responsible for the design of the set for a performance. They will work closely with the director and other designers so that there is unity between all the designs and the needs of the performance.
Costume designer	Designs the costumes for a performance. The costume department of a theatre is often called the wardrobe
Puppet designer	Designs the puppers for a performance.
Technician	A person who works backstage either setting up technical equipment such as microphones or rigging lights before a production or operating technical equipment during a performance.
Director	In charge of the artistic elements of a production. A director will often have the initial creative idea ('concept') for a production, will work with the actors in rehearsal, and will collaborate with designers and the technical team to realise this idea in performance.
Stage manager	In charge of all aspects of backstage, including the hackstage crew. They will oversee everything that happens backstage before, during and after a performance. During the rehearsal period, the Stage Manager and their team will make sure that all props are found or made, scene changes are rehearsed and smooth, and all other aspects of backstage are prepared. They are also in charge of the rehearsal schedule.
Theatre manager	Responsible for and manages the front-of-house team who deal with the audience during the production (for example, the box office manager, ushers and similar staff).

Drama KS3 Knowledge Organiser Term 3 & 4

store trying to take in every possible 7 ----





Physical Skills:	
rnysical skills.	Eye conexet
Movement	I deliberately last eye contact with Character X, showing my submissive nature. While they
I moved towards Character X., showing the cudience	stated at me I kept my eyes on the floor, further highlighting.
Body language	Vocal Skills:
I made sure my body language was open with my chest up and my arms wide and at n	
ongles from my body. This suggests	Timing
The Control of the Co	Que group worked very hard on the tirring of the line "x y z". I paused to allow the
Interaction with other performers	audience to feel how serious the words were to my character and to portray his indecision.
In order to interact effectively with my cost-mates I	Then, as I began to speak, Character X interrupted me. This highlights
Posture	The second consideration of
I decided that my character's posture would be hundred over with drooping shoulders of	Internation (the rise and fall of the voice) I made my intunation higher at the end of the line. This suggests confusion and disbelief. An
head fitting down all the time. This shows her feelings of:	upward inflection is onto typical of Essex or Estuary English, which is appropriate for my
Gait (how your character moves)	therester because
I kept my gost precise with as little arm movement as possible. With an apright stance of	
high knees my feet ahows my character's history of	Diction (pronunciation / articulation/how clear your words are)
_	I worked hard to make sure my diction was dear. My character is confident and has no
Gesture	problems with articulating himself. I made sure every sound (especially my 't' sounds) was
To emphasise this feeling I added an aggressive gesture, extending my index finger and	audiole so that it was dear to the audience
moving my hand into Character X's face. This short, stabbing movement tells the	Pace
cudience	I made sure the pace of the scene was high. I spoke my lines speedly after the cue so that
Stillness	it added a sense of urgency. This was appropriate for
I used stillness to focus the movement of Characters X and Y, allowing them to dominate	A CONTRACTOR OF THE PROPERTY O
the space. This shows	Pause
<u> </u>	I paused after Character X's movement to allow the quiderice to digest what had instrumed.
Spacial awareness	nuppered,
My character is hyper aware of the space ground her. This develops her feur of the acti	Pitch (how high or low you were speaking - squeaky or deep voice)
in the scene as she seeks a way our, showing	During the argument I made sure my pitch was low: I deepened my voice and slowed my
The second second	speech to odd a threatening edge to my words. This shows
Proxemics (stage spacing)	General Skills
Proxemics were important in this scene. I placed myself upstage right, dividing the stage	The state of the s
between myself and Character X. This highlights our lack of closeness, further reinforcing	Expression of mood
Control	I used (other physical/socal stall) as an expression of the mood of the piece. This highlighted
I had to depict the control of emotions in this scene. I made sure I stayed still and didn't	the feelings of uselessness. Felt by my character and contrasts heavily with Character X.
react to Character X's insults. I kept my face neutral and bands denched. This shows on	
	Emotional range
Facial expression	My character showed a lot of emotional range. At the beginning she tended to be loud and
My focal expression was happy. I curved the corners of my mouth upward into a smile	
didn't show any teeth; I didn't want to openly grin as my character is quite shy. I had my eyes open and moving so that the o hat I'm excited, lacking around the	(mige)
eyes upon and moving sa trial the tr mat in excited, idealig trialia the	Performer /audience relationship (ensures sustained engagement)





It's better to use materials from pronuntle resources - ones that are replaced carturally as fast as we use them up. For example, pine from well-managed plantations in quite a matemable choice. (But if the timber has to be insusported a long way that II probably use up a lot of fossil. Fuels.) Natural fibres used for testiles (e.g. colton) one oil receivable.

Using recycled meterials means that fower new resources are needed, and often lines energy is used, For example, recycling old food cana takes much less energy than mining and processing new metal.





cm = 10 mm



Blending





Crosshatching Stippling





PINE. Pine is a softwood which grows in most areas

piele yellow wood which is light weight, straight grained and lacks figure. It resists strinking and

of the Northern Hemisphere. There are more than 100.

species workfwide. Properties. Pine is a soft, white or

Tri-Square

Tenon Saw

Bench Hook

Coping Saw

is for Aesthetics

is for Size

is for Safety

is for Function

is for Material

is for Cost

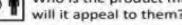
is for Customer

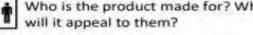
We use ACCESS FM to help us write a specification - a list of requ a design - and to help us analyse and describe an already existing



Who is the product made for? Why

What does it look like? What is the

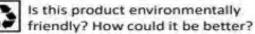




shape/ colours/ style/theme?

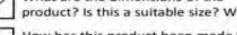
How much does it cost to make?

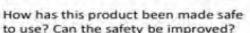
How much do I need to sell it for?



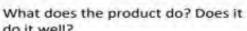


What are the dimensions of the product? Is this a suitable size? Why?











What is this material made from? Is this a good material to use? Why?

Evaluation

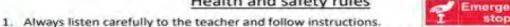
Designers evaluate their finished products or prototypes in order to test whether they work well and if the design can be corrected or improved. Whatever you have designed it is important to evaluate your work constantly during the project. Evaluation can take a variety of forms:

· General discussion with other pupils, staff and others.

- Questionnaires / surveys carried out at any time during the project.
- Your personal views, what you think of existing designs.
- Most important of all what do you think of your designs, prototypes and finished products?
- Can you think of any other ways of evaluating your work?

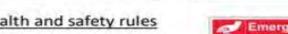
Remember to always suggest improvements when evaluating!

Health and safety rules





- Know where the emergency stop buttons are positioned in the workshop.
- Always wear an apron as it will protect your clothes and hold loose clothing such as ties in place.
- When attempting practical work all stools should be put away. 6. Bags need to be left in the cubicles and not under desks.
- Do not use a machine if you have not been shown how to operate it safely by the teacher.





Pillar Drill

Target Market

Who is the customer? A target market is the set of customers sharing common needs, wants & expectations that a business tries design a product for.







		1
Ch. 1- 6	Christmas Eve, afternoon: Pip meets the convict (Abel Magwitch); Pip asked to steal file and "wittles" for them. Joe and Mrs. Joe introduced; guns signal escaped convicts; Pip steals food and suffers from "wild fancies" in his guilt. The soldiers; Magwitch and Compeyson; Magwitch "confesses" to Pip's crime. Pip's guilt; Pumblechook describes Magwitch's "theft".	
Ch. 7- 13	The reader is introduced to Pip's limited education (from Biddy). This is compared with Joe's lack of learning. Miss Havisham wants Pip to visit; Pip sees Estella, Miss Havisham at Satis House: the gothic conventions are prevalent throughout Chapter 8. Estella seen as "a star" is Pip's eyes and she derides him as he "calls knaves, Jacks" demonstrating his poor breeding. Pip lies about Satis House and what he sees. Pumblechook pretends to know; Pip tells Joe the truth. Joe Gargey goes to Satis House and is given twenty-fie guineas for Pip's time, he is now bound into an apprenticeship with Joe which he feels	
Ch. 14-19	Retrospective narrative reflection on Pip's shame and ingratitude – juxtaposed with this, Joe's virtues are described. The half-holiday: Joe fights Dolge Orlick and Mrs. Joe is assaulted. Biddy moves in to look after Mrs Joe. Jaggers tells Pip of his "great expectations" and secrecy of benefactor. Pip undergoes transition point in Chapter 19 as he	
Ch. 20-26	Pip lodges with Herbert. Wemmick takes Pip to Barnard's Inn; Pip recognizes Herbert as "pale young gentleman". Herbert tells Miss Havisham's story. Pip takes up rowing and living the life of a 'gentleman' as he spends his fortune. Mr Jaggers flaunts his housekeeper, Molly's wrists in a scene of social power and male dominance. Pip is yet	3
Ch. 27-33	Biddy writes to Pip asking if Joe can visit Barnard's Inn; he calls Pip "Sir" highlighting Joe's "simple dignity" that does not fit with the figure of the 'gentleman'. Pip reads in local paper that Pumblechook is his "patron". Pip visits Miss Havisham; Orlick is gate-keeper. Pip declares his love for Estella. Pip waits for Estella who is visiting London. Wemmick shows him Newgate (convict motif).	

