



Knowledge Organiser

Year 10

Summer term A

Name:

Tutor:

What is a Knowledge Organiser?

Knowledge Organisers are a central place where staff have placed key content, skills and knowledge to help you progress. These skills are essential for your success and will need to be memorised and applied in your lessons. There are some techniques for how you can use Knowledge Organisers below:

Look Cover Say Write Check



LOOK

...at the sounds, or parts of the words as you read the word.

three... **th...r...ee**
phonemic spelling strategy

twice... **tw...ice**
onset-rime spelling strategy

enormous... **en...or...mous**
syllabic spelling strategy



COVER

...the word. Try to see the word and all its sounds in your head.



th...r...ee



SAY

...each sound or part of the word while revealing a finger.

three... **th - r - ee**

twice... **tw - ice**

enormous... **en - or - mous**







WRITE

...the word in alternating colours.

th-r-ee
phonemic spelling strategy

tw-ice
onset-rime spelling strategy

en-or-mous
syllabic spelling strategy



CHECK

...your work.

✓

✗

Flashcards

These are a very good and simple self testing tool, they can be physical or electronic.

To make your own, take some card and cut into rectangles, roughly 10cm x 6cm.

Write the keyword on one side and the definition on the other. Go through your cards looking at one side and seeing if you can remember the keyword/definition on the other side.

This video offers a really good guide for using them effectively:

<https://www.youtube.com/watch?v=eVajQPuRmk8>

Questions/Answers, Answers/Questions

Question: In what year was George V's coronation?

Answer: 1910

Ask a parent, carer or study partner to write you questions (or answers) and then you write the answer (or possible question that would correspond to the answer).

You can also write your own questions. If you do this leave it at least a day until you answer them to see what you can remember after a while.

Always check and correct!

A. Keywords

Omniscient – all knowing

Dramatic irony – the audience knows something which characters in the play do not.

Foreshadow – a warning or indicator of a later event

Responsibility & remorse – Who accepts what they have done?

Older vs. younger generation – How do their opinions differ? How does the relationship between the two sides change throughout the play?

Wealth and influence- How do the Birling family/Gerald use their position to influence others?

Public image vs. private lives – What image do the Birling family want to give of themselves? How far will they go to protect this?

Gender – How are the different genders presented in their play? Do they live up to the expectations placed upon them?

Class – Social hierarchy

Key quotations

Birling: “a man has to mind his own business and look after himself and his own – and –

Inspector: “a chain of events”

Sheila: “Why - you fool - he knows. Of course he knows.”

Mrs Birling: “Naturally that was one of the things that prejudiced me against her case.”

Inspector: “We don’t live alone. We are members of one body... if men will not learn that lesson, then they will be taught it in fire and blood and anguish.”

Sheila: “If she had been some miserable plain little creature, I don’t suppose I’d have done it.”

B. Plot Act 1

The Birling family (and Gerald) are all gathered to celebrate the engagement of Sheila and Gerald. Mr Birling gives a speech about how the talk of war is ‘fiddlesticks’.

A police inspector (Goole) arrives and reveals that a girl (Eva Smith) has committed suicide. Each character in turn is found to have played a part in her death.

Mr Birling fired Eva Smith after a dispute over pay at the factory. Sheila got Eva Smith fired after she thought Eva had laughed at her in a shop.

Act 1 finishes with Gerald and Sheila discussing the affair that Gerald had with Eva Smith once she had changed her name to Daisy Renton.

E. Image



F. Expert Modelling:

Birling speaks directly to his son, as he gives a warning, “You’ve had enough of that port, Eric.” This is evidence that Birling is a typical dominant patriarch as he reprimands his son for drinking too much. Furthermore, Birling uses imperatives to reprimand Eric and remind him of his father’s authority, “Just keep quiet, Eric, and don’t get excited.” The imperatives “keep quiet” and “don’t” show the audience Birling’s power and authority over his son and also acts as a foreshadowing of later events as Birling does not want Eric to speak, thereby implicating himself in the investigation over Eva Smith.

Subject: English

Topic: An Inspector Calls



C. Plot Act 2

The affair between Gerald and Daisy Renton (Eva Smith) is revealed to the rest of the family. Gerald leaves. We learn that Mrs Birling denied funding to Eva Smith when she arrived at the charitable organisation that Mrs Birling chairs. Mrs B. refused her money as she used the name of Birling which Mrs B. found impertinent. We find out that Eva was pregnant.

D. Plot ACT 3

Eric arrives and reveals that he was the father of the child. It is hinted that he raped her.

The Inspector gives a speech which highlights that all of the family were in some way responsible for the girl’s death. He leaves. Gerald returns.

The Birling family figure out that the Inspector wasn’t real. The older Birlings and Gerald start to celebrate at this news whereas the younger generation still feel responsible.

The play ends with Mr Birling answering the phone to find out a girl has committed suicide and a policeman is coming to ask questions.

G. Wider thinking / further reading:



A. Keywords:

Power – The act of repeatedly multiplying the same number by itself, e.g. $10 \times 10 \times 10 \times 10 \times 10 = 10^5$.

Standard Form – Numbers written in the form $a \times 10^b$ where a is a number between 1 and 10. There must be a power of 10 included.

Scientific Notation – An older way of saying Standard Form.

Ordinary Number – The normal way of writing numbers, without using multiplication signs and powers of 10.

Squared – The special name for a power of 2.

Cubed – The special name for a power of 3.

