# **ENGLISH Year 7 Half Term 2: Non-Fiction Unit**

# "If you believe you can achieve!"

#### **Glossary:**

- Alliteration two or more words which start with the same sound.
- **Autobiography** an account of a person's life written by that person.
- Chronological order events which take place in the order of which they occurred.
- Compare identify similarities and differences between texts.
- **First person** a text written from a person or character's perspective.
- Headline a heading at the top of an article or page in a newspaper or magazine.
- Leaflet a printed piece of paper containing information.
- Logo a symbol or image used by companies to promote a public image.
- Metaphor a comparison where a person, place, thing or action is portrayed as being something else.
- Method techniques used by writers such as metaphors, similes and pathetic fallacy.
- Quotation a phrase or short piece of writing taken from a longer speech or text.
- **Personification** giving human characteristics to something non-human.
- Subheading a heading given to a subsection of a piece of writing.
- · Synonyms words which have a similar meaning.
- Viewpoint a way of looking at something.

#### **Using a Dictionary and Thesaurus**

You should be confident when using a thesaurus or dictionary. Test yourself!

- What is the definition of the word 'curator'?
- Find a verb beginning of 'q'.
- What is the last word beginning with 'k'?
- Find three words which begin with 'dr'?
- How many definitions are there for the word 'movement'?
- What type of word is 'ooze'?
- Find three synonyms for the word 'malicious'.
- What is the next word after 'burly'?
- Find three nouns that begin with 'I'.



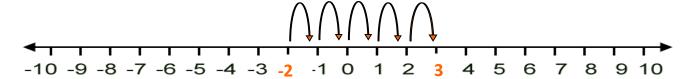
This half term focuses on non-fiction writing. There are a number of methods we often use when writing non-fiction persuasive texts. Try using RAPTORS in your persuasive writing. You should learn this acronym.

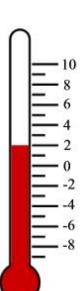
- R- Rhetorical Question= Must these animals be left to suffer indefinitely?
- A- Alliteration= Callous cases of cruelty are a disgrace to our society.
- P- Personal Pronouns= It is up to you to help those in need.
- T- Triplets= We must give animals a brighter, happier and kinder future.
- O- Over exaggeration= Animal cruelty is the most heinous crime imaginable.
- R- Repetition= These animals should be helped. These animals must be helped.
- S- Statistics and Facts= Data from the RSPCA indicates over 3000 reports of animal cruelty every single day in the UK.

**Negative numbers** 

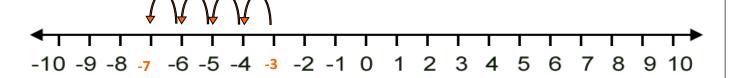
a negative number is a real number that is less than zero.



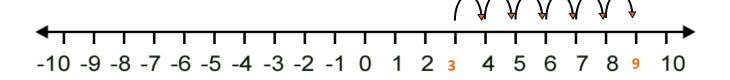




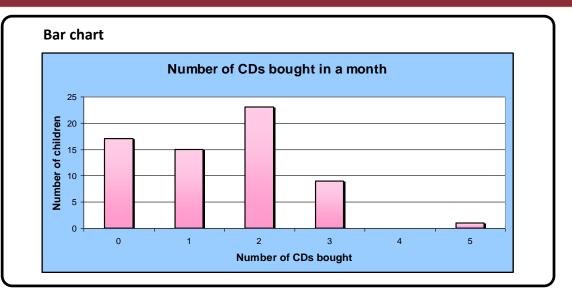
-3 + -4 = -7 To add a *negative* integer we move *backwards down* the number line.

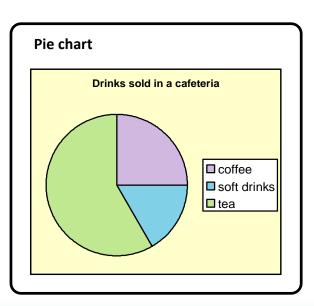


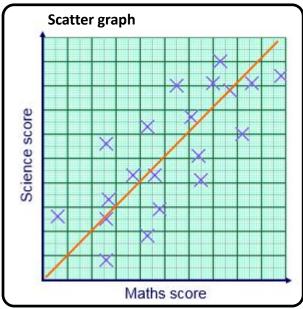
3 - -6 = 9 To subtract a *negative* integer we move *forwards up* the number line.



# **MATHS Year 7 Half Term 2: Statistics**







#### **Glossary**

**Discrete** data can only take certain values.

Examples – shoe sizes, the number of children in a class.

**Continuous** data comes from measuring and can take any value within a given range.

Examples – the weight of a banana, the height of students.

#### Mode

Most common piece of data.

#### Median

Middle value once the data is arranged in order.

#### Range

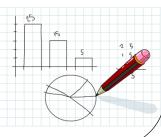
The difference between the highest and lowest value.

#### Mean

The average of the numbers: a calculated "central" value of a set of numbers.

#### Correlation

The process of establishing a relationship or connection between two or more things.



# **SCIENCE Year 7 Half Term 2: Separation**

#### **Glossary**:

- Insoluble
   Describes a
   substance that will
   not dissolve in a
   solvent.
- Mixture
   Different substances together which can be easily separated.
- Soluble
   Describes a
   substance that will
   dissolve in a
   solvent.
- Solute
   The substance that dissolves in a solvent to form a solution.
- Solution
   The mixture formed when a solute has

dissolved in a solvent.

