



Trinity Academy Grammar

Year 8 (B)
Knowledge Organiser
Term 2

Your subjects are in alphabetical order.

1– Vocabulary

observational drawing: drawing what you see in front of you as realistically as possible.

continuous line drawing: a drawing made in one single line, keeping your pen on the paper at all times.

gradient: a smooth transition from one tone to another or one colour to another.

4- Artist: Pablo Picasso

Pablo Picasso (1881 -1973) was a Spanish Artist who lived in France. He was a founder of the Cubist movement. He changed the way artists painted portraits by breaking the portraits into geometric shapes, using shapes and colours to show emotions.

The weeping woman, shows the pain and loss of a woman during the Spanish civil war.

5 – Artist: Adrian Brandon



The Weeping Woman (1937)

2 - Vocabulary

tone: how dark or light something is. Tone is also called shade. The parts of the object on which the light is strongest are called **highlights** and the darker areas are called **shadows**.

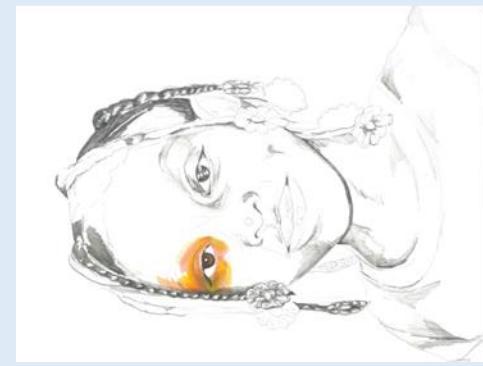
texture: the way something feels to the touch.

mark making: the different lines, dots, marks and patterns we create in an artwork to show texture.

3 – Vocabulary

composition: the placement of the elements on your page.
contrast: when opposite elements are arranged together (e.g. light and dark, big and small...).

abstract: art that does not attempt to represent external reality, but rather seeks to achieve its effect using shapes, colours, and textures.



Aiyana Stanley Jones,
Adrian Brandon –
painted for 7 minutes

1. Types of Computer

Key Vocabulary

PC: a small, single-user computer based on a microprocessor . . . Minicomputer
laptop: sometimes called a notebook computer by manufacturers, is a battery- or AC-powered personal computer generally smaller than a briefcase that can easily be transported and conveniently used in temporary spaces
tablet: is a portable PC, equipped with a touch screen interface. A tablet PC usually has software to run a virtual keyboard
super computer: extremely powerful computers
server: computer or computer program which manages access to a centralised resource or service in a network

2. What makes a Computer?

Key Vocabulary

processor: executes program instructions
RAM: random access memory
hard drive: is where your computer stores data
storage device: a piece of computer equipment on which data can be stored
hardware: the machines, wiring, and other physical components of a computer or other electronic system
input: an input device is any piece of computer hardware used to provide data to a computer system
output: any piece of computer hardware that is used to communicate the results of data that has been processed by a computer system

3. Logic Gates

Key Vocabulary

NOT: has just one input. NOT tells us that Input A has to be 0 (or OFF) in order for the output to be 1. Otherwise the output is 0. A NOT gate is sometimes called an inverter
AND: tells us that both Input A AND Input B have to be 1 (or ON) in order for the output to be 1. Otherwise the output is 0
OR: has two inputs. OR tells us that EITHER Input A OR Input B has to be 1 (or ON) in order for the output to be 1. Otherwise the output is 0
logic gate: a type of programming language. They are represented as truth tables

4. Artificial Intelligence

Key Vocabulary

artificial: created by humans, usually as a copy of or substitute for something natural
intelligence: the ability to acquire and apply knowledge and skills
Alan Turing: he invented the idea of a 'Universal Machine' that could decode and perform any set of instructions. Ten years later he would turn this revolutionary idea into a practical plan for an electronic computer, capable of running any program

1 - Soundscape Skills

Key Vocabulary

soundscape: a collection of individual sounds that are layered up to create a strong sense of place

unison: simultaneous performance or utterance of action or speech

choral speech: ensemble speaking as a group often using various voice combinations and contrasts

canon: when an action or sound is created, by a group of people, one after the other

