



# Trinity Academy Grammar

Year 7 (R)  
Knowledge Organiser  
Term 3

*Your subjects are in alphabetical order.*



## 1 – Key Vocabulary

**forms:** objects that are 3D having a length, width and height

**design:** a plan or sketch to show the look of an object

**pattern:** a design in which lines, shapes or form are repeated

**kiln:** special oven that gets super hot to turn the clay into biscuit

**bisque:** clay that has been fired in the kiln without a glaze

**symbol:** an object or image that represents something else (i.e. heart= symbol of love)

## 2 – Key Vocabulary

**slab:** a thick flat ‘pancake’ of clay made with your hands or a rolling pin. Slabs are usually 1cm thick

**slip:** a mixture of clay and water

**score and slip:** joining wet clay by scoring or roughly scratching and adding liquid clay called slip. This seals the pieces together

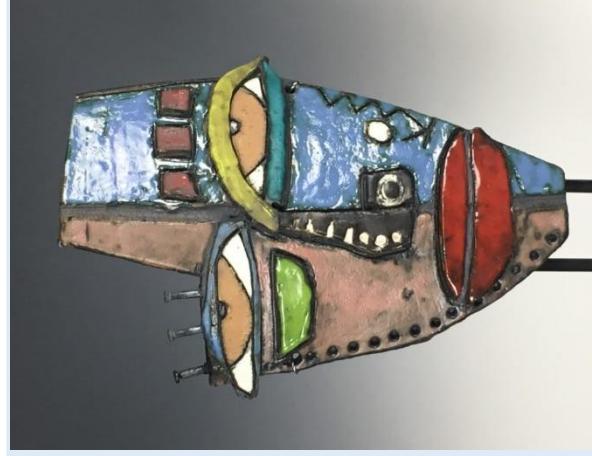
**oil pastel resist:** a clay decoration technique where you colour bisque clay with oil pastels, and paint over with a dark water-based paint

## 3 – African Masks

- Crafted from wood, metal, fabric, beads
- Symbolic purposes: fertility, protection
- Showing ancestors or spirits
- Integral in traditional religious ceremonies, performances, telling stories
- Different styles across Africa's regions
- Recognised as valuable art / craft
- Collected and displayed in museums worldwide
- Source of inspiration for many artists



## 4 – Artist Focus – Kimmy Cantrell



- Kimmy Cantrell is a contemporary American Artist
- he works using flat slabs of clay onto which he layers shapes
- Figures, faces, fish and flowers are central themes in his work
- He uses bold shapes, patterns and bright colours with some dark outlines in his work

Senufo mask

Kimmy Cantrell



## 1 – Non Verbal Communication (NVC)

**body language:** the way movements, posture and gestures can show how someone feels without speaking

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

**gesture:** a movement made by part of the body (e.g. arms, head) to convey a character's emotions

**gait:** a person's manner of walking

**pace:** the speed at which something happens or is done

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

## 2 – Melodrama

**Melodrama:** refers to a genre of theatre that features unbelievable plots, extreme emotions and exaggerated acting

**mime:** the use of movements, gestures and facial expressions to communicate an idea without words

**stock character:** a character who is based on a common stereotype

**slapstick:** an exaggerated style of performance that usually involves someone getting hurt in a comedic way

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## 3 – Theatrical Skills

**passing:** to pass an imaginary object from one person to another

**repetition:** to repeat the same action over and over again

**unison:** two or more people performing the same action at the same time

**slow motion:** to perform at a slower than normal pace with more exaggeration

## 4 – Stock Characters

**Hero:** a brave and heroic character who always saves the day

**Villain:** an evil character, who fights against the hero and usually kidnaps the damsel

**Damsel:** sometimes known as the 'damsel in distress', often a romantic interest of the hero. She is innocent and helpless and often find herself kidnapped by the villain and in need of saving

**Harlequin:** the comedic character, designed to lighten the mood and to entertain. Sometimes referred to as the joker or clown



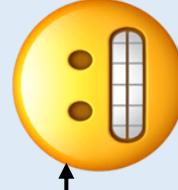
## 1 – Terminology

### Key Vocabulary

**narrative perspective:** who is telling us the story; this could be first

person (I) or third person (he/she/it)

**foreshadowing:** when the writer gives a hint of what is to come later in the story



**tension:** a feeling of nervousness when reading a story →

**suspense:** a feeling the reader feels when wanting more information or waiting for the outcome of certain events

## 2 – Vocabulary

**to convey:** to communicate a message or information

**to deduce:** to work something out by using facts

**highlights:** makes something stand out

**intrigue:** when a reader is interested in a story

**withholding information:** when the writer does not give away or reveal particular information in a story to build suspense e.g. the identity of a murderer