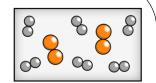
- Solvent
   The liquid in which a solute dissolves.
- Filtration
   Separates insoluble substances form a solvent.
- Chromatography
   Separates mixtures
   of soluble
   substances.
- Evaporation
   Change in state
   from liquid to gas.
   Distillation
   Separates a liquid
   from a mixture.
   Involves
   evaporation and
   condensation.

## **Reactions and properties**

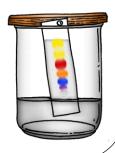
- A chemical reaction involves the rearrangement of atoms to form new substances, while the total number of atoms stays the same (see image above).
- The properties of different materials can be explained in terms of the behaviour of the atoms and groups of atoms of which they are made.

#### **Elements and mixtures**

This diagram shows a mixture of elements.



- Mixtures can be easily separated using techniques such as:
  - Filtration
  - Distillation
  - Chromatography



# SCIENCE Year 7 Half Term 2: Energy Transfers

"If you believe you can achieve!"

Glossary:

**Disspiation** – Becoming spread out wastefully

**Energy** – Energy is needed to make things happen

**Fossil Fuel** – Non-renewable energy resources formed over millions of years from the remains of ancient plants or animals

Joule - The unit of energy, symbol J

Non-renewable – An energy resource that cannot be replaces and will be used up, such as coal, oil or gas.

**Power** – How quickly energy is transferred by something (unit Watts)

**Renewable** – An energy resource that cannot be replaced and will run out.

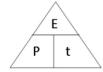
**Conduction:** Transfer of thermal energy by the vibration of particles.

**Convection:** Transfer of thermal energy when particles in a heated fluid rise.

**Convection current:** The movement of heated fluids where hot fluid moves upwards, and cold fluid moves downwards.

**Infrared radiation:** Radiation given off by the Sun and other objects that brings about energy transfer

**Thermal conductor:** Material that allows heat to move quickly through it



power =<u>energy used</u> time taken P = <u>E</u> t

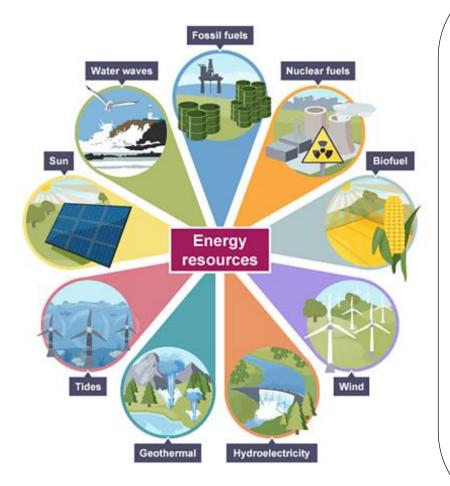
#### **Energy Transfer**

- Energy cannot be created or destroyed, it can only be transferred between stores. This is the law of conservation of energy. An energy store is a way of keeping track of energy.
- Radiation (like light), heating, forces and electricity are ways of transferring energy between stores.
- Energy is dissipated in any energy transfer process because of friction, air resistance, electrical resistance and the heating of surroundings by hot objects.
- You can calculate the useful energy or the waster energy from the energy input and energy output.

#### **Heating and cooling**

- The thermal energy of an object depends on its mass, temperature, and what it is made of. When a hot object is in contact with a colder one energy is transferred from the hot object to the colder one.
- Energy is transferred by conduction in solids and by convection in liquids and gases.
- Energy travels quickly through a thermal conductor, but more slowly through a thermal insulator. Some insulators work by trapping air, which is a poor thermal conductor.
- Energy is transferred by radiation, which does not need a medium to travel through. All objects emit radiation, Infrared radiation can be detected by your skin or a thermal imaging camera.

# **SCIENCE Year 7 Half Term 2: Energy Transfers**



#### **Fossil fuels**

We get energy from many different types of energy resources, including fuels, food and stores of energy such as batteries or the wind. We can divide energy resources into two categories:

- -non-renewable energy resources cannot be replaced once they are all used up
- -<u>renewable energy resources</u> can be replaced, and will not run out Fossil fuels are non-renewable energy resources.

#### **Fossil fuels**

Crude oil, coal and gas are fossil fuels. They were formed over millions of years, from the remains of dead organisms:

coal was formed from dead trees and other plant material

crude oil and gas were formed from dead marine organisms

# RE Year 7 Half Term 2: Christianity the Beginning

"If you believe you can achieve!"

Key Word	Definition	
Messiah	The 'anointed one' – a saviour promised to the Jewish nation.	
Ministry	From a Greek word meaning 'to serve'. Used to refer to the work of a religious leader/teacher.	
Miracle	Something which cannot be explained by the laws of science and therefore people attribute it to God.	
Parable	A simple story used to illustrate a moral or spiritual lesson, used by Jesus.	
Trinity	The three unified persons of the Christian God; Father, Son, and Holy Spirit.	
Apostle	One sent on a mission.	
Sacrament	An outward sign of inward grace. There are 7 sacraments in the Catholic Church.	
Confirmation	A sacrament whereby someone becomes an adult member of the Church by confirming their belief in Jesus Christ.	
Church	A community of Christians.	
Disciple	a follower or pupil of a teacher, often now used to refer to followers of Jesus	
Holy Spirit	The third person of the Trinity. The unseen power of God that works in us.	