2 - Vocal Skills

Key Vocabulary

pitch: the degree of highness or lowness of the voice

pace: the speed at which someone speaks

tone: a quality in the voice that expresses the speaker's feelings or thoughts

volume: the degree of loudness or the intensity of a sound

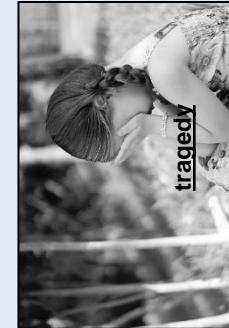
clarity: ensure that you speaking clearly

3 - Tragedy

Key Vocabulary

tragedy: a drama in which a series of actions leads to the downfall of the main character, called the tragic hero

- The plot builds to a catastrophe, or a disastrous final outcome, that usually involves the death of the hero and many others.
- A Shakespearean tragedy often includes elements of the supernatural.
- There is often a battle between good and evil.



4 - NVC skills

Key Vocabulary

non verbal communication (NVC): the way movements, posture and gestures can show how someone feels without speaking. It is also referred to as body language.

facial expression: the appearance, mood or feeling conveyed by a person's face

posture: the position a character holds themselves in when sitting or standing

gesture: a movement made by part of the body, for example, arms, head to show a character's emotions

gait: a person's manner of walking

1 – Terminology

Form:

- A speech is a **formal** talk given to an audience.
 - Speeches are used to emphasise or persuade an a point of view about a subject. They can be used to argue and persuade, to inform and advise, and to entertain.
- Audience:**
- It is important to understand who you are writing the speech for so that you can effectively engage your listeners. What **purpose** (point) are you writing for?
- Writer's craft:**
- Speeches should have a simple structure to help your audience follow your ideas.
 - Speeches should have a powerful opening to immediately engage your audience. Use rhetorical methods (in Box 2) to do this.

2 – Rhetorical Methods

Rhetoric: the art of effective or persuasive speech or writing

- **hypophora:** when a writer raises a question, and then immediately provides an answer to that question

• **anaphora:** a repeated phrase at the beginning of clauses e.g. 'I have a dream that...'

• **anecdote:** a short story narrating a personal experience for effect

• **triadic structure:** listing of three words or phrases for effect (triplet)

- **repetition (for effect):** when a phrase or word is repeated throughout a text to emphasise its meaning or importance
- **direct address:** when the writer communicates with the reader or audience by using their name or pronoun 'you'

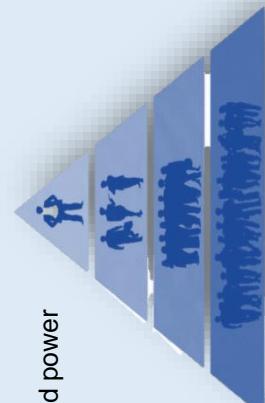
3 – Vocabulary

conspiracy (noun): a secret plan to cause harm

egotistical (adj.): being self-centred

equality (noun): the state of having equal and fair opportunity and rights

hierarchy (noun): a structure of authority and power



4 – Grammar: Imperative and Modal Verbs

imperative verbs:

- An imperative verb is one that tells someone to do something, so that the sentence it is in becomes an order or command.
- (e.g. stop, jump, go)

modal verbs:

Modal verbs are used to make a statement and show a belief that something is certain, possible or impossible. Some modal verbs are:

- can
- may
- must
- should

satirical (adj.): a sarcastic and mocking tone, to make fun of something

1 – Jouer (to play)

jouer	to play
je joue	I play
tu joues	you play (singular/informal)
il joue	he plays
elle joue	she plays
on joue	we play
nous jouons	we play
vous jouez	you play (plural/formal)
ils jouent	they play (masculine)
elles jouent	they play (feminine)
au basket	basketball
au foot	football
au hand	handball
au ping-pong	ping pong
au rugby	rugby
au tennis	tennis
au volley	volleyball