Plot

Great Expectations

	Great Expectations	nglish
I	Pip and Herbert accumulate rather large debts and Mrs. Joe dies. Pip comes of a (November) and becomes responsible for his finances; asks Wemmick's advice to	_
l	Herbert. Pip is to escort Estella and take her to Satis House; quarrels with Miss	
	Havisham and discovers Bentley Drummle as Estella's suitor. He leaves heartbro	oken. Pip

Pg 8

	34-39	(November) and becomes responsible for his finances; asks Wemmick's advice for Herbert. Pip is to escort Estella and take her to Satis House; quarrels with Miss Havisham and discovers Bentley Drummle as Estella's suitor. He leaves heartbroken. Pip
3	Ch. 40-44	The man on the stairs, "Provis" comes to stay; Jaggers confirms his story as Pip's bene- factor. Herbert then meets Magwitch/"Provis". Herbert advises Pip to take Magwitch out of the country; they ask him about his life. Pip tells Estella he loves her but Estella is set to marry Bentley Drummle.
	Ch. 45-50	Pip feels he is being watchedHe fears Estella is married but will not make sure. Pip dines with Jaggers; Estella is married. Pip recognizes Molly as her mother and Wemmick tells of Molly's trial. Chapter 49 sees Miss Havisham's confession and repentance; Estella's adoption and the fire. Pip says "I forgive her". Herbert tells of Magwitch's child and Pip knows Estella is his. Magwitch said that Pip reminded him of her.
	Ch. 51-59	Jaggers explains Estella's adoption and advises that Pip keep it secret. Orlick's confession and attempted revenge; Pip rescued by Trabb's boy and Herbert. Magwitch's escape is thwarted; Compeyson drowned and Pip reconciled to his benefactor, Magwitch. Pip's wealth is forfeited to the crown. Magwitch convicted and sentenced; Pip tells him, before his death, of Estella. Pip becomes ill and is arrested for debts but rescued by Joe. Orlick ends up in jail. Miss Havisham's will is read and Pip plans to propose to Biddy. Satis House goes up for auction and Joe marries Biddy. Eleven years later, Pip returns; sees young Pip and meets (widowed) Estella at Satis; "no shadow ofparting".

Characters

Pip Pirrip

The Bildungsroman's protagonist, Pip is an orphan, the apprentice of the gentle blacksmith Joe. When he unexpectedly comes into a fortune, Pip aspires to become worthy of the upper-class Estella. Pip becomes cruelly disloyal to Joe and Biddy, avoiding them because of their class. Eventually, Pip learns to judge people by internal rather than superficial standards and redeems himself.

Miss Havisham

The wealthy an decrepit Miss Havisham was abandoned on her wedding day by her fiancée (Compeyson) and traumatized, so she shuts out the world for over twenty years. In her revenge on men, Miss Havisham adopts and raises Estella to be beautiful and desirable but completely heartless.

Estella

The adopted daughter of Miss Havisham, Estella is proud, refined, beautiful, but cold: raised by Miss Havisham to "wreak revenge on the male sex". She initially marries Bentlev Drummle -a bad decision.

Biddy

Pip's school friend, Biddy moves into the forge to help out after Mrs. Joe's attack and later becomes a schoolteacher. Humble, kind and moral, she is also sharply perceptive and sees through everyone's pretensions, calling Pip out on his delusions and snobbery long before Pip can recognize them.

Great Expectations

Joe Gargery

Joe is a father figure for Pip whose tender kindness protects Pip from Mrs. Joe's harsh parenting. With no formal education, but a deep sense of integrity and an unfailing moral compass, Joe is loyal, generous, and kind, and acts lovingly towards Pip even when Pip's is ungrateful.

Mrs Joe

Mrs. Joe is fiery, tyrannical, and false, and abuses Pip and Joe. She is obsessed with social status and reputation. Yet, after the attack by Orlick that gives her brain damage, Mrs. Joe's personality changes completely and she becomes patient, compassionate, and docile.

Provis (a.k.a. Abel Magwitch the convict)

The same escaped convict Pip helps in the novel's opening scenes. Provis' gratitude towards Pip inspires him to devote his lifesavings to him and become his anonymous benefactor. Cruelly swindled by Compeyson, Provis has lived a life in and out of prison. Still, his criminal record is largely the result of unfortunate circumstances, not character, for Provis is kind, good-hearted, and immensely generous.

Mr Jaggers

A famous lawyer in London, Mr. Jaggers is Pip's guardian and the middleman between him and his patron. Mr. Jaggers also works for Miss Havisham. He is rational, sharp-minded, and intimidating. He prides himself on neither expressing nor responding to human emotion.

Bentley Drummle

Bentley Drummle studies with Pip. He is a wealthy heir to a baronetcy, upper class according to the old system of inherited rank. Described as "idle, proud...and suspicious," Drummle is Pip's nemesis. He marries Estella.

Herbert Pocket

Pip's best friend, Herbert is compassionate, honest, and unpretentious. He and Pip live together in London where he works in a counting house as a merchant. He cheerfully helps Pip through all of Pip's struggles.

What do we need proteins for?

Build enzymes and hormones

Functions

- Build cell membranes
- Repair and maintain tissues
- · Defend the body (antibodies)
- Secondary source of energy

What happens if we have too much or too

- Kidney and liver diseases.
- Weightgain
- Kwashiorkor
- Slowing growth rate
- Swelling

Protein alternatives

Vegetarians and vegans don't consume meat so instead they use protein alternative products which are manufactured in order to provide protein in a diet and protein rich foods.









Beans, lentils, chickpeas

What do we need carbohydrates for?

Functions

Excess

Deficiency

Functions

- Primary source of energy
- Store energy for later
- · Build DNA
- Prevent the body from using proteins as an energy source

What happens if we have too much or too little?

- Tooth decay Type 2 diabetes
- Weight gain and obesity
- Hyperglycaemia
- Weightloss Lack of energy, tiredness
 - Severe weakness Hypoglycaemia

the field to the plate of the consumer-importing food

Food miles - how far food has travelled from farm to fork.

Allergen - a substance or food that may cause an allergic reaction.

products from distant countries Increases food miles.

Food miles: The distance from

Keywords:

and transported.

Visible fats

Saturated



Food provenance (UK):

Macronutrients - nutrients we need in large amounts: carbohydrates, proteins, fats.

Intensive farming - a method of farming aimed at increasing the amount of food produced

Food provenance (origins) - how food is grown, reared and caught and how it is produced

Food that is caught: Fish such as mackerel, haddock and salmon and shellfish such as mussels and scallops.

Food that is grown: Crops: wheat and barley, Fruit and vegetables: apples, potatoes, carrots, lettuce, sprouts and s oft fruits like raspberries and strawberries.

Food that is reared; cows for milk and meat, sheep, pigs and chickens for meat and eggs.

Organic farming

allergen.

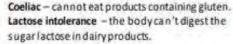
animal in their diet.

- No chemicals
- ✓ Few or no pesticides
- ✓ No artificial fertilisers
- ✓ No herbisides
- √ No GM feed or seeds
- ✓ Antibiotics only used when necessary
- ✓ Animal welfare standards are kept

Carbon footprint

A carbon footprint is defined as: The total amount of greenhouse gases produced to directly and indirectly support to produce a product. This is usually expressed in equivalent tons of carbon dioxide (CO2)

14 common allergens.



Factors that affect food choice

Vegetarian: No meat in the diet

Vegan: No products from animals in the diet e.g. meat, milk or honey.

Religion:

Islam: Requires Halal meat, no alcohol, no pork Judaism: Requires Kosher food, no meat and dairy

together, no pork Hinduism: No beef

Food intolerance - a reaction to food.

Coeliac disease - an intolerance to gluten.

Allergy - when the body reacts suddenly and seriously to an

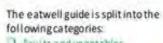
Vegan: Someone who doesn't include any products from an



plate) has been produced by the government. The Eatwell Guide shows how much of what we eat overall should come from each food group to achieve a healthy, balanced diet.

- ☐ Pruits and vegetables
- Dils and spreads
- other proteins.

The eatwell guide (formerly the eatwell



- Dairyandaltematives
- Beans, pulses, fish, eggs, meat and



What do we need fats for?

- Source of energy
- Insulation Dissolve vitamins
- **Build hormones**
- Build cell membranes

What happens If we have too much or too little?