**elevation:** when something is revealed in a story

**denouement:** the ending of a story/final outcome

## 3 – Conventions of the Mystery Genre

**the murder:** the central plot in any murder mystery. This occurs at the start of a mystery novel

**the murderer (antagonist):** an important character who creates tension and suspense

**the detective/investigator:** often the protagonist who uncovers the truth through skills such as powers of deduction

**clues:** information used to solve a crime. A murder mystery must have clues that help the detective and the reader in solving the case

**red herring:** a false clue used to distract the reader from the truth

**twists:** when there is a shocking piece of information revealed in the story that readers did not expect

## 4 – Grammar: Syntax and Sentence Structure

**simple sentence:** contains one **subject** and **independent main clause to express one clear idea**, e.g. *The two main protagonists in 'High Rise Mystery' are called Nik and Norva*

**compound sentence:** a sentence made of **two independent clauses joined together with a connective**, e.g. *High Rise Mystery is a mystery novel and is set in London*

**complex sentence:** a sentence that contains an **independent main clause with a subordinate clause added which contains extra information** e.g. *Nik and Norva, who are the protagonists of 'High Rise Mystery'*, are both extremely intelligent. The subordinate clause in the sentence is in bold

## 1 – Animals

un animal	a pet	une araignée	a spider
un chat	a cat	une chèvre	a goat
un chien	a dog	une grenouille	a frog
un hamster	a hamster	une renne	a reindeer
un lapin	a rabbit	une souris	a mouse
un cheval	a horse	une tortue	a tortoise
un oiseau	a bird		
un poisson	a fish		
un serpent	a snake		

**Indefinite article:** the word for 'a' changes in French depending on whether a noun is **masculine** or **feminine**:

If a noun is **masculine** we use **un**: **un chien** (a dog)

If a noun is **feminine** we use **une**: **une renne** (a reindeer)

## 2 – Plural Nouns

Plural means <b>more than one</b>
In French most nouns are made plural the same way we do in English: add ' <b>S</b> ' to the end
Note: animal and oiseau have an 'x' in the plural form
We also need to change the article before the noun:

indefinite article	plural article	definite article	plural article
<b>un</b>	<b>des</b>	<b>le</b>	<b>les</b>
<b>une</b>	<b>(some)</b>	<b>la</b>	<b>l'</b>

e.g. <b>un chien</b> → <b>des chiens</b>	<b>deux chats</b>
<b>la renne</b> → <b>les rennes</b>	<b>six oiseaux</b>

We can replace articles with numbers for plurals too

## 3 – Colours and Agreements

pink	rose
red	rouge
green	vert <b>e</b>
purple	violet <b>e</b>
silver	gris <b>e</b>
bronze	jaune
gold	noir <b>e</b>

Colours	
blanc <b>/he</b>	white
bleu <b>/e</b>	blue
brun <b>/e</b>	brown
gris <b>/e</b>	grey
jaune	yellow
noir <b>e</b>	black

Adjective endings match whether the noun that they are describing is **masculine** or **feminine**:

<b>masculine</b>	<b>feminine</b>
<b>singular</b>	<b>singular</b>

normal  
spelling

add 'e'

e.g. J'ai **un** lapin **brun**.

I have a brown rabbit.

J'ai **une** tortue **verte**.

I have a green tortoise

## 4 – Plural Agreements

Adjective endings also match whether the noun that they are describing is **singular** or **plural**:

masculine	feminine
plural	plural
add 's'	add 'es'

e.g. J'ai deux **lapins** brun**s**.

I have two brown rabbits

e.g. J'ai trois **tortues** vert**es**.

I have three green tortoises

## 5 – My House

**il y a**

**il n'y a pas de**

**there is/are**

**there isn't**

a staircase

a garden

a living room

a bedroom

a kitchen

a dining room

a bathroom

a sofa

a bed

a wardrobe

a chair

a chest of drawers

a window

a door

## 6 – BAGS Adjectives

Normally adjectives come **AFTER** the noun in French.

e.g. la maison **blanche** = the **white** house

However, some adjectives come **BEFORE** the noun.

These are called **BAGS** adjectives because they describe:

<b>Beauty</b>	beau/belle (beautiful)	joli/e (pretty)
<b>Age</b>	nouveau / nouvelle (new)	vieux/vieille (old)
<b>Goodness</b>	bon/he (good)	mauvais/e (bad)

**Size**

grand/e (big)

petit/e (small)

e.g. J'ai une **petite** lampe. = I have a **small** lamp

## Geography

### Term 3

## 1 – UK Ecosystems

### Key Vocabulary:

**ecosystem**: a natural habitat made up of living and non living things that work together

**meadow**: grassland maintained by traditional farming practices with lots of wild flowers

**deciduous woodland**: the natural ecosystem of the UK where leaves are temporary

- Food chains in an ecosystem show the direction of energy travelling from one species to another.
- If one part of a food chain changes, this effects all parts of the chain. This is called interdependence