Indices – Another name for powers, such as 10^3 .

Convert – To change from one unit, form, or notation, into another.

B. Key Knowledge 1:

When **multiplying** numbers in standard form the format stays the same. We can use **index laws** to help us.

$$(1.5 \times 10^3) \times (3 \times 10^5) = 4.5 \times 10^{3+5} = 4.5 \times 10^8$$

1. Multiply the numbers together e.g. $1.5 \times 3 = 4.5$
2. Multiply the powers of ten together e.g. $10^3 \times 10^5 = 10^8$

When **dividing** numbers in standard form the format stays the same. We can use **index laws** to help us.

E. Image – diameters in km

	Pluto 2.4×10^3
	Venus 1.2×10^4
	Saturn 1.2×10^5
	Mars 6.8×10^3
	Uranus 5.2×10^4
	Earth 1.3×10^4
	Mercury 4.9×10^3
	Jupiter 1.4×10^5
	Neptune 4.9×10^4

F. Expert Modelling: (Calculations).

(a)

$$(3 \times 10^4) \div (6 \times 10^{-3})$$

$$0.5 \times 10^7$$
$$5 \times 10^6$$

$$5 \times 10^6$$

(2)

(b)

$$(2.1 \times 10^{-5}) \div (7 \times 10^{-4})$$

$$0.3 \times 10^{-1}$$
$$3 \times 10^{-2}$$

$$3 \times 10^{-2}$$

(2)

Subject: Maths

Topic: Standard Form

B. Key Knowledge 2:

Converting into a **small ordinary number**

$$2.4 \times 10^{-6} = 0.0000024$$

Converting into a **large ordinary number**

$$5.67 \times 10^9 = 5\,670\,000\,000$$

D. Key Knowledge 3:

When adding or subtracting numbers in standard form, the numbers must be converted into ordinary numbers:

e.g.:

$$(2.3 \times 10^4) + (6.6 \times 10^3) =$$

$$23000 + 6600 =$$

$$29600 = 2.96 \times 10^4$$

G. Wider thinking/further reading:

Hegarty Maths clips: 123 - 128

A. Keywords:

Aerobic respiration	An exothermic reaction that occurs in living cells to release energy from food and oxygen
Exothermic reaction	A chemical reaction which transfers energy to the environment.
Aerobic respiration equation	Glucose + oxygen → carbon dioxide + water + energy transferred to the environment
Symbol equation	$C_6H_{12}O_6 + 6O_2 \rightarrow 6CO_2 + 6H_2O + \text{energy}$
Mitochondria	Cell organelle where aerobic respiration takes place
Glycogen	Excess glucose is stored as glycogen
Anaerobic respiration	Respiration without oxygen.
Lactic acid	The end product of anaerobic respiration in animal cells.
Oxygen debt	The amount of oxygen needed to break down lactic acid to carbon dioxide and water.
Metabolism	The sum of all the reactions in the body
Metabolic reactions	Used in the body to either make new substances or break down waste materials

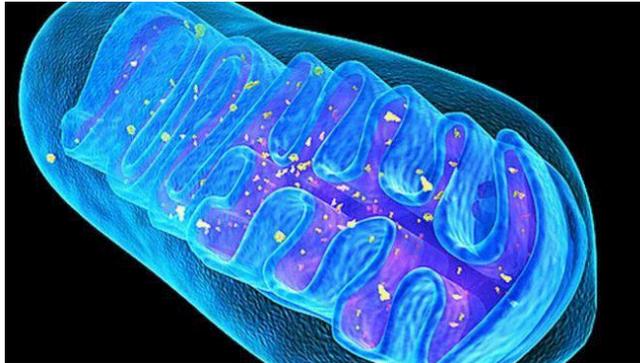
B. Aerobic Respiration

Glucose reacts with oxygen to produce energy which is used for:

- Building up large molecules from smaller ones
- Muscular contractions
- Maintaining constant internal body temperature
- In plants used to move mineral ions from soil to roots



E. Image



F. Expert Modelling: Response to Exercise

When explaining the effect of exercise on the body you must use the words *more, increases, faster* etc...

Your breathing rate increases when exercising because your muscle cells need oxygen so the mitochondria inside them can do respiration and release energy. *This is incorrect because you are doing this anyway!*

Your breathing rate increases when exercising because your muscle cells need **more** oxygen so the mitochondria inside them can do **more** respiration and release **more** energy.

Subject: Science
Topic: Respiration

C. Anaerobic Respiration

Not as efficient as aerobic as does not produce as much energy. Yet, it will still give you energy when you are not getting enough Oxygen.

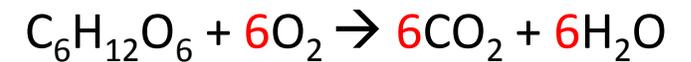
Glucose → Lactic Acid

Leads to muscle fatigue (cramp) and creates oxygen debt.

Anaerobic respiration in yeast produces ethanol & carbon dioxide which is used to make bread and alcoholic drinks

Glucose → Ethanol + Carbon Dioxide

D. Respiration Equation



To help you balance this equation just remember 666!

To help you memorise it...

It is the exact opposite of the **PHOTOSYNTHESIS** equation!

G. Wider thinking / further reading:

<https://www.bbc.com/education/guides/zqnsrwx/revision/3>

A. Keywords

Consumer – creature that eats herbivores and/or plant matter.