- St Paul taught that Christians are all 'one body' guided by Christ.
- We have to continue Christ's work on earth.
- We all have unique roles in this duty but are equally important.

#### Jesus Begins His Ministry:



- John the Baptist paved the way for the Messiah. He told people to repent for their sins.
- He baptized them as a visible sign they were making a fresh start. When Jesus
  was baptized there were signs that he was the Messiah they had been waiting for.
  Jesus realized the important mission he had to do.

#### Jesus the Teacher:

- Jesus is considered to be the greatest teacher that ever lived because he was God in human form; his teachings were actually the teachings of God!
- Jesus told the Rich Young Man to sell everything he owned and to give to the poor.



#### Jesus the Miracle Worker:

Jesus performed many miracles, which are important because they are evidence;

- · That Jesus was the Son of God
  - of God's power
- that God is still present in the world today.

#### The Early Church



- Jesus chose 12 apostles to follow him and to help spread his message.
- Jesus gave them a special task to complete; he asked them to go out and make disciples of all nations. He promised to send the Holy Spirit as a helper.
- The Holy Spirit came at Pentecost, it gave the disciples the courage to go out and complete Jesus' mission, creating the first Christian communities.
  - The early Christian communities worshipped together, lived as one sharing everything they owned and broke bread together just as Jesus had done.

# HISTORY Year 7 Half Term 2: The Norman Conquest "Hyon believe you can achieve!"

The intended purpose of this 5 lesson unit of study is to develop pupils' knowledge and understanding of the Norman conquest of England in the 11<sup>th</sup> century. Furthermore, pupils will have the opportunity to develop the following historical skills in order to ensure that they are GCSE-ready; describing key features, analysing interpretations and making inferences.

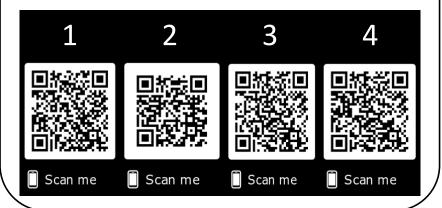
#### **Pupils should know:**

- The key features of England, c.1066. For example, it had a growing population; its communities were becoming increasingly self-sufficient; the government of the country was supported by the Witan and was linked to France as English nobles would often attend court there.
- That the claimants to the English throne after the death of Edward the Confessor were Harold Godwinson, Harald Hardrada and Duke William of Normandy. For further information, including a biography of each claimant, scan or click QR codes 1 and 2.
- That the Battle of Stamford Bridge was fought between the armies of Harald Hardrada and Harold Godwinson. For further information about the battle, including its location and outcome, scan or click QR codes 1 and 3.
- That Duke William of Normandy's victory in the Battle of Hastings was due to the strengths of his armed forces and the quality of his leadership in relation to those of his opponent, Harold Godwinson. For further information about the battle, including its location and significance, scan or click QR codes 1 and 4.

#### **Glossary**

- Witan A council comprising of advisers that gave advice to the king.
- Claimant One who claims something.
- **Huscarls** Highly skilled and well-trained soldiers.
- **Fyrd** An untrained army of local labourers.

Opportunities for deeper learning can be accessed by scanning or clicking the following QR codes for topic-specific websites or YouTube clips:



#### **Historical Skills**

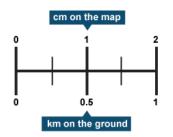
- Describing key features of the past involves identifying relevant features of that aspect of the past and developing a description of them with precise factual information.
- Analysing interpretations involves studying historians' contrasting views of the past and identifying the main difference between them. Details from the interpretations can be used to clearly show the contrasting views.
- Making inferences involves studying historical sources in order to consider what they suggest about an aspect of the past. Details from the sources can be used to support the inferences that are made.

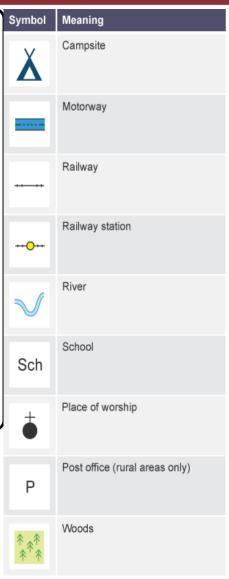
# **GEOGRAPHY Year 7 Half Term 2: Map Skills**

A map is a twodimensional drawing of an area. Maps help us to understand what places are like and how to plot routes.

## Maps should have a:

- Title
- Scale
- North arrow
- Key





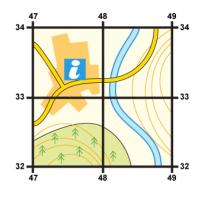
#### **Grid References:**

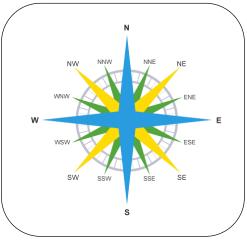
A grid of squares helps the map-reader to locate a place. The vertical lines are called eastings. They are numbered - the numbers increase to the east. The horizontal lines are called northings as the numbers increase in an northerly direction.

Things to remember: When you give a grid reference, always give the easting first: "Along the corridor and up the stairs".

Four-figure grid references can be used to pinpoint a location to within a square. To find the number of the square:







## **GEOGRAPHY Year 7 Half Term 2: Rivers**

#### **Glossary:**

#### **Bank**

The ground at the side of a river Bed (riverbed)

The riverbed is the ground at the bottom of the river - often made up of sand and stones.