2 – Faire (to do/make)

faire	to do
je fais	I do
tu fais	you do (singular/informal)
il fait	he does
elle fait	she does
on fait	we do
nous faisons	we do
vous faites	you do (plural/formal)
ils font	they do (masculine)
elles font	they do (feminine)
du patinage	dancing
du roller	horse-riding
du ski	wrestling
du sport	swimming
du vélo	skiing
des promenades	fishing
walking	hiking
de la danse	sailing
de l'équitation	dancing
de la lutte	horse-riding
de la natation	wrestling
de la pêche	swimming
de la randonnée	skiing
de la voile	hiking

3 – Negatives

To say 'not', 'don't' or 'never' in French, you need to use a negative.
In French, negatives go around the verb :

ne ... pas = don't/not
ne ... jamais = never

e.g. je **ne joue pas** = I don't play
je **ne fais jamais** = I never do

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4 – Aller

The verb 'aller' (to go) is an **irregular** verb. This means that, like with 'avoir' and 'être', you just have to learn its pattern by heart.

5 – The Near Future Tense

To form the near future tense, we us the verb **aller+infinitive verb**

aller	to go
je vais	I am going
tu vas	you are going
il/elle va	he/she is going
nous allons	we are going
vous allez	you (pl) are going
ils/elles vont	they are going

e.g.

Je vais **jouer** au foot. I am going **to play** football.
Je vais **faire** de la lutte. I am going **to do** wrestling
On va **jouer** au volley. We are going **to play** volleyball.

6 – Time Expressions

Days of the week:

lundi	Monday
mardi	Tuesday
mercredi	Wednesday
jeudi	Thursday
vendredi	Friday
samedi	Saturday
dimanche	Sunday
le lundi	on Mondays

Regularity:

souvent	often
parfois	sometimes
d'habitude	usually
une/deux fois...	once/twice...
...par semaine	...per month
...par mois	...per month

next week
next weekend
next year
next Thursday

next Friday
next Saturday
next Sunday
on Mondays

'année prochaine
jeudi prochain

next Monday
next Tuesday
next Wednesday
next Thursday
next Friday
next Saturday
next Sunday
on Mondays

1. Location

- Russia is located in two continents, Asia and Europe.
- Russia is so large that it has 11 time zones.
- The capital city, Moscow, is 10 hours behind the Kamchatka Region of Eastern Russia.



2. Climate of Siberia

Key Vocabulary:

extreme: is beyond normal

- There is a Mediterranean climate in south western Russia and the extreme cold of the northern and central parts of the country.
- The world's coldest permanently inhabited town is called Oymyakon. This place had a temperature of -88°C. This is colder than Mars.
- The extreme cold of central Russia means that there are no major towns or cities in the region.

3. Population of Russia

Key Vocabulary:

sparse: an area where there isn't much of something

- The area with the highest population density in Russia is the west of Russia.
- The area with the lowest population density is the north and east of Russia.
- The east of Russia is sparsely populated due to the climate being extremely cold. This means that people have to wear lots of clothes and spend a lot of time indoors.

4. Economic Opportunities

Key Vocabulary:

resource: any material that is part of Earth that people need and value

- Russia is the largest producer of oil in the world. Russia has large reserves of gas. This gas is transported to countries, such as Germany to heat their homes.
- Russia is a resource rich nation but these resources have to be transported over vast distances.

5. Threats to the Tundra

Key Vocabulary:

tundra: a vast, flat, treeless Arctic region in which the soil below the surface (subsoil) is permanently frozen

- The tundra is threatened by a number of economic and social reasons. The first reason is climate change.
- The next reason is due to the immense wealth of resources that is underneath the ground.
- The tundra needs protecting as it is a fragile ecosystem that takes 1000s of years to repair.

6. Russia and the Middle East

Key Vocabulary:

comparing: estimate, measure, or note the similarity or dissimilarity between

- Both are primary resource rich regions that have been exploited for profit.
- Both have people that have had to adapt to the extreme environments of the regions.
- On the other hand, both Russia and the Middle East have different climates. One is extremely cold and one is extremely warm.