Conservation - preservation, protection, or restoration of the natural environment and of wildlife

Deciduous – trees that lose its leaves annually.

Decomposer – an organism such as a bacterium or fungus, that breaks down dead tissue, which is then recycled to the environment.

Food chain – the connections between different organisms (plants and animals) that rely upon one another as their source of food.

Food web – a complex hierarchy of plants and animals relying on each other for food.

Habitat - the natural home or environment of an animal, plant, or other organism

Nutrient cycling – a set of processes whereby organisms extract minerals necessary for growth from soil or water, before passing them on through the food chain – and ultimately back to the soil and water.

Producer – an organism or plant that is able to absorb energy from the sun through photosynthesis.

Timber - trees grown for use in building or carpentry.

Species - a group of living organisms consisting of similar individuals capable of exchanging genes or interbreeding.

B. Background

The new forest is the UK's smallest national park and is situated in Hampshire between Bournemouth and Southampton in the south of England. It covers 480km². The New Forest is one of the largest remaining areas of unenclosed pasture land, heathland and forest in England. It is managed and maintained by the Forestry Commission for people, wildlife and timber. The open forest covers 2/3 of the New Forest and is made up of a variety of habitats including forest 'lawns' (open, grassy areas), valley mires (boggy habitats), heathland and Ancient woodlands.

E. Image Location of New Forest



F. Why should the New Forest be protected?

The New Forest is significantly important as it has about 90 valley wetlands almost all of those which remain in Europe and have RAMSAR status. An English Nature Survey found 136 species living in the rich meadows and pastures. Most of these areas have little or no management and depend on grazing animals to cut grass, spread seed and maintain their diversity. Approximately 50% of all the species of moths, butterflies and beetles and 30% of all breeding dragonfly species known in the UK occur in the New Forest. At least 46 species of nationally or internationally rare plants occur in the forest. These species are under threat from the 13 million visitors who trample the plants and animals whilst exploring the national park.

Subject: Geography

Topic: Ecosystems, Biodiversity & Management – Deciduous Woodlands



C. Human Uses

The Forest is in a vulnerable position with easy road motorway access and visitor pressure from nearby Bournemouth and Southampton. Up to 13 million visitors a year creating a £500 million income for the area. The New Forest is the 2nd largest timber producer in the South of England producing 50000 tonnes of timber a year. People have rights to use the pasture for rearing ponies, pigs and other livestock which roam freely.

D. Management

Development of honeypot areas outside the forest (Moors Valley Park) will take pressure off the main forest areas. Strict control of parking and the shutting of some parking areas can reduce the carrying capacity of the area, protecting the wildlife. Zoning activities - for example camping is only allowed in designated areas; mountain biking is only allowed on certain marked trails. When conifers are cut down they are replaced with native broad leaf species. 40% of the forest is privately owned and if often left unmanaged, this is good for wildlife and the natural regeneration of plants.

G. Wider thinking / further reading:

http://www.coolgeography.co.uk/gcsen/CRM_Energy_North_Sea_Supply.php

A. Keywords:

Key word:	Definition:
Gentry	A person of a good social position, below the nobility but wealthy.
Labourer	A person who does physical type of work such as; farming and building.
Vagabond	A person who wanders from place to place without a home or job.
Poverty	The state of being extremely poor.
Poor Law	A number of laws created to help deal with the increasing rise and cost of poverty
Cruel sport	Also known as blood sport, this type of sport involved animals which often led to their death.
Band of strolling players	A group of actors who toured the country playing to audiences.
Religious Settlement	A set of religious rules; a compromise between the three religions: Catholic, Protestant and Puritan.

B. Key Knowledge 1: The rich and the poor

The gentry were landowners and during this period they began to build and extend their homes to reflect their status. Son's of the gentry attended grammar schools and daughters were taught to be a Lady, as well as a perfect wife and mother.

However, half of the population in Elizabethan England were the labouring poor, who lived in very simple one storey dwellings. The lower classes had little to no education - what little they did have was taught by the local parish school.

E. Image



A contemporary woodcut of 1569, shows a wealthy gentleman rejecting requests for help from a beggar.

F. Expert Modelling:

Explain the connections between TWO of the following that are to do with the reasons for the increase in poverty during the late sixteenth century.

The reign of Elizabeth witnessed a sharp rise in poverty. During the mid sixteenth century farming practices when through a period of change. Farmers began to switch from growing crops which was labour intensive to keeping sheep which was much less labour intensive. These changes meant that less employment of workers was needed and it took less workers to tend to a flock of sheep than it did to plough the land and harvest the crops. This meant that some labourers were now out of work and were unable to pay their rents so became homeless and were forced to leave their rural area and migrate to towns in search of employment.

Subject: History

Topic: The Elizabethan Age, 1558-1603

C. Key Knowledge 2: Entertainment

There was little leisure time for workers during the Elizabethan Age; Sundays and religious festivals were a time for celebration and entertainment for all social classes.

Most attended some type of cruel sport due to it being a cheap form of entertainment.

The richer classes had more time for leisure so could experience a wider range of entertaining activities such as: Hunting, Hawking and ball games.

Most social classes attending the theatre, a form of entertainment which was created during Elizabeth's reign.

D. Key Knowledge 3: Religion

Upon Elizabeth's coronation, England had already gone through three changes of religion; this caused division and tension amongst the people. Elizabeth faced much opposition and plots to depose her.