#### Channel

A groove in the land that a river flows along.

#### Current

The flow of the river.

#### **Confluence**

Where two rivers or streams meet.

#### **Deposition**

A river lays down or drops the sediment or material that it is carrying.

#### **Drainage Basin**

The area of land that is drained by a river and its tributaries.

#### **Erosion**

The wearing away, in this case by water and rocks constantly rubbing

#### Meander

A bend in a river - usually in the middle or lower course. Mouth The end of the river. The mouth may be where the river meets the sea, a lake or a larger waterway.

#### Oxbow lake

A small arc-shaped lake formed when a meander is sealed off by deposition.

#### **Precipitation**

A general term for all forms of water particles – rain, snow, sleet, dew, hail etc.

#### <u>Source</u>

where the stream begins: usually where there is a spring, and quite high up

#### **Transportation**

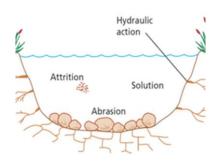
A process where the river moves, or transports materials (it's load) from one place to another.

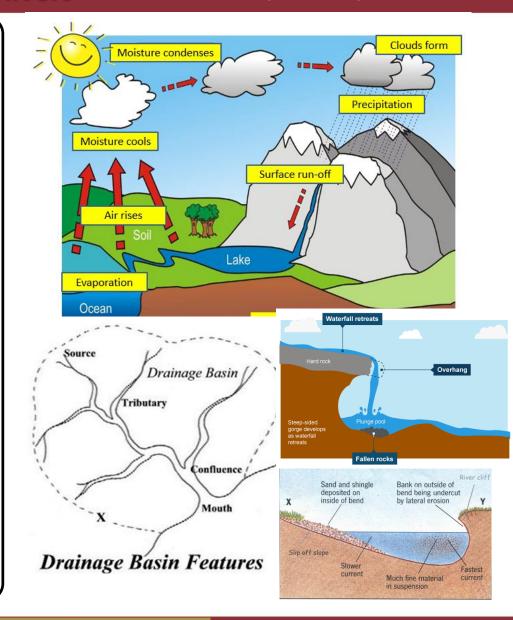
#### **Valley**

A valley is a long trough in the landscape that has been eroded by a river or a combination of river and glacier action.

#### Waterfall

A place where the river course is interrupted by a tall step.





# **GEOGRAHPY Year 7 Half Term 2: Flooding**

#### Physical causes of flooding:

- Heavy rainfall
- Long periods of rain
- snowmelt
- Steep slopes
- Impermeable rock (doesn't allow water through)
- Very wet, saturated soils
- Compacted or dry soil

#### **Human factors increasing flood risk:**

- Urbanisation, because towns and cities have more impermeable surfaces
- Deforestation, because removing trees reduces the amount of water intercepted and increases run-off

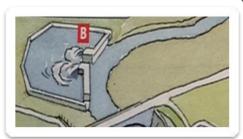


Every year, many more people in LICs (Low Income Countries) suffer the impacts of flooding compared to people in HICs. Consider how variation in the quality of the following factors could lead to more suffering in poor countries during times of flood;

Healtcare? Emergency services/rescue?

Building quality? Early warning? Clean up/repair?





How could the strategies in these images **protect** people from flood risk?





# **SPANISH Year 7 Half Term 2: Mi Tiempo libre**



#### Gramática Grammar Gramática Hacer (to do) is an important irregular verb. The c changes There are three types of verbs: -ar, -er and -ir. togin the 'I' form. Learn it The biggest group is -ar verbs. Once you know by heart. the pattern, you can apply the rules to new -ar. Ido hago hablar to speak haces you do (yo) hablo I speak he/she does hace (tú) hablas you speak hacemos we do (él/ella) habla he/she speaks hablamos we speak hacéis you(plural)do (nosotros) habláis (vosotros) you (plural) speak hacen they do (ellos) hablan they speak In brackets you can see the pronouns I, you, Gramática he/she, we, you, they. Often these are not used in Spanish because the verb endings make it clear who is speaking. The infinitive is the form of the verb you find in the dictionary There are two ways of saying 'you' in Spanish. or word list. It often translates Use the tú form when you are talking to one as 'to do something'. person, and the vosotros form when you are talking to more than one person. escuchar v to listen In Spanish, all infinitives end Using question words in -ar, -er or -ir. How many To take part in a longer of each group can you find in conversation you need to exercise 1? know your question words. These are the question When me gusta is followed words you know already: by another verb, that verb ¿Qué...? What/Which? must be in the infinitive. ¿Cuándo...? When? ¿Dónde...? Where? Me gusta escuchar música. ¿Cómo...? How/What? I like to listen/listening to ¿Cuántos...? How many? music. Questions in Spanish always begin with an upside-down question mark ¿. **Gramática** Jugar (to play) is a stem-changing verb. Some people call these 'boot' verbs. jugamos we play I play juego you (plural) play jugáis you play ju**e**gas he/she plays ju**e**gan they play