History

Year 8 | Term 2

1 – British Empire

Key Vocabulary

empire: a group of countries

trade: swapping products with one another

- The British Empire stretched from New Zealand to Vancouver Island in Canada.
- The British Empire ruled over 400 million people and covered 20% of the world.
- Trade and religion spread across the empire.
- The British Empire could buy and sell new products.

Key Vocabulary

independent: to not need anyone

colony: a country under the control of another country

- The Irish had been ruled by the English since the 1100s.
- The British were brutal towards the Irish for 800 years until they became independent in 1922.
- The British set up a colony called Jamestown in North America in 1607 where many Irishmen went.
- The 13 colonies declared independence in 1776.

2 –Ireland and America

Key Vocabulary

company: a business

trade post: where goods and services are traded

- The Mughal Empire covered most of what we call India, Afghanistan, and Pakistan today.
- By 1700, this empire had the most powerful economy in the world. It produced 25% of the world's goods and services.
- In 1608 the first British trade post was opened by the East India Company.

3 – The British in India

Key Vocabulary

independent: to not need anyone

colony: a country under the control of another country

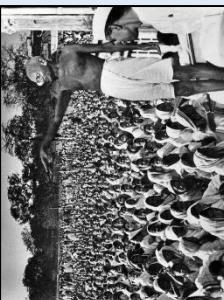
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4 – The Indian Resistance

Key Vocabulary

British Raj: the British government in India

refugee: a person forced to leave their home



5 – Partition of India

Key Vocabulary

legacy: something left behind

democracy: when people have the right to vote

- In 1947, the British left India. This was because of the movement led by Gandhi and the cost of the World War 2.
- The British Raj split India into three sections: India, which would be Hindu, and West and East Pakistan, which would be Muslim.
- This decision created 10 – 20 million refugees.

6 – Legacy of Empire

Key Vocabulary

legacy: something left behind

democracy: when people have the right to vote

- The legacy of the British Empire is viewed differently by the British and Indians. Britain are positive; India are negative.
- Today Britain recognises there is good and bad. Empire can bring wealth and democracy but it can also bring death and suffering.

Literacy B

Spelling Rules – Homophones

Year 8/9

Term 2

Week 1 – buy/by/bye

buy: giving someone money for something
e.g. *I am going to buy a car.*



by: going past
e.g. *The car drove by.*



bye: what you say when you leave.
e.g. *I said bye to my friends.*



Week 2 – accept/except

accept: when you take something given to you
e.g. *I accept this gift.*



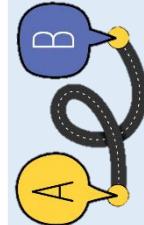
except: when something is left out
e.g. *I like all cars except green ones.*

whether: making a decision between two options
e.g. *I don't know whether to buy the top or the skirt*



Week 4 – to/too/two

to: going somewhere
e.g. *I am going to the shop.*



two: as well as
e.g. *I have brown hair too!*

two: 2
e.g. *There are two apples left.*



Week 5 – you're/your

you're: contraction of you and are
your: it belongs to you

You're or your?



you're =
you + are



It's yours!

Week 6 – bare/bear

The verb *bare* has only one meaning:
“to uncover.”
All other uses of the verb are for *bear*: “bearing children”

Know the difference – Part 1	
Bare	V.S.
Bare	Bear
Meaning: naked; to uncover	Meaning: to put up with
An Example: The sky was bare; no clouds in sight.	An Example: The chair was unable to bear his weight.