Elizabeth had to reach a compromise to satisfy the religious desires of the Protestants, Catholics and Puritans. She created the Religious Settlement in 1559, which created a church to reflect the attitudes of both Protestants and Catholics.

G. Wider thinking / further reading:

<https://www.rmg.co.uk/discover/explore/elizabeth-religious-settlement>

http://www.bbc.co.uk/history/british/tudors/poverty_01.

Subject: French
Topic: Restaurants

A. Keywords:

du pâté	some pâté
un hamburger	a hamburger
un poulet rôti	a roast chicken
un steak au poivre	a steak with pepper sauce
du brie	(a mild soft cheese)
du roquefort	(a hard blue cheese)
du camembert	(a strong soft cheese)
une soupe de poisson	a fish soup
une salade de tomates	a tomato salad
une omelette	an omelette
une entrecôte garnie	a steak with garnish
une salade maison	a home-made salad
une salade niçoise	a tuna fish salad
une tarte aux fraises	a strawberry tart
une glace	an ice-cream
une crêpe au chocolat	a chocolate pancake
une eau minérale	a mineral water
une salade de fruits frais	a fresh fruit salad
une mousse au chocolat	a chocolate mousse
un canapé	a canape
une entrée	a starter
un plat principal	a main course
un plat chaud	a hot dish
un plateau de fromages	a cheeseboard

B. Key Knowledge 1

un coca (light)	a (diet) coke
une limonade	a lemonade
un jus d'orange	an orange juice
un café	a coffee
un thé	a tea
un chocolat chaud	a hot chocolate
un milkshake (à la fraise)	a (strawberry) milkshake
un sandwich (au jambon/ au fromage)	a (ham/ cheese) sandwich

E. Image



F. Expert Modelling:

A: Bonjour. Avez vous une table pour deux s'il vous plait?
 B: Oui, à côté de la fenêtre. Vous désirez comme boisson?
 A: oui, un jus d'orange et un coca s'il vous plait?
 B: Voilà. Vous avez choisi?
 A: Oui comme entrée, je voudrais une salade de tomates et comme plat principal, je prends un steak au poivre avec les frites.
 B: voilà.
 Merci. L'addition s'il vous plait.

C. Key Knowledge 2

Avez-vous une table pour deux?	Do you have a table for two?
Avez-vous un menu en anglais?	Do you have a menu in English?
Vous désirez?	What would you like?
Vous avez choisi?	Have you decided?
Je voudrais...	I would like...
C'est pour qui?	Who is it for?
C'est pour moi	It's for me
Où sont les toilettes?	Where are the toilets?

D. Key Knowledge 3

Vous désirez ?	What would you like ?
Vous avez choisi ?	Have you chosen ?
Comme entrée ?	As/for a starter ?
Comme boisson ?	As a drink ? / To drink ?
Comme dessert ?	As/for a dessert ?
L'addition s'il vous plaît.	The bill please.
Je suis végétarien/enne	I am vegetarian.
Je suis allergique à	I'm allergic to...

G. Wider thinking / further reading:
Linguascope.com

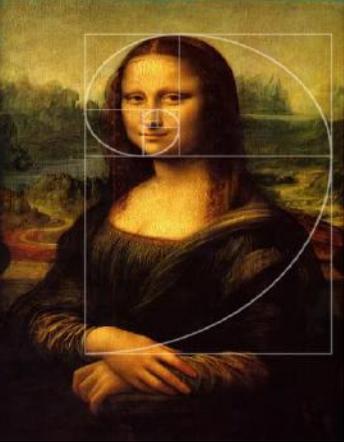
A. Keywords:

Line	Line is the path left by a moving point. A line can be horizontal, diagonal or curved and can also change length.
Shape	A shape is an area enclosed by a line. Shapes can be geometric or irregular .
Form	Form is a three dimensional shape , such as a cube, sphere or cone.
Tone	This refers to the lightness or darkness of something. This could be a shade or how dark or light a colour appears.
Texture	This is to do with the surface quality of something. There are two types of texture: Actual texture really exists, so you can feel it or touch it; Visual texture is created using marks to represent actual texture.
Pattern	A design that is created by repeating lines, shapes, tones or colours.
Colour	Red, yellow and blue are primary colours , which means they can't be mixed using any other colours.

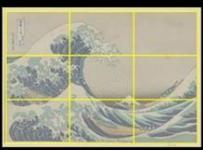
B. Key Knowledge 1:

The term composition means 'putting together,' and can apply to any work of art or photography, that is arranged or put together using conscious thought. There are numerous approaches or "compositional techniques" to achieving a sense of unity within an artwork, depending on the goals of the artist. For example, a work of art is said to be aesthetically pleasing to the eye if the elements within the work are arranged in a balanced compositional way. However, there are artists such as Salvador Dali whose sole aim is to disrupt traditional composition and challenge the viewer to rethink balance and design elements within art works.

E/F. Expert modelling:







Painting: Great Wave off Kanagawa, by Hokusai

Subject: Art
Topic: Composition / Final outcome

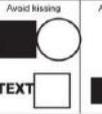
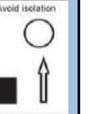
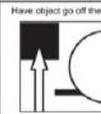
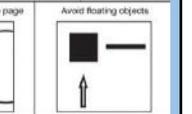
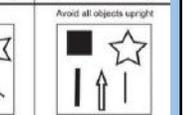
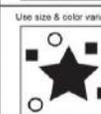
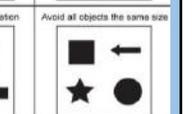
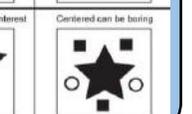
C. Key Knowledge 2:

Rule of thirds

The rule of thirds is a guideline followed by some visual artists. The objective is to stop the subject and areas of interest from bisecting the image, by placing them near one of the lines that would divide the image into three equal columns and rows, ideally near the intersection of those lines.