		•	
¿Qué te gusta hacer?	What do you like to d	100	
Me gusta	Hike	navegar por Internet	to surf the net
Me gusta mucho	I really like	salir con mis amigos	to go out with my friends
No me gusta	I don't like	ver la televisión	to watch TV
No me gusta nada	I don't like at all	porque es	because it is
chatear	to chat online	porque no es	because it is not
escribir correos	to write emails	interesante	interesting
escuchar música	to listen to music	guay	cool
jugar a los videojuegos	to play videogames	divertido/a	amusing, funny
leer	toread	estúpido/a	stupid
mandar SMS	to send text messages	aburrido/a	boring
¿Qué haces en tu tie	empo libre? What d	o you do in your spar	e time?
bailo	Idance	monto en bici	I ride my bike
canto karaoke	I sing karaoke	saco fotos	I take photos
hablo con mis amigos	I talk with my friends	toco la guitarra	I play the guita
¿Qué tiempo hace?	What's the weather like	:e?	
hace calor	it's hot	llueve	it's raining
hace frío	it's cold	nieva	it's snowing
hacesol	it's sunny	¿Qué haces cuando	What do you do wher
hace buen tiempo	it's nice weather	llueve?	it's raining?
¿Qué deportes haces	s? What sports do y	ou do?	
Hago artes marciales.	I do martial arts.	Juego al tenis.	I play tennis.
Hago atletismo.	I do athletics.	Juego al voleibol.	I play volleyball.
Hago equitación.	I do/go horseriding.	iMe gusta!	I like it!
Hago gimnasia.	I do gymnastics.	iMe gusta mucho!	I like it a lot!
Hago natación.	I do/go swimming.	iMe gusta muchísimo!	I really, really like it
Juego al baloncesto.	I play basketball.	iMe encanta!	Hove it!
Juego al fútbol.	I play football.		
Los días de la semana	a The days of the we	ek	
lunes	Monday	domingo	Sunday
martes	Tuesday	los lunes	on Mondays, every
miércoles	Wednesday	100 101100	Monday
iueves	Thursday	los martes	on Tuesdays, every
viernes	Friday	ios martes	
VICTORS	Tiday		Tuesday

sábado

Saturday

# "Y you believe you can achieve!"

#### **Glossary:**

#### **Cardiovascular System-**

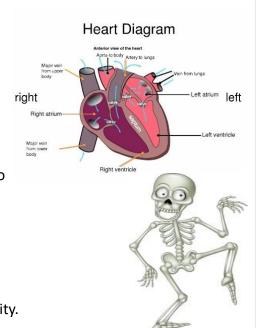
The organs responsible for circulating blood around the body

#### Muscular System

A combination of muscle groups that work together to create movement.

#### **Skeletal System**

The skeleton provides a framework for muscle attachments and enable movement for physical activity.



#### How to warm up and why

Pulse raising activity- to increase blood flow to the working muscles.

Stretches- lower and upper body, preparing the body for physical activity

Skill drills- specific to the actual sport. Eg dribbling in football.

Main game situation- usually small sided - putting the learned techniques into practice.

#### Extra - Curricular Timetable- Autumn / Winter

Lunch

After School

Monday- Bad/TT/ Basket Net/ Tramp/ football
Tuesday- Yr11 Foot training Net/ Tramp/ Rugby
Wednesday- Bad/TT/Basket BIG PUSH GCSE PE
Thursday- Bad/TT/Basket Mini Tennis Girls Football
Friday- 5 aside Football GCSE PE Intervention



#### **Good Sporting Conduct**

- Plav fairly
- Play to the rules
- Accept the refs decision
- Show sporting etiquette
- Shake hands with opponents
- Encourage team mates don't be negative!
- Show respect

#### Girls PE Kit

White Barlow logo, polo shirt, Maroon shorts or long black Barlow logo tracksuit bottoms.

Sports leadership is encouraged across all year groups. e.g helping out at primary school events/ sports days.

#### **Boys PE Kit**

For indoor activities or summer activities

White Barlow logo, polo shirt, black logo shorts, white sports socks

For outdoor sports such as football and rugby.

Maroon Barlow Rugby Top, black logo shorts or tracksuit bottoms, long black football socks, shin pads.

#### **Girls Curriculum**

- Netball
- Fitness /team Building
- Dance
- Gymnastics
- Handball
- Badminton
- Athletics
- Football
- Rounders



#### **Boys Curriculum**

- Football
- Gymnastics
- TT/ Badminton
- Rugby
- Cricket
- Athletics



All clubs are open to everyone! 2 Reward trips for regular attenders- e.g. Waterworld
After school practices finish approximately 4.25pm

Match finish times vary depending on whether it is home or away. You will be informed of the fixture details and expected to note down them down in their Journals.

Glossary:	that allows
<b>File</b> An	access to a
object on a	computer,
computer	interface, or
that stores	system.
data,	
information,	Private
settings, or	information
commands	Information
used with a	that can be
computer	used to
program.	identify,
Folder A	contact or
way to	locate a
organize	person.
computer	Public
files. A	information
folder is a	Information
storage	that has
space that	been made
many files	available for
can be	anyone to
placed into	access.
to group	
them	Cyber
together	bullying:
and organize	Bullying that
the	takes place
computer.	online
Internet A	
global	
0.0001	

computer network characters

Malware key	vocab
Malware	Software that can harm devices, which is installed on someone's
ware	device without their knowledge or consent.
	Viruses attach (by copying themselves) to certain files. Viruses are
Virus	self-replicating meaning that they can copy themselves across
	files or other computers without consent.
Worm	Similar to a virus but targets large networks. They will spread
worm	amongst devices connected to that network.
	Trojans are malware disguised as legitimate software. Unlike
Trojan	viruses and worms, Trojans don't replicate themselves – users
	install them not realising they have a hidden purpose.
	Secretly monitors user actions (eg. key presses) and sends info to
Spyware	a hacker. They can discover passwords, credit card details, and
	other personal information
	A type of malware which hijacks files and encrypts them. It will
Ransomware	demand money from a victim in exchange for the password to
	decrypt files.
Adware	A type of malware which floods a victim with unwanted adverts
	and pop-ups on their device.
Hacker	A person who unlawfully gains access to a computer system.
1	I .