- Obesity
 - Hypertension
 - Coronary heart disease
 - Fattyliver disease
 - Type 2 diabetes
 - Weightloss
 - Vitamin defidency Heart disease
 - · Feeling cold





Fats you can see,

often saturated.

such as on meat are

Unsaturated fats

you cannot see,

such as in nuts and

avocados. They are

often good for the

brain,

Quelle est ta matière	What is your favourite
préférée?	subject?
L'anglais	English
L'espagnol	Spanish
Le français	French
Le théâtre	Drama
Le dessin	Art
Le sport / l'EPS	PE
L'informatique	Computer Science
L'éducation civique	PSHE
L' histoire	History
La musique	Music
La technologie	Technology
C La géographie	Geography
La religion	RE
Les mathématiques	Maths
	Science
Les sciences humaines	Humanities
Que penses-tu?	What do you think?
C'est	It is
Ce n'est pas	It isn't
Créatif	Creative
Intéressant	Interesting
Pratique	Practical
Utile	Useful
(in)confortable	(un)comfortable
Cher	Expensive
Bon marché	Cheap
À la mode	Fashionable
Démodé	Unfashionable
Sale	Dirty

Clean

Ugly

Propre

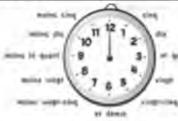
Moche

7.3 My life at school

	Comment est ton uniforme?	What is your school uniform like?
	Je porte	I wear
W	Une veste	Blazer
	Un pull	Jumper
Ŷ.	Une chemise	Shirt
-	Un T-shirt	T-shirt
1	Un pantalon	Trousers
	Une cravate	Tie
N-	Une jupe	Skirt
)h	Des chaussettes	Socks
4	Des chaussures	Shoes
1	Des collants	Tights

Verbes au collège	Verbs at school
Étudier	To study
Écouter	To listen
Bavarder	To chat
Travailler	To work
Passer	To spend
Jouer	To play
Se reposer	To rest
Se relaxer	To relax





Comment est ton prof?	What is your teacher
	like?
Gentil (-le)	Kind
Agréable	Pleasant
Ennuyeux (-se)	Boring
Organisé (e)	Organised
Content (e)	Нарру
Difficile	Difficult
Facile	Easy
Amusant (e)	Fun
Coléreux (-se)	Angry
Strict (e)	Strict
Grincheux (-se)	Grumpy
Fort (e)	Strong
loli (e)	Handsome/ pretty
Horrible	Awful
Fascinant(e)	Exciting
leune	Young
Mature	Mature
Petit(e)	Small
Grand (e)	Tall
Parfait(e)	Perfect
Rapide	Fast
Riche	Rich
Bruyant(e)	Noisy
Sage	Wise
Sérieux(-se)	Serious
Timide	Shy
Travailleur(-se)	Hard working
Triste	Sad
Âgé(e)	Old

Porter is a regular verb which follows the pattern below. The verb "**aller**" is irregular but an important verb.

Pronouns	Porter – to wear	
Je (I)	Je port e – I wear	
Tu (you)	Tu port es – you wear	
il (he), elle (she)	il /elle porte - He/she wears	
Nous (we)	Nous portons — we wear	
Vous (you) (pl. or formal)	Vous portez — you wear(pl. or formal)	
ils /elles (they)	ils/elles port ent – they wear	

Aller – to go

Je vais - I go
Tu vas – you go
il /elle va– he/she goes
Nous allons –we go
Vous allez – you (pl) go
ils/elles vont– they go

Comparisons

Plus...que - more...than Paul est **plus** sérieux **que**Thomas Moins...que - less ...than Thomas est **moins**sérieux **que** Paul
Aussi...que - as...as Paul est **aussi** sérieux **que**Jacques

<u>Superlative</u>

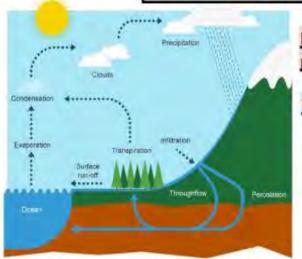
Opinion phrases help to make our work more interesting – have a look at your vocabulary list. Try to use a range of different ones in your work e.g. J'aime (I like)/Je pense que (I think that)/ à mon avis (in my opinion).

Time phrases help to make our work more detailed by telling us when things happen - have a look at your vocabulary list e.g. normalement (normally), rarement (rarely), deux fois par semaine (twice a week).

Evaporation

Condensation

Precipitation



When sun heats water it

changes into water vapour

As air rises it cools and the

Water droplets that fall to the

ground as rain, hail or snow.

vapour forms clouds.

Diver	Erosion	The wearing away of land.
River	Transportation	The movement of material in a river.
processes:	Deposition	The dropping of material by water.

1.The soft rock is eroded quicker Waterfall Formation: than the hard rock and this creates Steep sided gorge a step. 2. As erosion continues, the hard rock is Hard rock undercut forming Soft rock an overhang. Overhang erodes and waterfall Abrasion and hydraulic action continue to erode Plunge pool with fallen rocks the soft rock to create a plunge pool.

- Over time this gets bigger, increasing the size of the overhang until the hard rock is no longer supported and it collapses.
- This process continues and the waterfall retreats upstream. A steep-sided valley is left where the waterfall once was. This is called a gorge.



Infiltration Water soaks into the soil.

Transpiration When moisture is evaporated from plants.

Surface runoff When water runs off the surface of the land.

Throughflow When water flows through the soil.

and rises.

water

River landforms:

Waterfall Hightant V-shaped valley

Lower Middle Lower delta

Flooding:

C	auses		Impacts	
Physical	Human	Social	Economic	Environmental
Heavy rainfall	New buildings	Homes flooded	Jobs lost	Water supply contaminated
Saturated ground	Deforestatio n	Loss of electricity	Businesses closed	Debris left behind

	Solutions	
Hard engineering	Soft engineering	
What: man-made structure/barriers	What: not involving man-made structures, more ecological	
e.g. flood walls, dams	e.g. floodplain zoning, catchment management	

Meander Formation:

Cabot Learning

Was denkst du?

Es ist Ich mag Ich liebe Ich mag...nicht Ich hasse Ich finde interessant praktisch nützlich (un)bequem modisch/hässlich

What do you think?

It is Hike llove

I don't like

I hate

I find

Interesting Practical

Useful

Uncomfortable Fashionable/ugly

Old fashioned

Expensive/cheap

dirty/clean

Was ist dein Lieblingsfach?

schmutzig/sauber

altmodisch

teuer/billig

Englisch Informatik Geschichte

Spanisch

Französisch

Deutsch Theater

Kunst

Sport

Musik

Technologie

Erdkunde

Religion

Mathe/Mathematik

Naturwissenschaften

What is your favourite subject?

English

Computer Science

History Spanish

French German

Drama

Art

PE

Music Technology

Geography

RS

Maths

Science

German Year 7.3 My Life at School

Beschreib deine Schuluniform

Ich trage...

eine Jacke / einen Blazer

einen Pullover ein Hemd

ein T-Shirt

eine Krawatte/einen Schlips

einen Rock eine Hose Socken

Schuhe

eine Strumpfhose

Describe your school

uniform

I wear... Blazer

Jumper Shirt

T-shirt Tie Skirt

Trouser

Socks Shoes **Tights**

Verben in der Schule

studieren

hören plaudern

arbeiten verbringen

spielen

lesen sich entspannen

Verbs in School

To study To hear

To chat To work

To spend (time)

To play To read

To relax

Wie spät ist es? What is the time?

Es istUhr = ...o'clock

Es ist Viertel nach vier = 4.15

Es ist Viertel vor drei = 2.45

Es ist halb acht = 7.30

Es ist fünf vor vier = 3.55

Es ist zehn nach neun = 9.10

Es ist zwanzig vor elf = 10.40

Lehrer nett angenehm langweilig froh/glücklich lustig streng stark schwach jung alt klein/groß laut klug intelligent ernst schüchtern fleißig faul gemein/böse

Teachers Nice Pleasant Boring Happy Funny Strict Strong Weak Young Old Small/tall Loud Clever Intelligent Serious Shy Hardworking Lazy mean/nasty

Meinungen schlecht einfach toll schwierig gut

furchtbar

Opinions

Bad Easy Great Difficult Good awful

School – Subjects, uniform and time. Opinions and verbs + comparisons and superlatives



machen and spielen are regular/weak verbs which follows the pattern below; which we have seen before. The verb "tragen" is irregular/strong but only changes slightly in the 'du' and 'er/sie/es' versions.

Pronouns	tragen – to wear	spielen – to play	machen – to do/to make
ich (I)	ich trage – I wear	ich spiele – I play	ich mache – I do
du (you – informal/singular)	du tr <mark>ägst</mark> – you wear	Tu spielst – you play	du mach <mark>st</mark> – you do
er (he), sie (she), es (it)	er/sie/es tr <mark>ägt</mark> - He/she/it wears	er/sie/es spiel t - He/she/it play(s)	er/sie/es macht – he/she/it do(es)
wir (we)	wir trag <mark>en</mark> – we wear	wir spiel <mark>en</mark> – we play	wir mach <mark>en</mark> – we do
ihr (you) (plural + informal)	ihr tragt – you wear (pl. informal)	ihr spielt – you play (pl. + informal)	Ihr macht- you do (pl.+ informal)
Sie (you formal singular + plural) sie (they)	Sie tragen (you wear)/– Sie tragen (they wear)	Sie spiel <mark>en</mark> (you play)– Sie spiel <mark>en</mark> (they play)	Sie mach <mark>en</mark> (you do)/– Sie mach <mark>en</mark> (they do)

You will have seen lots of questions since September...

e.g. Wie heißt du?, Wie alt bist du? Hast du Geschwister?