Mathematics	Representations	Year 8	Term 2
Those topics highlighted in yellow also appear in Science, Geography or Technology			
1 – Quadrants and Lines	2 – Linear Graphs	3 – Data	
Co-ordinates			
<u>x</u> : first number in a coordinate which is the horizontal value	<u>y</u> : second number in a coordinate which is the vertical value	<u>frequency</u> : the number of times an event occurs	
quadrant : one of four regions separated by the x and y axis.	linear graph : produces a continuous straight line	correlation : a measure of the strength of association between two variables	
origin : a fixed point at which measurements are taken from. This is usually (0, 0).	$y = mx + c$: often the form of a linear graph where m is the gradient and c is the y intercept	continuous data : data which can take any value	
gradient : a measure of the steepness of a line	non-linear graph : doesn't produce a continuous straight line <ul style="list-style-type: none"> the steepness of a line refers to its gradient An ascending linear sequence results in a positive gradient A descending linear sequence results in a negative gradient parallel : two lines the same distance apart at all points	discrete data : data which takes certain values qualitative : refers to a quality or attribute quantitative : refers to a quantity or amount range : difference between largest and smallest	
4 – Scatter Graphs		5 – Probability	6 – 8 Times Table
positive correlation : a link showing that as one variable increases, the other also increases	negative correlation : a link showing that as one variable increases the other decreases	trial : an experiment that is repeated	$1 \times 8 = 8$ $7 \times 8 = 56$
outlier : result which lies beyond where most of the data is clustered		event : a set of possible outcomes from a trial	$2 \times 8 = 16$ $8 \times 8 = 64$
line of best fit : a line drawn on a scatter graph to represent the best estimate of the relationship between the variables		outcome(s) : the result(s) of a statistical trial	$3 \times 8 = 24$ $9 \times 8 = 72$
		probability : The likelihood (chance) of an event happening	$4 \times 8 = 32$ $10 \times 8 = 80$
		sample space : set of possible outcomes from a trial	$5 \times 8 = 40$ $11 \times 8 = 88$
		biased : something which is unfair	$6 \times 8 = 48$ $12 \times 8 = 96$
		union : where one or two elements of a set are satisfied	
		intersection : where two elements of a set are satisfied	

1 – Origin

- Rap and Hip-Hop began in New York, USA.
- It started when the Jamaican sound system culture arrived in the late 1970s.
- Rappers combined lyrics and beats to entertain at rap battles where they would boast about being the best rapper.
- Rap came to the UK in the 1970s and 80s.
- The London Posse and Cookie Crew were two successful early rap groups.



2 – Hip-Hop Key Vocabulary

- MC:** Master of Ceremony. Another name for a rapper.
- sound system:** large outdoor speaker system which originated in Jamaica often run by DJs and Rappers



beat: unit of time used in music

pulse: a constant beat that doesn't change

bass line: the low-pitched instrumental part or line of music played by the lowest sounding instrument

beatboxing: vocal percussion, mimicking the drum machines with the mouth

3 – DJing Key Vocabulary

mixing: when two different records are mixed together

beatmatching: changing the speed at which a record is played so that its tempo matches that of the song currently playing

scratching: moving a record back and forth on a record player to create a 'scratching' sound

looping: when a sample of music is repeated over and over

sampler: a device that can take any sound that is put into it, process it and play it back

sampling: taking a section, or sample of a recording and reusing it within a different song

4 – Rap Lyric Writing

couplet: a pair of rhyming words

internal rhyming/assonance: matching the sound of words within the line

hook: a catchy line of lyrics which is remembered by the listener

Key Hip-Hop and Rap Artists

Post Malone, Khalid, Drake, Lil Nas X, Travis Scott, Juice WRLD, DaBaby, Cardi B, Lil Baby, Meek Mill, Chris Brown, Lil Wayne, Kanye West, Jay-Z



Drake

PE

Year 8

Term 2

PE

Football

1 – Dribbling

Key Vocabulary

control: the ability to manage a moving object

side step: stepping one way and taking the ball in the opposite direction



Key Vocabulary

through ball: passing the ball between two opponents to a teammate

- Techniques for a lofted pass:
 - Non-kicking foot by the ball
 - Lean body back
 - Striking foot to get under the ball
 - Arms out for balance



2 – Passing

Key Vocabulary

scan: looking behind and around for space and players

shielding: protecting the ball from being taken

Using muscular strength to keep the ball from the defender by placing the body between the defender and the ball, in a side on position.