Key vocab	
Phishing	To obtain people's information illegally online by
	pretending to be someone else.
Hacking	To gain unauthorized access to data in a system or
	computer.
Digital	The process of uncovering and interpreting electronic data
forensics	for the purpose of reconstructing past events.
Pen testing	A method of trying to infiltrate a network to check for flaws
ren testing	in security methods.
Ethical A hacker who claims to practice hacking to highlight	
Hacker	security concerns.
Network	Guidelines set in place by a company or organisation, which
policies	all members agree to, so that the network is as protected
policies	as possible.
Username	Identification used by a person with access to a computer,
Osername	network, or online service. (eg. 17B1)
Password	A secret word, phrase, or string of characters that allows
	access to a computer, interface, or system.
	A computer designed and built in the Second World War to
Colossus	decrypt German messages, so that battle plans could be
	interpreted.

#### Signs of Phishing emails

- Spelling mistakes?
- Inconsistent formatting
- Fake email addresses
- Threatening language
- Not using correct names
- Links to follow
- Links to alternative websites (hover, don't click!)
- Are there attachments that you weren't expecting?

#### Stay safe online:

- 1. Don't post personal information online.
- 2. Think carefully about posting any images or videos of yourself.
- 3. Keep privacy settings as high as possible.
- 4. Keep your password safe.
- 5. Don't befriend people you don't know.
- 6. Don't meet up with people you have met online.
- 7. Think before you say.
- 8. Treat others with respect, don't be rude!
- 9. If you see something which makes you feel unsafe, scared or uncomfortable. Report it.
- 10.Block any users that you don't want to see content from.
- 11.Don't put photos of you in your school uniform onto social media – it can make it clear to strangers where you go to school.

# **ART Year 7 Half Term 2: Self Portrait**

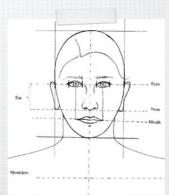
# The Formal Elements of Art are the building blocks used by artists to create a work of art.

- Line- a mark with greater length than width, the distance between two points. Lines can be horizontal, vertical, or diagonal; straight or curved; thick or thin.
- Shape- a closed line. Shapes can be geometric, like squares and circles; or organic, like free form or natural shapes. Shapes are flat and can express length and width.
- **Form-** a three-dimensional shapes expressing length, width, and depth. Spheres, cylinders, cubes, and pyramids are forms.
- Pattern- the repetition of a motif or symbol.
- **Texture-** the surface quality that can be seen and felt. Texture can be rough or smooth, soft or hard.
- Tone- the degree of lightness or darkness of an area. Tone varies from the bright white of a light source through shades of grey to the deepest black shadows.

### **Proportions of the face**

# General Rules

- \* The eyes are halfway between the top of the head and the chin.
- \* The bottom of the nose is halfway between the eyes and the chin.
- \* The mouth is halfway between the nose and the chin.
- \* The corners of the mouth line up with the centers of the eyes.
- \* The top of the ears line up with the center of the eyes.
- \* The bottom of the ears line up with the bottom of the nose.



Proportion is the feeling of unity created when all parts (sizes, amounts, or number) relate well with each other. When drawing the human figure, proportion can refer to the size of the head compared to the rest of the body.

Leonardo Da Vinci- The **Vitruvian Man**, a study of the proportions of the human body.



#### Leonardo di ser Piero da Vinci (14/15 April 1452 – 2nd May 1519),



Italian polymath Leonardo da Vinci is widely considered one of the greatest painters of all time. The Mona Lisa is the most famous of his works and the most popular portrait ever made. While Leonardo da Vinci is best known as an artist, his work as a scientist and an inventor make him a true Renaissance man.

Mona Lisa (1503–1505/07), Louvre, Paris





Anatomical drawings showing proportion



# **DRAMA Year 7 Half Term 2: Drama Elements**

# Glossary of Drama Conventions:

- Improvisation –
   Making something up on the spot.
- Freeze Frame A living picture/photograph
- Mime Using actions without words.
- Body as Prop –
   Using your body to create an object.
- Split Screen 2 scenes on stage a different times.
- Thought Tracking –
   Saying your
   thoughts to an audience.
- Flashback A scene in the past
- Flash-forward A

scene in the future.

- Narrator –
   Someone who tells the story to an audience.
- Audience Address -Speaking directly to the audience.
- Soundscape A variation of different sounds
- Stimulus A
   starting point that
   provokes an idea
   for a piece of
   theatre.

#### **Drama Elements**

**Movement –** The way the character walks, moves, uses actions and gestures.

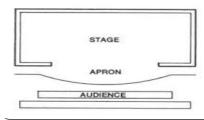
**Voice**– Changing the tone/volume/pitch to show emotion.

Character - Creating a role different from yourself.

**Mood/atmosphere** – How the scene feels to an audience. **Focus**-Being able to stay in role throughout a scene.

#### **Staging**

Proscenium Arch





#### **Drama Skills**

Levels – How the actor sits, stands, kneels on stage to show status.