Now you should be able to create some of your own questions using the question words below.

Wann? - When?

Wer? - Who?

Wo? - Where?

Wie viel(e)? – How many?

Was...? What?

Wie? - How?

Warum? - Why?

Welche? - Which?

Opinion phrases help to make our work more interesting – have a look at the list on your vocabulary list. Try to use a range of different ones in your work e.g. ich mag (I like)/ich denke, dass..... (I think that)/ Meiner Meinung nach – you must then write the verb! (in my opinion).

Time phrases help to make our work more detailed by telling us when things happen have a look at the list on your vocabulary list e.g. normalerweise (normally), selten (rarely), zweimal pro Woche (twice a week).

Comparisons

Add 'er' to the adjective. You can't add the word 'mehr' = more. Er ist kleiner = he is smaller es ist billiger = it is cheaper Exceptions are besser (better)/großer(bigger)/alter(older)

Enquiry: What was happening in the Islamic World?

Summary

During this topic we are going to be studying what was happening in the Islamic World during the Medieval period. We will be explaining similarities and differences between Medieval life and society in England and Medieval Baghdad.

Key Dates

1	750 – The Abbasid family took control of the Muslim Empire in the east.
2	762 – Baghdad was established as the capital city of the Abbasid Caliphate.
3	793 – Paper arrives in Baghdad from China.
4	800 – Baghdad is the largest city in the world.
5	830 – The House of Wisdom was established.
6	850 – Baghdad has its own hospital.
7	1258 – Baghdad was destroyed by the Mongols.

Key People		
8	Ibn Sina	Doctor and scholar known in English as Avicenna (980-1037). Wrote a huge medical encyclopaedia known as the "Canon of Medicine".
9	Al-Razi	Doctor and scholar known as Rhazes (854- 925). Helped identify the difference between smallpox and measles and influenced the hospital in Baghdad.
10	Al-Ma'mun	Caliph of the 'Abbasid Dynasty ruled 813 to 817 and he founded the House of Wisdom.

History – Year 7 Knowledge Organiser Topic 3



Key Places

11	Baghdad	Established by the Abbasid Caliphs and was the capital of the Islamic World. It became a centre of learning during the Golden Age of Islam.
12	House of Wisdom	The Grand Library of Baghdad. Home to academic works gathered from across the known world.
13	Golden Gate Palace	The palace was the Caliph's residence and was located in the centre of the round city of

		Baghdad.
14	Grand Mosque	The mosq
	11/00°	palace so when peo bowed do

The mosque was next to the Caliph's palace so that when people bowed down to pray they were bowing down to the Caliph.

Va	· T	~	-
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			_

15	Abbasid	A member of the Abbas family, the ruling
		Caliphs of Baghdad.
16	Anatomy	The scientific study of an animal or plan, or any of its' parts.
17	Arab	Name given to the group of people originating from the Middle East and North Africa
16	Astronomy	The scientific study of space and the universe
17	Caliph	Spiritual leader of Islam, any of the former Muslim rulers of Baghdad.
18	Caliphate	An Islamic state led by a Caliph
19	Golden Age of Islam	A period of cultural, economic, and scientific flourishing in the Islamic World, dated from the 8th century to the 13th century.
20	Scholar	Someone who has excellent knowledge of a particular subject.

Historical Skills Focus

Similarities and differences	We will be explaining how the Islamic World and England were similar and different during the Medieval period.
------------------------------	--

Significance: We will be

using the 5 R's of significance to explain the reasons why the Islamic World is important.



Remarkable: An event/person that was remarked on by people at the time or since. *Reported*.



Remembered: People have not forgotten it.



Resulted in change: had consequences for the future. *It led to other things happening.*



Revealing: tells us a lot about a person's time.



Resonant: An event/person that has an effect on future generations. *People connect with it today.*

Enquiry: What changed in the reformation?

Summary

1	The reformation	Attempts to reform the Catholic Church and the development of Protestant Churches in western
201		Europe are known as the Reformation.

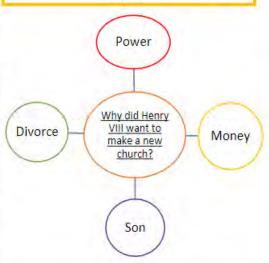
Key Events

2	1509 – Henry VIII becomes King of England
3	1517 - Martin Luther nailed 95 problems with the Catholic church to a church door sparking the Protestant Reformation.
4	25th January 1533 – Henry VIII secretly married Anne Boleyn.
5	23 May 1533 – Henry VIII marriage to Catherine of Aragon was annulled, they were divorced.
6	1536-1540 – The closure of English Monasteries by Henry VIII.

Key People

7	Martin Luther	A German monk that thought that the Catholic Church had too much power and was corrupt he set up the new Protestant church.
8	Pope Clement II	The head of the Catholic Church that refused to give Henry VIII a divorce.
9	Henry VIII	King of England from 1509-1547. Head of the Church of England.
10	Thomas Cromwell	Henry VIII put him in charge of getting rid of the monasteries.

History – Year 7 Knowledge Organiser Topic 4



PEE Paragraphs

To write a paragraph you explain your points in history we use PEE.

Point: Make your point to answer the question.

One reason Henry VIII made a new church was because he needed money.

Evidence: Give facts that support your point.

He didn't have any money because...

Explain: Give reasons why this evidence backs up your point.

By making a new church Henry VIII knew he would be able to gain money

as...

Key Terms

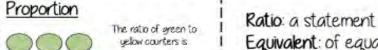
11	heir	Next in line to the throne.
12	Roman Catholic	The Christian church of which the Pope, or bishop of Rome, is the supreme head.
13	Protestant	Someone who follows the principle of Christianity using beliefs developed from the Reformation.
14	Break with Rome	Henry VIII decided to do this when the Pope would not authorise his divorce from Catherine of Aragon. He decided to break away from the Catholic Church and become head of the Church of England.
15	Dissolution of the Monasteries	The monasteries that were run by the Catholic Church and were homes for Monks and Nuns were closed down. They also provided hospital care and charity to the local people.

Six Wives of Henry VIII



Pg 18

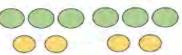
Maths



3:2

Ratio increases

proportionally



The ratio of green to yellow counters is

$$\frac{6}{10} = \frac{3}{5} \text{ are green}$$

The proportion remains the same. Ratio: a statement of how two numbers compare

Equivalent: of equal value

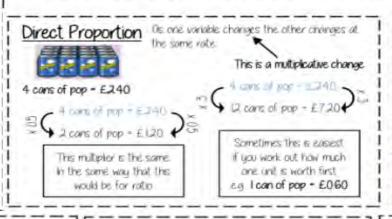
Proportion: a statement that links two ratios

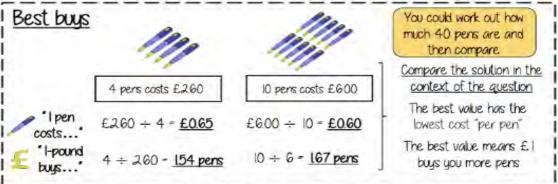
Integer: whole number, can be positive, negative or zero.

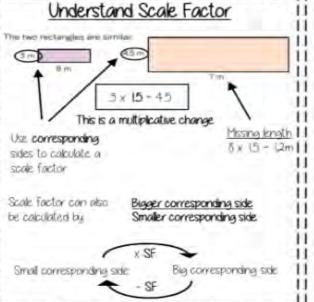
Fraction: represents how many parts of a whole.

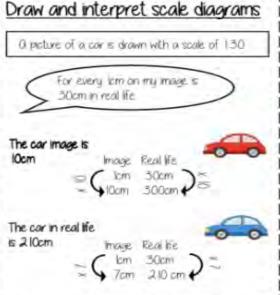
Denominator: the number below the line on a fraction. The number represent the total number of parts.