D. Key Knowledge 3:

Tips for creating good composition:

<p>1. Overlap Place objects slightly over one another. This will get the eye to move from one element to another. Objects should not be touching each other by edges ("no kissing allowed"). Avoid isolation: Build a relationship between objects.</p>	<p>Good overlapping</p> 	<p>Avoid kissing</p> 	<p>Avoid isolation</p> 
<p>2. Crop Consider having objects go off the edge of the page. This gets the viewer in and out of the picture. Avoid floating objects within the edges of the page.</p>	<p>Have object go off the page</p> 	<p>Avoid floating objects</p> 	
<p>3. Rotate: Consider placing objects at an angle. Things that are tilted create a more dynamic composition. Adhere with objects that are perfectly lined up with the edge can be boring.</p>	<p>Tilt objects</p> 	<p>Avoid all objects upright</p> 	
<p>4. Focal Point Create an area of importance: Give the viewer something to focus on. One way to achieve this is through size variation. Try not to have all elements the same size. Another way to create focus is through color dominance.</p>	<p>Use size & color variation</p> 	<p>Avoid all objects the same size</p> 	
<p>5. Off-Centering Avoid placing objects directly in the center of the page. Think about placing objects slightly to one side. This will create a more interesting composition. Try to keep elements balanced as you do this. For example, one large object could be balanced by 2 smaller ones. (Note: this does not mean that a symmetrical design cannot be successful.)</p>	<p>Off-center objects for interest</p> 	<p>Centered can be boring</p> 	

G. Wider thinking / further reading:
www.youtube.com/watch?v=O8i7OKbWmRM
www.youtube.com/watch?v=aHq5KwFvtns
www.youtube.com/watch?v=RjM8AaNSjhA

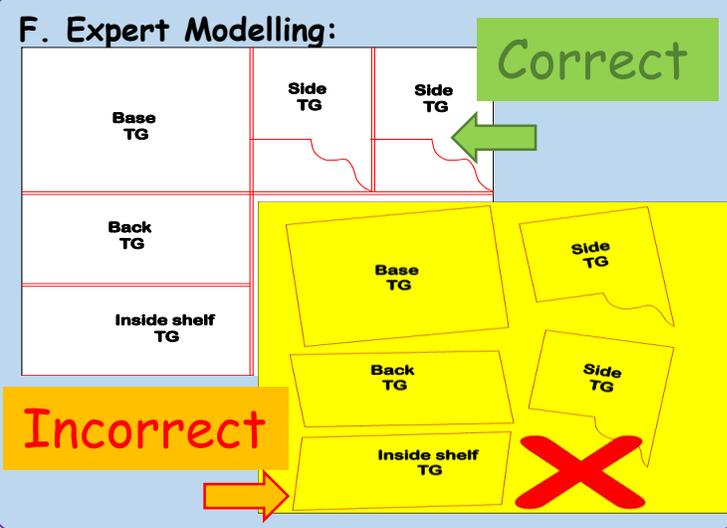
A. Keywords:

- Try-square** - an implement used to check and mark right angles in constructional work.
- Steel Rule** - a basic measuring tool. When used correctly, a good **steel rule** is a surprisingly accurate measuring device.
- Marking gauge** - to scribe a line parallel to a reference edge or surface. It is used in joinery and construction.
- Marking knife** - is a woodworking layout tool. It is used to scribe a line to be followed by a hand saw or chisel when making woodworking joints.
- Metal punch** - A punch is a hard metal rod with a shaped tip at one end and a blunt butt end at the other, which is usually struck by a hammer.
- Scribe** - a sharp-pointed tool for making marks and especially for marking off material such as wood or metal to be cut.

B. Key Knowledge 1: Marking out means the process of transferring a design or pattern to a work piece, as the first step in the manufacturing process. Always draw against the straight edge of the material to avoid waste and reducing the amount of cuts needed to be made. It is used by many industries on many different types of materials.



C. Key Knowledge 2: Consider joining two more complex shapes together temporarily with double sided tape to allow you to cut once and produce two pieces identically and accurately with less effort and saving time. Hold the **Try-Square** flat against a straight edge to allow you to draw a 90 degree line accurately. Always measure using mm as they are more precise than cm. This will allow for more accuracy and perfect sizes.



D. Key Knowledge 3: Always label every piece of material with your initials to prevent you from losing your work. Also write down what each piece is so you can glue them together more easily and accurately. Leave a 2mm gap between each piece to allow for the **Band Saw** blade to cut through without removing material you may need. Measure from the edge when using a **Steel Rule**.

G. Wider thinking / further reading:
<http://www.bbc.co.uk/schools/gcsebitesize/design/resistantmaterials/processtechniquesrev2.shtml>

A. Keywords:

Micronutrients – Nutrients required in smaller quantities.

Minerals- Calcium and Iron.

Vitamins- Vitamin A, Vitamin D, Vitamin B and Vitamin C.