3 – Receiving

Key Vocabulary



4 – Defending

Key Vocabulary

steal: gaining possession of the ball from the opponent

timing: a particular point to take tackle the opponent

Key Vocabulary

power:

lob: looping the ball over the goalkeeper into the goal having won possession



5 – Shooting

Key Vocabulary



6 – Positional play

Key Vocabulary



unit: several players linked together

counter-attack: moving the ball up the pitch quickly having won possession



1 – Passing

Bounce pass teaching points:

- bounce from chest height
- ball should hit the floor two-thirds of the distance towards the receiver

Shoulder pass teaching points:

- from head height
- opposite foot forward
- elbows in

Overhead pass teaching points:

- above head, elbows in
- spread fingers around the ball
- used for longer distance

2 – Footwork

Key Vocabulary

pivot: to rotate round on the ball of the foot

Ways to perform footwork:

- land with two feet at the same time, to then pivot with the foot of your choice
- land on left or right foot, following with other foot, pivot on landing foot
- to turn in the air and rotate body to shooting third then land



3 – Attacking

Key Vocabulary

straight lead: to find space by running very quickly over a short distance to escape your opponent.

dodge: using quick footwork and the body to move one way then go in the opposite direction

roll: using the foot which is furthest away from your opponent, take it in a circular motion around them and rotate your body around the player (U-turn).

Timing is key!
Move too early and you will run out of space. Move too late and the opposition will intercept the pass.

4 – Defending

Stages of defence:

- Stage 1: mark the player even when they do not have the ball. Stay close to your opposing player.
- Stage 2: mark the ball. 1m away from the landing foot. Arms up.
- Stage 3: mark the space. Time your run to intercept a pass.



5 – Shooting

Key Vocabulary

step in: take a large step forward towards the post to get closer, keep your balance and do not put the landing leg back down



Shooting teaching points:

- ball held by dominant hand and high above the head
- second hand is placed at the side of the ball to steady its position
- aim for a point above the ring to gain height. Do not let the ball drop behind the head
- Flick wrists to put a backward spin on the ball



6 – Positional Play



Position	Playing Areas
Goal	1 2
Stop	Goal
Circle	Attack
Attack	1 2 3
Wings	Attack
Arches	2 3 4
Centre	2 3 4
Wing	Defence
Defence	3 4 5
Goal	4 5
Circle	4 5
Attack	4 5

1 – The Khalsa

Key Vocabulary

Khalsa: the community of Sikhs
turban: a man's head covering



turban

- The first Khalsa was formed during the time of Guru Gobind Singh.
- The Guru asked a group of Sikhs if any of them were willing to sacrifice their lives for their faith.
- Five men volunteered and entered a tent, expecting to be killed. They eventually emerged unharmed, all dressed in fine clothing and wearing turbans.
- The five men became known as the 'Panj Piare' (the Five Beloved Ones) and they became the first members of the Khalsa.
- Any Sikh can now join the Khalsa if they want to be fully committed to the faith.

2 – The 5 Ks

Key Vocabulary

symbol: something simple which stands for something more complex

The 5 Ks are symbolic items which all members



of the Khalsa wear to show their commitment to their faith:

- Kesh – uncut hair. Sikhs do not cut their hair as this is a gift from God.
- Kangha – a wooden comb. This is used to keep their hair neat.
- Kachera – cotton underpants. This is to show modesty.
- Kara – a steel bangle. This represents the one, eternal God.
- Kirpan – a sword. This is used to defend the truth and the vulnerable. It is never used to attack others.

3 – The Guru Granth Sahib

Key Vocabulary

Gurdwara: the Sikh place of worship

scriptures: sacred writings

Guru Granth Sahib: the Sikh holy book

- In the Gurdwara building, scriptures from the Guru Granth Sahib are read aloud.
- Drums are often played whilst the Guru Granth Sahib is being read.
- The prayer hall is often decorated with bright colours on the walls and carpets.
- The Guru Granth Sahib will have its own bedroom within the Gurdwara, where it is kept when not being read.
- The communal kitchen, langar, is open to all people and serves vegetarian food to whomever wants it.