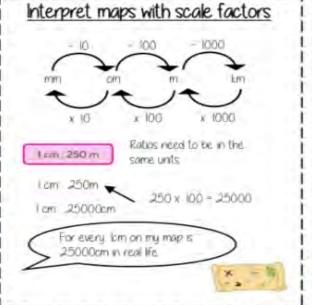
Numerator: the number above the line on a fraction. The top number. Represents how many parts are taken



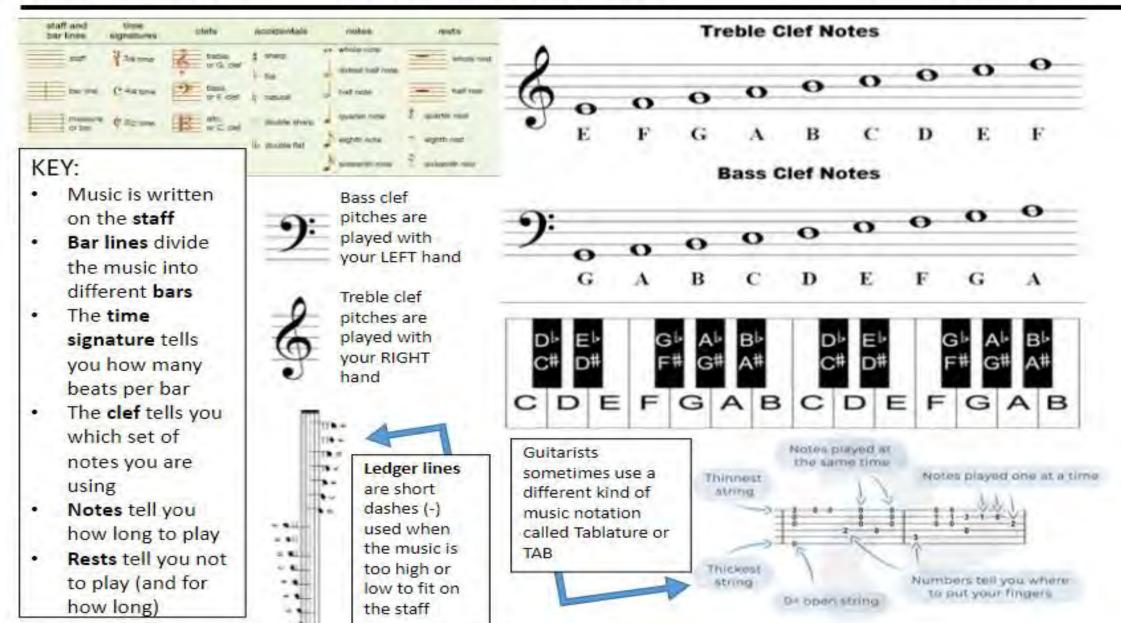








Music Notation - Year 7



PRINCIPLES OF TRAINING



Basic -

FITT

FREQUENCY

How often you train

INTENSITY

How hard you train

TIME

How long you train for

TYPE

What type of training you do









Advanced - SIVRPAR

SPECIFICITY - Training should be specific to the individual's sport, activity or fitness goal

INDIVIDUAL DIFFERENCES/NEEDS – The programme should be designed to meet the individual training goals and needs

VARIATION – It is important to do different activities in training to prevent boredom

REST & RECOVERY – A sports performer needs to rest to allow their body to recover and repair

PROGRESSIVE OVERLOAD – In order to progress training needs to be demanding enough to cause the body to adapt, improving performance

ADAPTATION – How the body reacts to training loads by increasing its ability to cope with those loads

REVERSIBILITY – When training stops, training effects are reversed

What do the Abrahamic faiths believe? Knowledge Organiser

NEED TO KNOW WORDS

Omnipotent Meaning all-powerful

Omnibenevolent Meaning all-loving

To make amends for a wrong Atonement

Believed by Christians to be Jesus God in human flesh

Bible Meaning 'The books' a collection of scriptures. The

Holy Book of Christianity

Believed to be the residence Heaven

of God

Hell a spiritual realm of evil and

suffering

Judgement The belief that our actions will be judged in the next life

To take care of the world Stewardship

and everything within it

Creed A statement of beliefs

Holy Trinity Christians believe God has appeared in three forms which they call persons: The Father, The Son and The Holy Spirit

Christian nature of God.

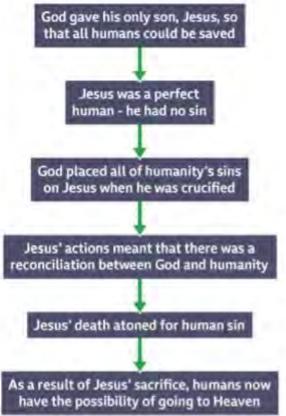
Christians believe that God is one but exists in three different 'persons'. God the Father, the Son and the Holy Spirit - and that these three Persons form a unity. The word Trinity comes from the word 'tri' meaning 'three' and 'unity' meaning 'one'.

Who is Jesus?

Christians believe that Jesus Christ was the Son of God, given as a sacrifice so that humans would have the possibility of eternal life in Heaven. Jesus' crucifixion, resurrection and ascension are key events that shape Christian beliefs.

Jesus as the Son of God

Most Christians believe that Jesus, as well as being fully human, is also fully God. Most Christians believe that Jesus is the second person of the Holy Trinity and is the Son of God.



Role of the Bible

The Bible records the teachings of Jesus during his life. These teachings give Christians guidance and instructions on how to live their life. The Sermon on the Mount is an example of a collection of such teachings. Christianity teaches that it is through Jesus' life and death that humans can be saved from sin. The Old Testament contains the Ten Commandments, which are believed to be instructions sent directly from God that tell humans how to live.

C What do the Abrahamic faiths believe? Knowledge Organiser

C

NEED TO KNOW WORDS

Allah 'the God' - the one and only God in Islam

Muhammad

(pbuh)

A religious, social, and political leader and the founder of Islam.

Islam a monotheistic faith regarded as revealed through Muhammad as the Prophet of Allah.

Qur'an the Islamic sacred book, believed to be the word of God

Jannah

"paradise, garden", is the final abode of the righteous

Jahannam the place of punishment for unbelievers and other evildoers in the afterlife

Predestination The belief that Allah knows your fate but we still have free will to reach that end

Sunnah the traditions and practices of the Islamic prophet Muhammad

Who was the Prophet Muhammad?

The Prophet Muhammad (pbuh) was a merchant born in the city of Mecca. Muhammad was respected as he was a wise and fair businessman. Tradition says Muhammad escaped the busy city during the month of Ramadan and went to the mountains by himself to think.

Muslims believe Allah chose
Muhammad to be his Prophet because he was a fair and wise man and because he was concerned for the people.

Muhammad as the Seal of the Prophets

Muhammad is the final prophet in Islam, known as the 'Seal of the Prophets'. This means that Muslims regard Muhammad as Allah's final messenger. The Qur'an is formed from the revelations

Muhammad received from God through the Angel Jibril. Muslims do not believe that Muhammad was in any way divine, and this is confirmed in the Qur'an, which states: Muhammad is no more than a messenger (Surah 3:144).

Islamic nature of God.

Muslims believe that Allah is One God, indivisible and absolute; nothing comes close to Him as the ultimate source of power and creation. He is totally supreme. There is nothing that can be likened to Him. He is beyond human understanding.

Declaration of Faith

الشُهُلُ الْكَالِكُولُ الْكُولُ الْكُولُ الْكُولُ الْكُولُ الْكُولُ الْكُولُ الْكُولُ الْكُولُ الْكُولُ الْكُو I bear witness that there is no god besides Allah

وَ اَشْهَالُ أَنَّ عُمُمَّلًا عَبْلُ لَا وَرَسُولُكُ وَ and I bear witness that Muhammad

is His servant and messenger.

[Sahih Muslim Book 9, Hadith 50; Sunan Nasai Vol. 1, Book 1, Hadith 148]

Role of the Qur'an

The word Qur'an means 'recitation' and Muslims believe that the Qur'an is the direct word of Allah revealed to Muhammad by the Angel Jibril. Due to this, it is completely different to any other book. It contains teachings and guidance for Muslims on how to live their lives.

Year 7 Block 3 Knowledge Organiser Energy Revision Pgs: 63-68 (66-70 higher)

https://www.bbc.com/bitesize/subjects/zh2xsbk

KPI 8.1: describe examples of energytransfers

KPI 8.3: apply the law of conservation of energy to situations involving energy transfers

Energy Stores

Energy can be stored in objects, or when objects are doing something. It is a quantity measured in joules (J). Examples to know:

- · Energy is stored in fuels as chemical potential energy
- Energy is stored in anything elastic when it is stretched, as elastic potential energy
- Energy is stored in any object that has been lifted up, because the object stores gravitational potential energy
- Energy is stored in moving objects as kinetic energy.
- Energy is stored in any object as heat energy. (Obviously, if it is cold, it doesn't store much heat energy!) This is also known as thermal energy.

Energy Transfer

An energy transfer is when energy changes from one store to another. VERYIMPORTANTLY, the **total amount of energy does not change**. Energy cannot be created or destroyed. All that can be changed is how it is stored. This ideas is called **the law of conservation of energy**.