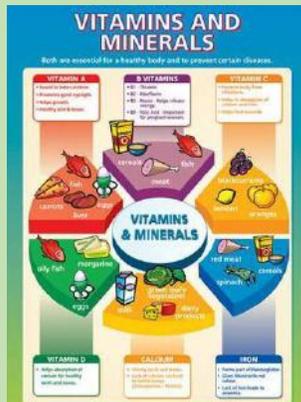
Retina - a thin layer of tissue that lines the back of the eye on the inside.

Rickets - a condition that affects bone development in children. It causes the bones to become soft and weak, which can lead to bone deformities.

Osteomalacia- is the softening of the bones caused by impaired bone metabolism primarily due to inadequate levels of available phosphate, calcium, and vitamin D

Deficiency – A lack or a shortage of something.

Excess – When you have too much of something



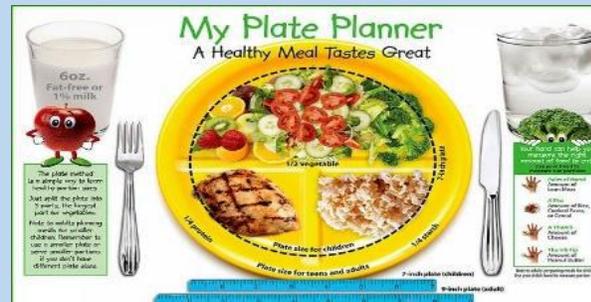
B. Key Knowledge 1:

Mineral	Function	Deficiency
Calcium	With phosphorus it combines to make calcium phosphate which helps to harden and strengthen bones and teeth. Needed to help blood clot and for the correct functioning of muscles and nerves.	Children - Bones and teeth are not mineralized properly. Can along with Vitamin D cause Ricketts. Adults - Strength of bones and teeth which could result in osteomalacia. Too much calcium in the body is dangerous as it will be deposited in organs such as the kidneys and this can be fatal.
Iron	A component of haemoglobin which gives red blood cells their colour. Needed to transport oxygen around the body.	Fatigue, weakness, pale complexion. In severe cases it can cause anaemia. General health is affected as cells cannot function properly.

E. Image



F. Expert Modelling:



Subject: Catering
Topic: Micronutrients



C. Key Knowledge 2:

Fibre:

Fibre also known as non-soluble polysaccharide (NSP) is not absorbed by the body. As fibre passes through your body it collects all the rubbish and waste until it finally is expelled as faeces. It absorbs water and bulks up the waste making it soft.

Deficiency

Lack of fibre can cause constipation and diverticular disease.

Excess intake

Bloating, abdominal pain, flatulence, diarrhoea.

D. Key Knowledge 3

Water:

Water is vital to life. 70% of the human body is water. It is not a nutrient. Most drinks including milk are made of water. It helps to digest and absorb nutrients, remove waste from the body, control our body temperature, concentrate and lubricate our joints.

Deficiency

A lack of water can result in dehydration.

Excess intake

In rare cases, drinking an extreme amount in a short time can be dangerous. It can cause the level of salt, or sodium, in your blood to drop too low. That's a condition called hyponatremia. It's very serious, and can be fatal. You may hear it called water intoxication

G. Wider thinking / further reading:

Revision resource <https://www.food.gov.uk/northern-ireland/nutrition/eatwell-guide>

A. Keywords:

Physical development

- Development of the body - changes in size or weight.
- Gross motor skills - control of large muscles e.g. walking.
- Fine motor skills - control and coordination of hands and fingers e.g. gripping.
- Physical appearance - changes to appearance of face and body.

Intellectual development

- Building up of concepts - different intellectual ideas e.g. maths.
- Self-esteem – how much you like, accept and value yourself.
- Learning to read and write and later on taking exams.
- Memory - the ability to remember information such e.g. names and dates.

Language

- Development of words and sounds.
- Understanding the meaning of more complex words.

Emotional

- Family influences - type of family, brothers and sisters, parents etc.
- Positive and negative emotions - enthusiasm, laughter, anger, hatred etc.
- Self-concept - a person's mental image of themselves e.g. see themselves as intelligent, attractive etc.
- Stress - mental or emotional strain caused by demanding circumstances.
- The environment - how the world around us effects our emotions.

Social

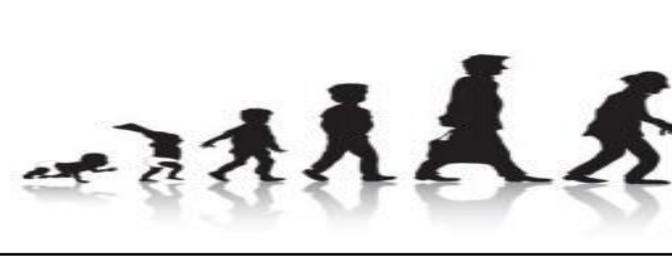
- Development of relationships - bonding with parents, friends.
- Social interaction - playing, working with others, arguments.
- Environment - e.g. living in a urban or rural area.
- Cultural status - religion, race.

B. Key Knowledge 1:

The different life-stages are:

- Childhood
- Adolescence
- Early Adulthood
- Middle Adulthood
- Later adulthood

E. Image



F. Expert modelling: 'Childhood'

'Between the ages of 5 and 9 children will increase in both size and weight. At age of 5 they will be around 43 inches tall and weigh around 40 pounds. By the age of 9 they will have grown to around 52 inches and weigh 62 pounds.