4 – Seva

Key Vocabulary

seva: service

langar: the communal kitchen in the Gurdwara

- Sikhs believe they must perform a selfless service to God's creation. This means that they have to help people.
- Sikhs believe when they are serving others, that they are serving God. They believe that God is in everything that He has created.

Seva can be performed in three ways:

- Tan – physical service. For example: helping in the langar.
- Man – mental service. For example: teaching others.
- Dhan – giving to charity.

B1 – Aerobic Respiration	C1 – Exothermic and Endothermic Reactions	P1 – Energy Sources
<p>respiration: the chemical process that releases energy from glucose for life processes</p> <p>aerobic: a process that involves oxygen</p> <p>glucose: a simple sugar that can be made from larger carbohydrates</p> <p>mitochondria: a subcellular structure where aerobic respiration takes place</p> <p>carbon dioxide: a waste product that is produced from aerobic respiration as a gas</p> <p>Aerobic Respiration Word Equation</p> $\text{glucose} + \text{oxygen} \rightarrow \text{carbon dioxide} + \text{water}$	<p>Key Vocabulary</p> <p>endothermic: a reaction that absorbs thermal energy and causes a temperature decrease</p> <p>exothermic: a reaction that releases thermal energy and causes a temperature increase</p> <p>hazard: something that could cause harm</p> <p>precaution: doing something to prevent a hazard from causing harm</p> <p>temperature change: final temperature – initial temperature</p>	<p>energy source: a source from which useful energy can be extracted or converted</p> <p>renewable: an energy source that will not run out</p> <p>non-renewable: an energy source that is used faster than it is replenished and will run out</p> <p>power: the amount of energy transferred in a set amount of time, measured in Watts</p> <p>fossil fuel: types of non-renewable energy sources: coal, oil and gas</p> <p>standard form: a method of writing small or large numbers E.G. $192 = 1.92 \times 10^2$</p>
<p>anaerobic: a process that does not involve oxygen</p> <p>cytoplasm: the jelly like substance that fills the cell, where anaerobic respiration takes place</p> <p>lactic acid: a waste product that is produced from anaerobic respiration</p> <p>breathing rate: how many breaths are taken per minute</p> <p>waste product: any substances that are produced in a reaction that are not the desired product</p> <p>Anaerobic Respiration (animals) Word Equation</p> $\text{glucose} \rightarrow \text{lactic acid}$	<p>catalyst: a substance that increases the rate of reaction without being used up</p> <p>corrosive: able to damage or destroy other substances by chemical reaction</p> <p>rate: how quickly a process happens</p> <p>enzyme: a biological catalyst</p> <p>repeatable: when the same person conducts an experiment and gets similar results</p> <p>analyse: break down information to better understand it</p> <p>word equation: an equation showing reactants and products</p>	<p>Key Vocabulary</p> <p>fuel: a substance that is burned to release energy</p> <p>joules: the units for all types of energy</p> <p>kilowatt hour (kWh): the unit used to state the amount of energy used by a 1kW appliance for 1 hour</p> <p>compare: to find similarities and differences between two objects</p> <p>estimate: a rough calculation</p> <p>conversion: the process of changing units by multiplying or dividing</p> <p>risk: the chance a hazard will cause harm and how serious it could be</p>

Technology

Year 8 | Term 2

Food

1 – Proteins

- We need protein for muscle growth and body repair.
- Any left is used as a secondary source of energy.

amino acids: the building blocks of proteins. There are 20 needed by our body.

essential amino acids: the amino acids that need to come from the food we eat

HBV: proteins that contain all of the Essential Amino

LBV: are generally proteins from plants and are

missing at least one of the essential amino acids

protein complementation: when 2 or more LBVs are eaten together

vegans: can find it difficult to source the amount of amino acids needed for a balanced diet

- We need this for energy, to protect our vital organs, to insulate our body and to provide the fat soluble Vitamins A D E & K

Key Vocabulary

saturated fats: come mainly from animals and are high in cholesterol.