Energy is transferred, so it changes store, in loads of situations. Examples to know:

- When a fuel is burned, the chemical potential energy in the fuel ends up stored as thermal energy in the surroundings;
- When an object falls off a shelf, the gravitational potential energy it stores is transferred (changed) to kinetic energy while it is falling.
- When the object hits the floor, all the gravitational potential energy it had to start with ends up stored as thermal energy in the surroundings.
- When a spring that's been stretched is released, the elastic potential energy it stored is transferred to kinetic energy then to thermal energy.

1	
Key Terms	Definitions
Energy	Energy is a quantity that is stored in many objects and situations. Anything storing energy can do work.
Work	Work is done when energy changes from one store to another.
Potential energy	Potential energy is energy stored in objects that don't seem to be doing anything. See the examples.
Chemical potential energy	Energy stored in fuels (like wood, or the gas werun Bunsen burners on) is called chemical potential energy.
Elastic potential energy	Elastic objects, like springs or rubber bands, store elastic potential energy when they are stretched.
Gravitational potential energy	Any object that is not on the ground has gravitational potential energy. This is because they are lifted up in a gravitational field, and could fall down!
Kinetic energy	Movement energy. Any moving object stores kinetic energy.
Thermal energy	Also known as heat energy. All objects store some thermal energy, because the particles are moving. The higher the temperature of an object, the more thermal energy it stores.
Conservation of energy	The law that says energy cannot be created or destroyed. It can only change how it is stored.

Energy Transfer

This shows how energy changes where it is stored twice while you use a light bulb (lamp):

From chemical potential energy to electrical energy to heat (thermal) energy in the surroundings.



Year 7 Block 3 Knowledge Organiser Energy Revision Pgs: 63-68 (66-70 higher)

https://www.bbc.com/bitesize/subjects/zh2xsbk

Knowledge objective: describe how thermal energy transfers from one place to another

Temperature and Heat

Temperature and heat are linked, but are not the same thing. The heat of a material depends on the **potential energy** of the particles AND the **kinetic energy** of the particles is it made from. What this does mean is that the more heat (thermal energy) a substance stores, the higher its temperature will be. You can increase the heat stored in a substance without increasing its temperature though: just get more of it. This means you have more particles, so there is more thermal energy all together in the substance.

But do not get confused, a cup of tea at 80°C has a higher temperature than a swimming pool at 30°C but because there are many more water particles in the swimming pool so the energy is higher.a

Thermal energy transfer

Thermal energy will always be transferred from hotter objects to cooler objects. This includes hot objects transferring thermal energy to the surroundings (the air, nearby surfaces and so on). You can reduce the amount of thermal energy transferred by **insulating** the hot object.

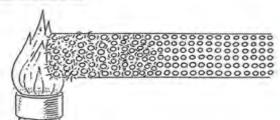
Thermal energy transfer by radiation

All objects give out some infra red radiation, but the hotter they are the more radiation they give out. All objects can also absorb infra red radiation: when they do, they heat up. Radiation can travel through empty space – so this is how the Sun heats up the Earth. The objects don't have to be touching and there are no particles involved.

Key Terms	Definitions
Temperature	The measure of the average amount of kinetic energy of all the particles in a substance.
Heat	The energy stored in substances thanks to the energy of their particles. Also called thermal energy.
Conduction	One way that thermal energy can be transferred. Objects that are touching can transfer thermal energy, from the hotter object to the cooler one.
Radiation	Another way that thermal energy can be transferred. All objects give out infra red radiation. Hotter objects give out (emit) infra red radiation that is absorbed by cooler objects.

Thermal energy transfer by conduction

Hot materials can transfer thermal energy to other materials that they are touching. This is called **conduction** of thermal energy. As the diagram



shows, the particles that are heated increase in kinetic energy when they are heated. They bump into neighbouring particles and pass on (transfer) thermal energy. This is why a table feels warm after a hot cup of tea is lifted from it, and the reason why thermal energy can pass through the bottom of a saucepan to cook your dinner.

Thermal energy transfer by convection Convection is all about density of a gas or a liquid

Hot air is less dense and therefore rises Cold air is more dense and therefore sinks This creates a convection current



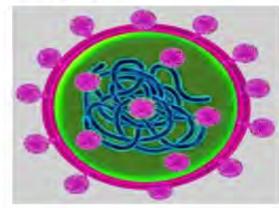
Cell

Bacterial cell Chromosomal Plasmid DNA DNA

Cell

membrane

Virus particle

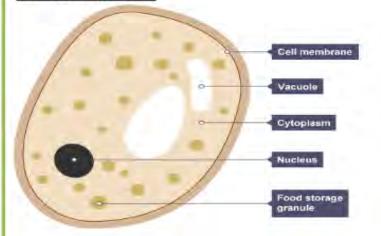


- Not all, but many microorganisms are dangerous to humans.
- Microorganisms that cause infectious diseases are called pathogens, or pathogenic microorganisms.
- Bacteria can cause disease if they enter our bodies. They reproduce rapidly and can release poisonous chemicals, called toxins, that damage our cells. Examples of diseases caused by pathogenic bacteria include cholera, tuberculosis (TB) and food poisoning.
- Viruses need a host to survive. Viruses that cause disease in humans use human cells as hosts. They cause disease symptoms by reproducing inside cells, and bursting the cell from the inside. This releases them, so they can be passed onto other host cells or other people (e.g. by coughing or sneezing out mucus that contains the viruses).
- Fungi can also cause disease, by growing on living tissue (for example, athlete's foot is caused by a fungus).

Yeast cell (fungus)

Flagellum

(not always present)



Bacteria	Fungi	Viruses
Unicellular organisms	Can be uni- or multi- cellular	Smaller and more simple than cells
Smaller and more simple than animal and plant cells	More similar to our cells than bacteria, larger	A protein coat surrounding some genetic material
Have not nucleus	Unicellular examples include yeast	Require a host cell to reproduce
Often have a flagellum for moving	Multicellular examples include mushrooms	

Direct transmission of pathogens

Direct contact e.g. shaking hands or kissing

Sexual contact

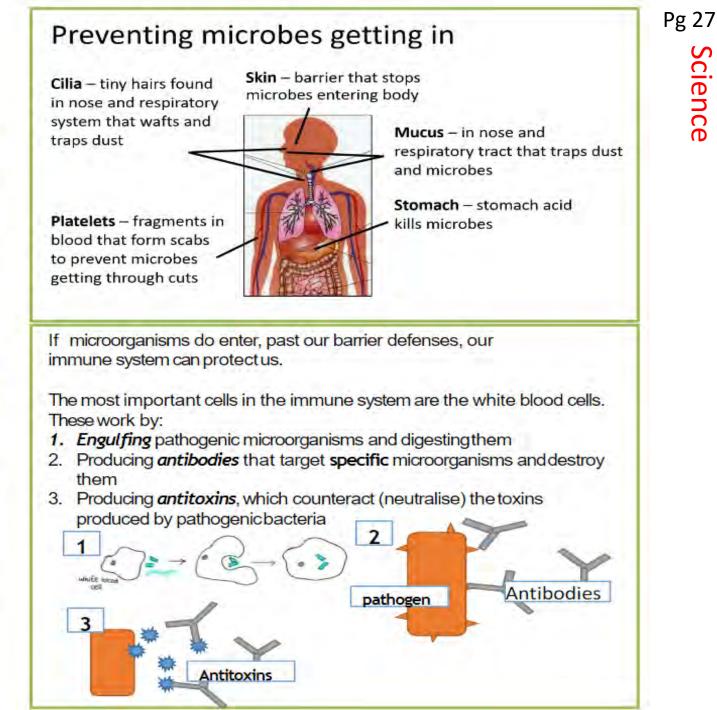
From mother to foetus over the placenta

Indirect transmission of pathogens

A vector carries the pathogen e.g. mosquitos carry the pathogen that causes malaria

Droplet infection: droplets of mucus containing a pathogen are sneezed or coughed out by an infected person, and breathed in by someone else. We can also say the pathogen is airborne.

Waterborne - the pathogen infects water and moves between people when they drink the water

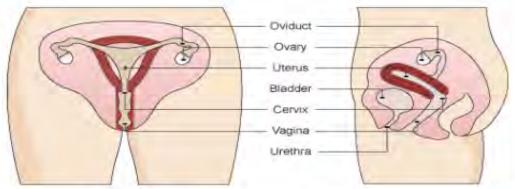


Year 7 Block 3 Biology Knowledge Organiser Reproduction

Revision guide Pgs: 14-16 (15-16 higher)

https://www.bbc.com/bitesize/subjects/z4882hv

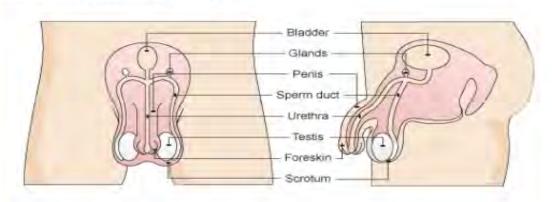
Female reproductive system



Parts of Female Reproductive System	Functions of the part	
Ovary	The organ where eggs (ova) are produced and where they mature ready for release each month	
Oviduct	The small tube leading from each ovary to the uterus – the egg travels along here and fertilisation happens here	
Uterus	The organ where an embryo grows into a foetus and eventually ababy	
Uterus lining	The wall of the uterus	
Cervix	A ring of tissue between the uterus and vagina; this helps keep a foetus in place in the uterus during pregnancy	
Vagina	The organ that is entered by the penis during sexual intercourse; this is also part of the birth canal	

Knowledge objective: label the parts of the male and female reproductive system, and describe their function.