Multi-role – When the actor plays more than one role. Vocal projection – Using the voice so the audience can hear. Gestures – Non verbal actions to communicate meaning. Facial Expressions – Using your face to show emotions and feelings

## MUSIC Year 7 Half Term 2: Keyboard and Treble Clef

#### **Glossary:**

Metre

**Simple time signatures** how many beats are in a bar

Musical notation

**Treble clef** – the clef used to notate higher pitched instruments and the right hand part on the piano.

Semibreve – 4 beats

Minim - 2 beats

Crotchets – 1 beat

Quavers – ½ a beat

**Semiguavers** − ¼ of a beat

Semibreve rest – 4 beat rest

Minim rest – 2 beat rest

Crotchet rests, - 1 beat rest

Quaver rests - ½ beat rest

**Semiquaver rests** − ¼ of a beat

rest

**Dotted Crotchets** − 1 ½ beats

**Dotted Quavers** – ¾ of a beat

**Dotted Crotchet rests** – 1 ½ beat rest

**Dotted Quaver rests** – ¾ of a beat

rest

Bar/s – section of music containing a specific number of beats Barlines – vertical lines separating

bars

**Double barlines** – 2 vertical lines marking the start and end

of a piece of music

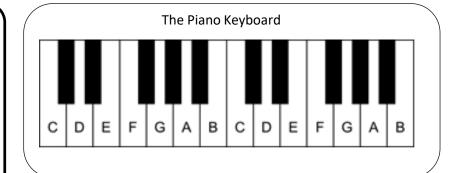
**Repeat barlines** – a double barline with two dots informing the performer to repeat a section of music

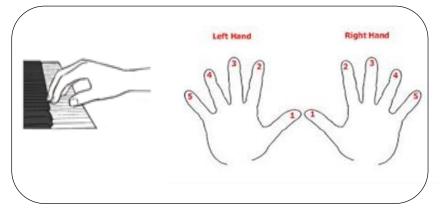
- Tempo: (speed)
   Allegro fast
   Andante at walking pace
   Largo slow
- Dynamics: (Volume)
  fortissimo ff very loud
  forte f loud
  mezzoforte mf medium loud
  mezzopiano mp medium quiet
  piano p quiet
  pianissimo pp very quiet
  Crescendo gradually getting
  louder

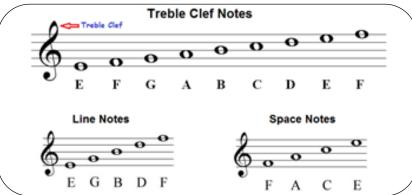
**Diminuendo** – gradually getting quieter

**Structure** – how the music is organised

**Technique** – the correct hand, wrist and finger positions to use on the piano







# The Design and Technology Unit depends on which rotation you are currently completing.

# **DT Year 7 Food Rotation**

# "If you believe you can achieve!"

#### **Glossary:**

- Cross contamination:
- The transfer of food poisoning bacteria from one food to another.
- Bacteria: Microscopic living things that live on everything around us
- Use By: Foods must be eaten or thrown away by the date
- After this date foods may be unsafe to eat even if they look fine, because the nutrients in the food may become unstable or a build-up of bacteria may occur.
- Best Before: Foods may be safe to eat after the date as long as they are not damaged, deteriorated or perished
- High Risk: Foods that are rich in protein and are at more risk of contamination

#### **Symptoms of Food Poisoning**

- nausea
- vomiting
- diarrhoea
- stomach cramps
- abdominal pain
- loss of appetite
- a high temperature (fever) of 38°C
- muscle pain
- chills.

# Cooking Temperatures

- Freezer: -18 °C
- Fridge: 1-4 °C
- Cooking: 75°C +
- Holding

hot food 63 °C +



#### **High Risk foods:**

Cooked meats and food containing meat, poultry or fish, pate, casseroles, curries, lasagne and meat pies, dairy products and foods containing dairy products, such as milk, cream, seafood (excluding live seafood) and food containing seafood, such as seafood salad, fish cakes, cooked fish or shellfish, cooked rice, pasta dishes, gravies and sauces

#### **Quality control:**

A system of checks made at any stage to ensure the overall quality of the product is good.

#### **Cooking skills:**

 Simmering: keep (food) just below boiling point when cooking or heating it. This is done on low flame/ low heat.

#### **Knife skills**

Bridge method



Claw method



#### **Food Dates and Labels**

- **Use by date:** Foods can be eaten (and most can be frozen) up until the use by date, but not after.
- Best before date: The food will be safe to eat after this date but may not be at its best. Its flavour and texture might not be as good.
- **Sell-By:** This label is aimed retailers, and it informs them of the date by which the product should be sold or removed from shelf life.





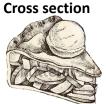






# Techniques in drawing food products Birds Eye Cross se





#### **Exploded view**



# **DT Year 7 Textiles Rotation**

#### **Glossary**

- 1. Biomimicry to mimic some thing from nature to inspire a design
- 2. Applique to sew a smaller piece of fabric on to a larger piece of fabric
- 3. Paper pattern a template used to cut out shapes of fabric accurately
- 4. Embellishment to add components such as beads or sequins for decoration
- 5. Quality Control to check the quality of a product throughout the manufacture
- 6. Sewing to join fabric together using a needle and thread
- 7. Cotton a fabric made from natural fibres (cotton plant)
- 8. Polyester a fabric made from synthetic fibres (fossil fuels)
- 9. Synthetic a man made material
- 10. Yarn yarns are thread that are knitted or woven to make fabric
- 11. Properties characteristics of a material
- 12. Aesthetics how something looks

Biomimicry comes from the **Greek** word 'bios'. Biomimicry means to **mimic** or **imitate** something from **Nature**. Over a 3.8 billion year **history** of trial and error **nature** has found solutions to many of the **problems** we need to solve. Biomimicry continues to be a valuable source of information and **inspiration** to today's designers.