This is bad for our heart as it can clog our arteries and can cause long term health problems E.G. Type 2 diabetes and strokes.

unsaturated fats: come mainly from plant sources such as nuts and oils.

They are lower in cholesterol, which makes it a healthier choice.

We should aim to eat mainly unsaturated fats from sources such as nuts and oils

2 – Fats

- We need these for energy.
- There are two types: simple and complex.

simple carbohydrates: mainly sugars which can lead to long-term problems such as tooth decay, obesity and type 2 diabetes.

complex carbohydrates: starchy foods such as bread, rice, pasta and potatoes

- These give us more fibre and our bodies find them harder to break down.
- The energy lasts longer keeping us feeling fuller for longer

dietary fibre: keeps our digestive system working healthily and prevents complications such as constipation or more seriously cancer of the bowel. E.G. wholemeal bread and fruit.

3- Carbohydrates

Vitamin D (fat soluble): works with calcium to form strong bones and teeth. Found in – oily fish, margarine, eggs, sunshine.

calcium: works with vitamin D to make strong bones and teeth.

- It is needed for the clotting of the blood.

Iron: needed to form red blood cells, which carry oxygen to all parts of the body.

Magnesium: found in – milk, cheese, yogurts, fish bones E.G. tinned salmon.

Calcium: added to white bread by law

Iron: found in – red meat, green vegetables

4 – Vitamins and Minerals

Vitamin A (fat soluble): for normal growth of children. Found in– oily fish, dairy foods, carrots, green vegetables.

Vitamin B: to allow the body to get energy from food. Found in- wholemeal cereals, meat, marmite.

Vitamin C: clear skin, healing of wounds. Healthy teeth and gums, prevents infections e.g. colds. Found in – fruit E.G. berries and citrus fruit, tomatoes, potatoes, green vegetables

Found in – red meat, green vegetables

1 – Identity

Key Vocabulary

identity: understanding who you are, the way you think about yourself and your characteristics

- Everyone has a different identity and this is what makes us a diverse society.
- Everyone is unique and no one characteristic is more important than another.
- Identity encompasses a range of concepts: gender, race, heritage, religion, sexual orientation and ability.

2 – Self-Worth & Self-Confidence

Key Vocabulary

self-worth: the internal feeling of being good enough and understanding that you are a valuable human being

- self-confidence:** a feeling of trust in your own ability to do something
- Our self-worth and self-confidence are very important factors in supporting our own wellbeing.

3 – Gender Identity

Key Vocabulary

gender identity: an internal and personal understanding of your gender

- Gender identity is not always visible to others.
- For some people, gender identity aligns with the sex assigned at birth (male or female).
- For others, gender identity differs from the sex assigned at birth (transgender).
- For others, they do not feel their gender fits into either male or female categories (nonbinary).

4 – Recognising and Challenging Discrimination

Key Vocabulary

discrimination: treating someone unfairly because of a unique characteristic

- homophobia:** treating someone unfairly because they are homosexual
- biphobia:** treating someone unfairly because they are bisexual
- transphobia:** unfair treatment of someone who is transgender or transsexual
- All of the above must be reported to a member of staff and will be challenged.

Look

Look at the information carefully.

Read it three times.

It may help to say it as you read it.



Cover

Cover it with your hand or a piece of paper.



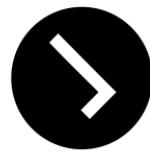
Write

Write it out, from memory.



Check

Check what you have written matches the information exactly.
Have you got it correct?
If so, tick your work to show it is correct.



Correct



If you choose to make flashcards to help you revise, don't forget our top tips.

1. On one side of the card, write the question clearly
2. On the other side of the card, write the answer you want to remember
3. Only put one question on each flashcard
4. Test yourself regularly, until you can't get the answers wrong



Scan the QR code to access a short video on how to use your flashcards more effectively.

If it doesn't match exactly, use your purple pen to correct it.
Repeat the steps above.

If you get 100% correct, move on to the next piece of information.