At this time they will also develop many gross and fine motor skills. For example; a 5 year old will be able to run, skip and dress themselves. A year 6 – 7 year old will have more control over their gross motor skills so will be able to hop, ride a bike and roller blade. An 8 – 9 year old will have started to refine their gross motor skills to the point that they are able to throw and catch a ball with a greater level of accuracy and perform more complex balances in gymnastics.'

Subject: Health and Social Care
Topic: Unit 25 - Life Stages



C. Key Knowledge 2:

To complete this task you will need to do the following:

- Explain what each letter of 'PILES' stands for.
- Explain how an individual would develop throughout the different life-stages (childhood – middle adulthood).
- Explain how different factors can impact development.

D. Key Knowledge 3:

The following factors can impact an individual's development:

- Education
- Bereavement
- Redundancy
- Culture/religion
- Pregnancy
- Relationships
- Puberty
- Birth of a child
- Home/school/work
- Menopause

G. Wider thinking / further reading:

- <https://www.livestrong.com/article/104652-stages-physical-development-children/>
- http://raisingchildren.net.au/articles/early_teens_development_nutshell.html
- https://www.beststart.org/OnTrack_English/2-factors.html

A. Keywords:

Credit card – a form of borrowing offered by banks, building societies and some specialist firms. It allows the cardholder to borrow money by paying for things using the credit card, but is generally the most expensive way to borrow, unless the balance is paid in full every month.

Emergency fund – a pot of money that can be used to cover emergencies, such as unexpected spending, loss of income or other unexpected financial problems.

Gross income – the amount a person earns before any deductions.

Life stages – people go through a number of stages in their life. Each stage is based on their age. Each of the stages has its own typical opportunities, challenges and needs.

Mortgage – a loan to help people buy houses or flats. They are offered mainly by banks and building societies and can last for up to 30 years.

Net income – the amount a person earns after deductions have been taken by the government, i.e. for tax and National Insurance

Personal loan – offered by banks, building societies and some specialist firms. It is usually paid back over a much shorter term than a mortgage, and tends to be unsecured, so the providers charge higher interest rates to cover the risk.

Shares – the name derives from the fact that the shareholder actually owns a share in the company. Shares will go up or down in value, according to how investors and large financial organisations think the company is doing.

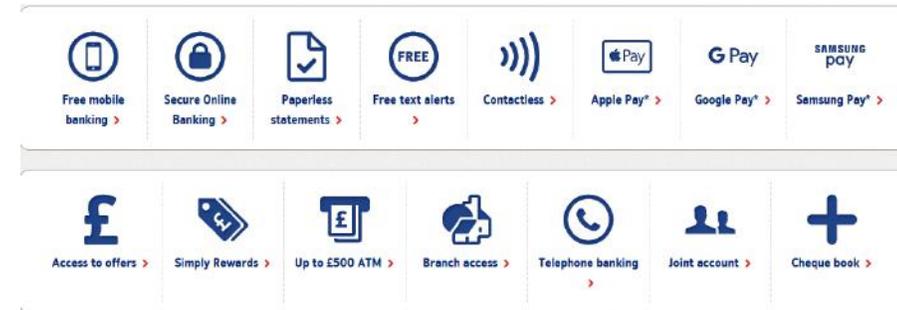
B. Financial providers - Banks

Banks have been around in the UK for over 300 years, and have three main roles:

1. to provide a safe place for people to keep their money;
2. to provide a way for account holders to receive payments and pay bills;
3. to provide loans and mortgages for customers who need to borrow money.

Banks are 'proprietary' organisations, which means that they are businesses owned by, and responsible to, shareholders.

E. Image Features of a current account



F. How does sound financial planning help to maintain our finances?

- Select sensible and affordable borrowing products if we need to borrow, and avoid unnecessary borrowing.
- Know what needs to be done to reach those objectives and goals, rather than hoping for the best.
- Understand how each financial decision we make affects other areas of our finances
- Make better decisions about spending, saving and borrowing.
- Know what we're doing on a day-to-day basis.
- Make sure that important people and things are protected.

Subject: Finance Education
Topic: Financial planning and products



C. Building societies

Building societies have been in existence for almost 250 years. Historically they have provided a place for people to put their savings and receive interest, and the funds raised from savings were used to provide loans for their members.

Providing savings accounts and loans is still the main role of building societies, they now also provide current accounts, other investments and many services. They are 'mutual' organisations, meaning they are owned by their members rather than shareholders, although in most respects they are similar to banks.

D. Financial products

Mortgages – loans to help people buy houses or flats and can last for up to 30 years. 'Secured' loans meaning that the lender has legal rights over the property if the borrower doesn't make repayments. **Personal loans** – paid back over a much shorter term than mortgages – 1- 10 years. Interest rates are generally higher for personal loans than for mortgages. **Credit cards** – They allow the cardholder to borrow money, by paying for things using the credit card. A minimum payment is made each month, the cardholder can choose how much to pay back each month, which means that the borrowing could go on for a long time.

G. Wider thinking / further reading:

www.economicshelp.org <https://my.libf.ac.uk/>

A. Keywords:

Social class – a way dividing people into groups usually based on occupation.

Ethnicity – the cultural group a person belongs to.

Material deprivation – being without enough money to buy goods.

Cultural deprivation – being without the values and skills needed to be successful.

Cultural capital – advantages that parents can pass onto their children in the form of knowledge and resources.

Parental aspirations – parents' hopes and ambitions for their children's future.

Labelling – attaching a category, type or image to a person.