<u>EMBELLISHMENT</u> - a decorative detail or feature added to something to make it more attractive

Eg. Sequins, beads, ribbons, buttons etc



<u>APPLIQUE</u> - When a shaped piece of fabric is cut and placed on top of larger piece of fabric and secured in place with thread, which is stitched around the edge of the shaped fabric.



<u>FABRIC PAINT/ PENS</u> - When fabric pens and crayons are used to draw and add colour to fabric. The fabric is then ironed to fix the designs onto the fabric, so they don't wash away when laundered.



**Sewing pattern** - a guide or diagram that you follow to make clothes or other things using a needle and thread. Three benefits of using sewing patterns:

- · designs will be accurate
- reduces waste material and mistakes
- identical products can be made

#### Literacy Task—Threading a Needle

Put the end of the	through the	of the needle	. Make sure both
ends of the thread are t	he same	. Tie a	at the end of the
thread, this will ensure t	he stitching does not cor	ne	

# **DT Year 7 Graphics Rotation**

#### **Graphic Design**

- Art work that is produced to COMMUNICATE or EXPLAIN an idea, to a group of people.
- Graphic designers combine words, symbols and images to create a visual representation of ideas and messages.

#### **Typography**

- Typography is the art and technique of arranging type to make written language legible, readable, and appealing when displayed.
- The term typography is also applied to the style, arrangement, and appearance of the letters, numbers, and symbols created by the process.

#### **Analysis**

Product analysis involves looking closely at existing products and identifying how they work, the materials they are made from, the industrial processes used to manufacture them and their key features. It may also involves the designer asking the general public or potential customers what they think of the product. The aim of product analysis is to help the designer develop even better designs and products in the future.

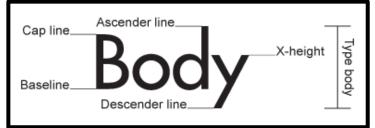
Aesthetics	The look, the theme, the colour, the finish.	
Cost	The cost the item is/ will be. Also the cost to make the object.	
Gustomer	The target market (who and why).	
Environment	The impact on the world (social, moral, environmental, ethical and the 6 Also consider where the item is to be placed when purchas	
Size	The size it is/ it must be. All measurements must be in mm	
Safety	The safety in the workshop and how is the product is safe for the consume	
Function	The product will/ does hold, include or have	
Materials	The materials it will be/ is it made fro	

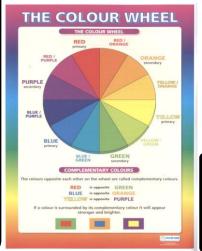
#### **Key Words**

- 1. Analysis
- 2. Annotations
- 3. Measurements
- 4. Development
- 5. Typography
- 6. Symbol

- 7. Logo
- 8. Design
- 9. Guidelines
- 10. Research
- 11. Evaluation
- 12. Research

## Cap line, X-height and Baseline







#### Linking typography to-

- Emotion
- Themes
- Colour
  - message

#### **Soldering Iron**

- Never touch the element of the soldering iron...400°C!
- Keep the cleaning sponge wet during use.
- Always return the soldering iron to its stand when not in use.
- Never put it down on the workbench.
- Turn unit off and unplug when not in use.
- The soldering irons should have silicone heat proof cables.
- All soldering irons used in schools should be
   12volts to reduce the risk of severe electrocution.
- Wear eye protection. Solder can "spit".
- Use of lead -free solders wherever possible.
- Control of fumes as limited fumes may be generated by soldering.

#### Modelling

Model making can be a very quick and cheap method of producing a product idea. Suitable materials include paper, card, foam board, blue foam™, wire and 3mm MDF. Users, clients and manufacturers use models to evaluate ideas and decide how well they meet their needs and how best to make it. Models are usually 3D but they can also be 2D drawings or CAD simulations.

#### **Electronic Circuits**

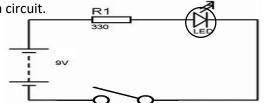
**Circuit** – Components joined together so that electricity can flow.

**Components** – The electronic parts that make up a circuit.

**Current** – The flow of electricity around a circuit.

**Resistors** reduce the current and protect other components

Current is measured in **Volts**Resistance is measured in **ohms** 



#### **Standard Components**

A standard component is usually an individual part (called a 'component'), manufactured in thousands or millions, to the same specification (such as size, weight, material etc...). A good example is a steel bolt. Bolts are available in a vast range of standard sizes. However, each size will be manufactured to an internationally accepted standard.





#### How to solder safely

- Identify the component side
- Recognise the soldering side
- Place component closely to PCB
- Bend the legs slightly to secure the component
- Place the soldering iron onto the pad and leg then introduce the solder wire
- Remove both wire and iron.
- Evaluate the solder
- Trim excess component leg
- QC checks to fault find

# Control Checking – Fault Finding on an electronic

**QC Quality** 

- Loose wires
- Pad hole visible

circuit

 Incorrectly placed component