Male reproductive system



Parts of Male Reproductive System	Functions of the part	
Testes	The organ where sperm cells are made	
Scrotum	The skin that holds the testes	
Sperm ducts	The tubes that carry sperm from the testes to the urethra	
Glands	These add liquids, including nutrients for the sperm, to the sperm cells from the testes to make semen	
Urethra	The tube that carries either urine or semen out of the body through the penis	
Penis	The organ that enters the vagina during sexual intercourse	
Foreskin	The skin that protects the end of the penis	

Year 7 Block 3 Biology Knowledge Organiser Reproduction

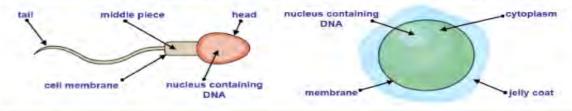
Revision guide Pgs: 14-16 (15-16 higher)

https://www.bbc.com/bitesize/subjects/z4882hv

Knowledge objective: describe the processes of menstruation and fertilisation, and identify the stages of gestation and birth

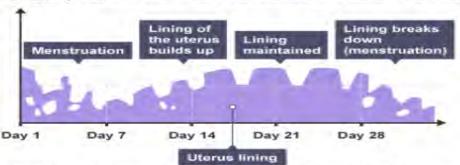
Fertilisation

Fertilisation is when a sperm cell and an ovum fuse. Sperm cells are released into the female reproductive system during sexual intercourse (ejaculation). Only one sperm cell breaks through the cell membrane and enters the ovum, and only the head enters. The nuclei fuse together, putting the mother and father's genetic information together. The fertilised ovum is nowan embryo.



The menstrual cycle

The menstrual cycle prepares the female body for pregnancy by causing eggs (ova) to mature and be released. It lasts for 28 days.



On about day 14, the mature egg cell is released from the ovary. This is called ovulation. If the egg cell does not meet with a sperm cell in the oviduct, the lining of the uterus begins to break down and the cycle repeats.

Key Terms	Definition
Fertilisation	When the sperm and the eggfuse
Gestation	The time it takes for the baby to develop in the womb. This is 40 weeks in humans.
Birth	When the baby leaves the womb.
Menstrual cycle	A series of events that prepares the female body for pregnancy.
Menstruation	When the lining of the uterus is removed from the body. Also known as the period.
Foetus	The name given to the baby developing in the womb.

Gestation

After fertilisation of an ovum, a woman is pregnant. The embryo grows as cells divide and travels to the uterus. Ciliated cells in the oviduct help it to move to the uterus.

The embryo implants into the uterus wall, where is gets oxygen and nutrients from the mother's blood. As it grows bigger and cells become specialised, we call it a foetus. It grows a placenta and umbilical cord.

At the placenta, the foetus gets oxygen and nutrients from the mother's blood (but their blood does NOT mix). The foetus gets rid of waste like carbon dioxide into the mother's blood too.

<u>Birth</u>

After about 40 weeks of pregnancy (for humans), the foetus is ready to be born.

- The muscles in the wall of the uterus contract (contractions)
- These contractions get stronger and faster this is 'labour'
- After some time of labour, the amnioticsac breaks, which releases the fluid (the 'waters break')
- Contractions push the baby headfirst through the birth canal through the cervix and out through the vagina

¿Cuál es tu asignatura	What is your favourite
favorita?	subject?
El inglés	English
El español	Spanish
El francés	French
El teatro	Drama
El dibujo	Art
El deporte	PE
La informática	Computer Science
La música	Music
La tecnología	Technology
La geografía	Geography
La historia	History
La religión	RE
La educación personal y social	PSHE
Las matemáticas	Maths
Las ciencias	Science
Las humanidades	Humanities

¿Qúe Piensas?	What do you think?	
Es	It is	
No es	It isn't	
Interesante	Interesting	
Práctico	Practical	
Útil	Usefui	
Fácil	Easy	
Difícil	Difficult	
Aburrido	Boring	
Emocionante	Exciting	
(in)cómodo	(un) comfortable	
Caro	Expensive	
Barato	Cheap	
De moda	Fashionable	
Pasado de moda	Unfashionable	

7.3 My life at school

¿Cómo es tu uniforme escolar?	What is your school uniform like?
Llevo	I wear
M Una chaqueta	Blazer
Un jersey	Jumper
Una camisa	Shirt
Una camiseta	T-shirt
Una corbata	Tie
Una falda	Skirt
Unos calcetines	Socks
Unos pantalones	Trousers
Unos zapatos	Shoes
Unas medias	Tights
Ashas an al calagia	Verbe at sabaal

Verbos en el colegio	Verbs at school	
Estudiar	To study	
Escuchar	To listen	
Charlar	To chat	
Trabajar	To work	
Pasar	To spend	
Jugar	To play	
Descansar	To rest	
Relajar	To relax	

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ter lat sinte	san lat cines	MEANS VALMICIANA	y vistoin.

¿Cómo es tu profe?	What is your teacher like?
Amable	Kind
Agradable	Pleasant
Aburrido/a	Boring
Asqueroso/a	Disgusting
Cómodo/a	Comfortable
Contento/a	Нарру
Difícil	Difficult
Divertido/a	Fun
Enfadado/a	Angry
Estricto /a	Strict
Feo/a	Ugly
Fuerte	Strong
Grande	big
Guapo/a	Handsome
Horrible	Awful
Emocionante	Exciting
Joven	Young
Limpio/a	Clean
Maduro/a	Mature
Pequeño/a	Small
Perfecto/a	Perfect
Rápido/a	Fast
Rico/a	Rich
Ruidoso/a	Noisy
Sabio/a	Wise
Serio/a	Serious
Sucio/a	Dirty
Tímido/a	Shy
Trabajador/a	Hard working
Triste	Sad
Viejo/a	old



Llevar is a regular verbs which follow the pattern below. The verbs "jugar" is irregular but an important verb.

Pronouns	Ilevar- to wear
Yo (I)	Llevo – I wear
tú (you)	Llevas – you wear
el (he), ella (she),	Lleva - He/she wears
nosotros (we)	Llevamos – we wear
vosotros (you) (pl. or formal)	Llev <mark>áis</mark> – you wear(pl. or formal)
Ellos/ellas (they)	Llevan – they wear

Jugar – to play

Yo juego- I play Tu juegas – you play Él/ella juega – he/she plays Nosotros jugamos -we play Vosotros jugáis - you (pl) play Ellos/ellas juegan – they play

Comparisons

Juán es más interesante que Pablo más more Pablo es menos interesante que Juan menos - less Pablo es tan interesante como Juan tan...como - as...as

Superlative

El/la más the most Juan es el más inteligente El/la menos – the least María es la menos simpática

Opinion phrases help to make our work more interesting - have a look at the list on your vocabulary list. Try to use a range of different ones in your work e.g. Me gusta (I like)/Pienso que (I think that)/ En mi opinión (in my opinion).

Time phrases help to make our work more detailed by telling us when things happen have a look at the list on your vocabulary list e.g. Normalmente (normally), raremente (rarely), dos veces a la semana (twice a week).

The formal elements are Line, Colour, Tone, Shape, Pattern and Texture. They are used together and determine how your work will look.

Practice your tonal drawing skill here

Year 7 Textiles Knowledge Organiser



Plain seam

analyse

sustainable

embellishment

Woven/ bonded/ knitted

Textiles Hierarchy of Key words

Free machine embroidery

function develop

- 1. Bags must be kept in the cubes
- 2. Do not ru
- 3. Hair must be tied back
- 4. Only one person to use a sewing machine at a time
- 5. Chairs must be tucked in and sat on correctly
- 6. Always listen to the teacher and follow instructions
- 7. No food or drink in the textiles room
- 8. Use all equipment respectfully and as you have been shown how to

Pictorial Instructions- how to sew on a button (practice and take photos)



Equipment	Use
Bobbin	A bobbin is a cylinder, to which cotton thread is wrapped around. It is found in the bottom part of a sewing machine, which is called the bobbin holder.
Thread	Cotton thread is used to attach fabric together by using a sewing machine or a hand needle. It is positioned on the thread spool when being used on a sewing machine.
Fabric scissors	Fabric scissors are used to cute fabric ONLY! They should not be used to cut paper.
Pins	Pins are used to position and secure fabric in to place before sewing fabric together.
Measuring Tape	It is a flexible ruler that can be used for body measurements, tailoring and dressmaking. It is flexible to measure fabric and curves of the body.