Market principles – treating schools like businesses so schools have to compete for students and parents 'go shopping' for schools.

Subcultures – a small group within society with its own norms and values.

Ethnocentric curriculum – when the content of lessons and courses concentrate on one country or ethnic group.

Institutional racism – where an organisation's culture and methods of operating are found to be racist throughout.

Stereotype – an exaggerated simplified view of a group of people that can cause prejudice and discrimination.

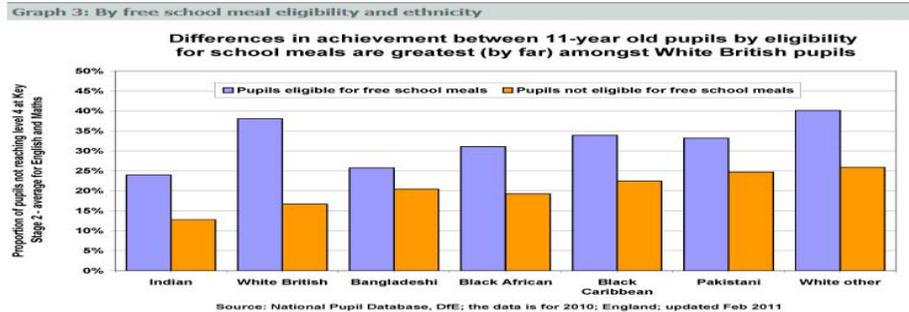
Crisis of masculinity – male insecurity regarding their identity, believed to be caused by a decline in male jobs and an increase in women's independence.

B. Social Class

A government report in 2014 suggested that social class was the biggest factor affecting achievement. White British children who have Free School Meals were the lowest achieving group of all ethnic groups.

Sociologists look at factors inside and outside of the school to explain the difference. Inside school factors include labelling by teachers, streaming into sets and subcultures formed within the school. Outside school factors include cultural factors like language, parental aspirations and values. Material factors consider how much money a family has can affect achievement.

E. Image



F. Expert Modelling:

Ethnic minority pupils tend to underachieve in education due to processes that take place within school. Do you agree with this view? (15)

P One process that takes place within schools that can affect ethnic minority achievement is the ethnocentric curriculum.

E This means that what is taught within schools focuses on the achievement of white culture and ignores the achievements and cultures of other schools.

E For example, it could be suggested that the history curriculum recreates a mythical age of past glories and ignores the history of other cultures.

Subject: Sociology

Topic: Factors affecting educational achievement

C. Gender

In the 1990s girls overtook boys at every level of education and they continue to outperform boys, even with the improvement seen in boys achievement.

Changes in norms and employment prospects have made it easier for women to follow a career. More jobs are available for women and this may be an incentive for girls to work hard.

Whereas for boys, there is a crisis of masculinity as men have lost their traditional roles in family and workplace and boys are left confused about their identity.

D. Ethnicity

Chinese children outperform every other ethnic group, including white children. Pakistani and Caribbean do less well, while Bangladeshi children are now achieving higher than the national average at GCSE.

Ethnic minority families tend to be working class so this affects the material such as diet and housing that can affect educational achievement.

Within school, research shows that teachers label ethnic minority children as low achievers.

G. Wider thinking / further reading:

<http://www.poverty.org.uk/26/index.shtml>

http://news.bbc.co.uk/1/hi/english/static/in_depth/uk/2002/race/educational_achievement.stm

A. Keywords:

Benefit – something that is advantageous or good.

Confidence – a belief in your own abilities.

Challenge – a contest of skill, strength and intelligence.

Enjoyment – gaining pleasure from something.

Improved Health and Fitness - benefits to overall well being and levels of endurance and skill from being involved.

Motivation – having a strong reason to accomplish something.

Environmental Awareness – an increased understanding of the natural environment.

Social Skills – the ability to communicate with other people.

Team Building Skills – the ability to work effectively as a team member.

Decision Making Skills – the ability to make good decisions based on experience.

Organisational Skills – the ability to plan things out effectively using leadership abilities.

B. Key Knowledge 1:

Outdoor activities are group or individual activities that take place in a natural, outdoor environment and can vary from hillwalking through the Lake District to BASE jumping from the top of a rollercoaster in Thorpe Park. These activities usually involve meticulous planning and preparation and enable participants to develop skills that are useful and transferable to everyday life. For this reason, organisations increasingly use outdoor and adventurous activities as the basis for team away days and team building exercises.

E. Image



F. Expert Modelling:

What are the benefits of participating in Outdoor Activities?

“There are numerous benefits from taking part in outdoor activities. For example, by overcoming challenges such as Mountain Biking on Cannock Chase, an individual can gain increased confidence. This will increase their confidence in other areas as well. This is the reason many businesses use outdoor activities and team building trips for their staff.

Subject: Sports Studies
Topic: R056 Task 2

C. Key Knowledge 2:

To achieve Learning Outcome 2 students must show an understanding of the value of participating in outdoor activities.

Students need to build up an understanding of the keywords in section A.

Students must complete a word processed assignment based on the benefits of participating in outdoor activities.

D. Key Knowledge 3:

Students should be able to form their own descriptions of each benefit and explain in detail the reasons why individuals and groups participate.

Students should also provide specific examples of people participating in activities and the reasons why they do this. Individuals may take part to increase their confidence or enjoyment whereas businesses may use group activities as a way of building social or organisational skills.

G. Wider thinking / further reading:

Mountaincraft and Leadership
www.actiondays.co.uk