Tier 2 Valuable keywords used in most lessons every lesson.	Complementary colours contrast environment fastening compare embroidery equipment iron
used in lesson.	context appliqué effect improve
Tier 1 Basic keywords used in almost every lesson.	colour design shape machine pattern Texture
	theme tone thread Fabric sew

Use these in your writing and speaking

Use connectives to link each paragraph!	Explain an idea: Although Except Unless However Therefore	Sequencing: Firstly Secondly Next Finally Since				
Adding to: Furthermore Also As well as Moreover	Cause and effect: Thus So Therefore Consequently	Contrasting: Whereas Instead of Alternatively Otherwise Then again				
To empathise: Above all Ultimately Especially Significantly	To compare: Likewise Equally In the same way Similarly	Give examples: Such as For example In the case of As revealed by For instance				

DESCRIBE



I believe that...
I think that...

The main idea is...

EXPLAIN



This means that...

Therefore...

This maybe because...

JUSTIFY



This is positive because...

This is negative because...

It is useful/not useful because...

ANALYSE



One strength is...

One weakness is...

One argument is...

EVALUATE



One advantage is...
One disadvantage is...

The best option is...

COMPARE AND CONTRAST



One similarity is...
One difference is...

On the other hand...

Sentence starter phrases

Most people would agree...

Only a fool would think...

We all know...

A sensible idea would be...

The fact is that...

Surely you would agree that...

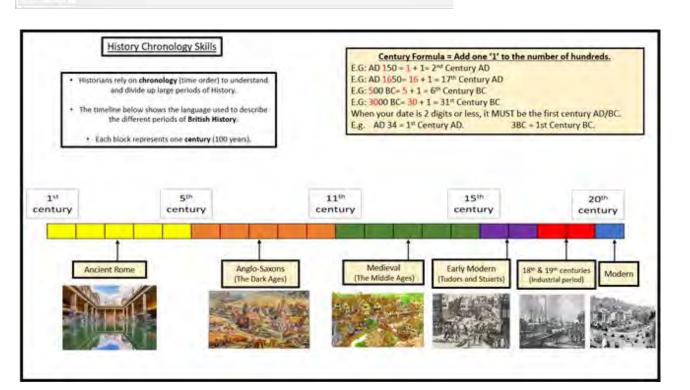
Without a doubt...

I am certain that...

Some people might argue...

However...

Also...



Use these in your writing and speaking in DT



Design and Technology Keywords

Food and Nutrition	Design and Technology	Textiles				
Caramelisation	Carbon footprint	Plain seam				
Aeration Amino acids	Planned Obsolescence Iterative Design Tolorance	analyse sustainable				
Plasticity Shortening	Tolerance	embellishment				
Denaturation Coagulation	Technology Push Anthropometrics	Woven/ bonded/ knitted				
Gelatinisation	Consumer Social Footprint	Free machine function				
Emulsification Pasteurisation	Ergonomics Forming Processes	embroidery develop				
Unsaturated Protein Radiation Saturated	Aesthetics Target Market	Complementary colours				
Carbohydrates	Properties Deciduous	contrast environment fastening				
Conduction	Coniferous	comp <mark>are embroidery equipment iron equipment iron equipment iron iron iron iron iron iron iron iron</mark>				
Digest Convection	Automation Functionality					
Cross-contamination	Primary Source Sustainability	context appliqué				
Micro-organisms	Continuous Improvement	effect improve				
Flavour Claw grip	Cost Customer	colour design shape				
Texture Aroma	Materials Annotation	machine				
Nutrients Energy	Product Safety	pattern line Texture				
Appearance Bridge hold	Design Environment	theme tone				
Mix Smell	User Prototype	thread sew				







Sentence Starters - DT

I have designed...because

My project was about...

I found... during my research

My design is suitable for...

I have learnt how to...

The most enjoyable part of my project was....

The area I found the most challenging was...

Equipment I have used include...

I would improve my work by...

I am pleased with my finished product because...

Sentence Starters- Food and Nutrition

In order to work hygienically/safely I made sure I

I worked safely when in the kitchen by...

If I could improve any skill, I would improve...because...

Overall, I am happy/unhappy with my progress/dish because....

The texture of my dish is... this is because...

Sentence starters- Textiles

I have designed....

The context of my design is...

My research is useful because...

By researching, I am able to.....

By researching I have found out....

I researched into....

My design is suitable for.....

My design is based upon...

I have planned to..

The order I will work in is...

The most enjoyable part of m project was...

The area I found most challenging was...

I am most pleased with...

I am pleased with my finished project

because...

Equipment I used was...



The periodic table of the elements

1	2			Key			1 H hybogen 1					3	4	.5	6	7	4 He return 2
7 Li 204000 3	9 Be teryllum 4	relative atomic mass atomic symbol nome atomic (proton) number						11 B toron 5	12 C onton 6	14 N ntrogen 7	16 O ossgen 8	19 F Morre 9	20 Ne neon 10				
23 Na modum 11	24 Mg magnestum 12											27 Al sturminum 13	28 Si #20 14	31 P phosphoros 15	32 \$ **** 16	35.5 CI chierem 17	40 Ar ***********************************
39 K pozmatum 19	40 Ca caldium 20	45 Sc scandum 21	48 Ti 99mam 22	51 V stredum 23	52 Cr Gramum 24	55 Mn 25	56 Fe	59 Co	59 Ni nicial 28	63.5 Cu 29	65 Zn arc 30	70 Ga odian 31	73 Ge germanium 32	75 As mente 33	79 Se selsram 34	Br browne 35	84 Kr krypton 36
85 Rb 1054 37	88 Sr stonium 38	89 Y ymun 39	91 Zr zroznium 40	93 Nb nicoun 41	96 Mo notyburum 42	[98] Tc technetium 43	101 Ru otenum 44	103 Rh modum 45	106 Pd patadum 46	108 Ag 47	112 Cd codmium 48	115 In Indum 49	119 Sn 50	122 Sb artimory 51	128 Te televium 52	127 1 lodne 53	131 Xe 20100 54
133 Cs 55	137 Ba berum 56	139 La* letharum 57	178 Hf Instrum 72	181 Ta tentium 73	184 W targaten 74	186 Re therisan 75	190 Os 500 76	192 Ir Indum 77	195 Pt putnum 78	197 Au gai 79	201 Hg 80	204 TI hallum 81	207 Pb lesset 82	209 Bi 83	[209] Po potentian 84	[210] At 85	[222] Rn ***don** 86

The relative atomic masses of copper and chlorine have not been rounded to the nearest whole number.

^{*} The elements with atomic numbers from 58 to 71 are omitted from this part of the periodic table.







These websites will help you with homework, reading around the subject and revision

English

https://www.sparknotes.com/ - Macbeth, A Christmas Carol, An Inspector Calls
https://app.senecalearning.com/ - Macbeth, A Christmas Carol, An Inspector Calls,
Power and Conflict Poetry

https://www.bbc.com/bitesize - Macbeth, A Christmas Carol, An Inspector Calls

Maths

https://corbettmaths.com/

https://vle.mathswatch.co.uk/vle/

https://www.mathspad.co.uk/

Science:

https://www.bbc.com/bitesize

https://www.senecalearning.com/

https://www.memrise.com/

Geography

Time for Geography - videos (mainly focused on physical processes)

Bitesize

Cool Geography

History

Seneca Learning

BBC bitesize - use Edexcel resources for GCSE.

Art Websites

https://www.tate.org.uk/

https://www.bbc.co.uk/bitesize/subjects/z6f3cdm

https://www.incredibleart.org/

Computer Science and IT.

www.mrahmedcomputing.co.uk

Drama

https://youtu.be/VeTpob9LBM8

https://youtu.be/wISEU13mRBE

https://www.bbc.co.uk/bitesize/guides/zsf8wmn/revision/1

DT:

http://www.mr-dt.com/

http://technologystudent.com/

https://www.senecalearning.com/

<u>PE</u>

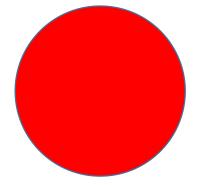
https://www.bbc.com/bitesize/examspecs/ztrcg82

https://sites.google.com/view/ocrgcseperevision/home

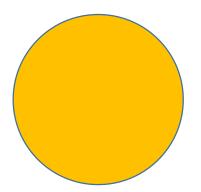
<u>RS</u>

KS3 https://www.bbc.co.uk/bitesize/subjects/zh3rkqt

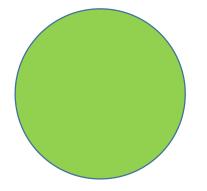




I don't understand the learning in this lesson and would like some help



I am not confident with the learning in this lesson so might need some extra help.



I am confident with the learning in this lesson and can work independently