## 2 – Global Ecosystems

### Key Vocabulary:

**biodiversity**: is the variety of plants and animals that live in an ecosystem

**food chain**: a series of organisms each dependent on the next as a source of food, e.g. Cows depend on

grass

**food web**: a system of interlocking food chains

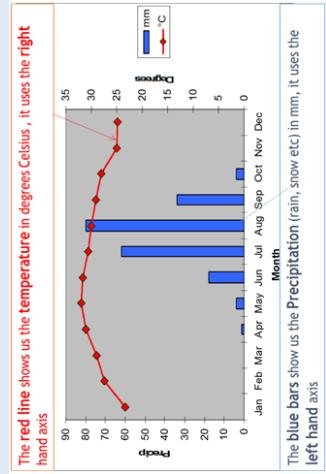
- An example of a local ecosystem is a pond.
- Examples of global ecosystems are the desert, tropical rainforest, or the tundra
- Humans impact the ecosystem by putting waste in the

## 3 – Climate Graphs

### Key Vocabulary:

**climate**: the average weather in a place  
**weather**: the day to day condition of the atmosphere.

This includes temperature, rainfall and wind



## 4 – Animal Adaptations

### Key Vocabulary:

**adaptation**: when a plant or animal becomes better suited to their environment and climate

- Polar bears have naturally adapted to the polar regions by having a white fur. This allows the polar bear to be camouflaged whilst hunting on ice
- Most animals are not adapting to the human world and are becoming extinct
- **One in four** mammals are endangered on planet Earth due to humans

## 5 – The Amazon Rainforest

### Key Vocabulary:

**deforestation**: when forests are destroyed by cutting trees (logging) and not replanting them

What can be done?

- Individuals: buy food which has a green frog from the rainforest alliance
- Governments: banning deforestation, such as in Ecuador
- Brazil has a special police force called the IBAMA.
- These police officers use the satellite technology, computers and helicopters to stop deforestation

## 6 – Conserving the Rainforest

### Key Vocabulary:

**conservation**: protecting from harm or destruction

## 1- William's Problems Recap

Economic: Related to money and jobs  
Political: Related to running the country e.g. laws

Many English lords did not want William to be king. William would find it hard to trust these powerful men

- William needed more money to establish control of England
- Some people in the north had supported Harold Hardrada's attempts to take control
- There were armed soldiers in London who had supported Harold Godwinson. He needed to get here quickly and defeat them
- He also had to capture the castle at Dover from soldiers who disliked him

## 2- Feudal System

feudal: related to how much land someone has  
hierarchy: ranking in order of importance  
monarch: a king or queen

- William I, King of England, set up a feudal system in England after 1066
- The feudal hierarchy was decided according to how much land someone had
- During the medieval period, someone's land showed how wealthy they were
- In England, the monarch sat at the top of this feudal hierarchy. The peasants sat at the bottom

## 3 – Harrying of the North

conflict: a disagreement with someone  
harrying: carrying out lots of attacks  
rebellion: fighting against someone

- William faced many rebellions in the north of England. The most deadly took place over the winter of 1069-70 and was known as the Harrying of the North
- During this rebellion, the Saxons were joined by the Danes (from Denmark)
- King William was able to pay the Danes to return home.
- The Saxon rebels were starved out using a 'scorched earth' policy'
- 75% of the population around York died or never returned

## 4- The Domesday Book

Domesday: a day of judgement  
survey: a list of something

wealth: the money, land and possessions someone has

- By 1086, King William wanted to know how much wealth there was in the country. This would help him to know how much tax he could collect for wars
- William sent his trusted advisors around England to record their findings in a survey. They visited over 13,000 difference places
- This survey became known as the 'Domesday Book'
- The book shows that the Church controlled 25% of England's land and William controlled 20% of England's land

## 5 – Religion Under the Normans

Catholic: a type of Christianity; the Pope is in charge  
the Church: the Christian religion  
clergy: someone who works for the Church

- The Normans continued England's religion of Catholicism, Christianity
- King William believed that many of the clergy were breaking their vows to God  
 E.G. Some clergymen were fulfilling two jobs at once.
- King William replaced Anglo-Saxon clergy with Norman clergy – the most famous was a man called Lanfranc
- Only the bishops at Durham Cathedral had the power to raise an army
- The number of monks/nuns increased from 1,000 to 4,000

## 6 – Bayeux Tapestry

Tapestry: A piece of thick fabric with pictures  
Bayeux: a town in Normandy

- The Bayeux Tapestry was produced by the Normans following William's conquest
- Its origins are not known for certain, but some historians believe it was arranged by William's half-brother, Odo, and sewn by English women
- The tapestry is 70 metres long and gives an account of events from 1064 - 1066
- Although the tapestry was made almost 1,000 years ago, historians still debate about who made it, why it was created and how it presents the events of 1064 - 1066

## Literacy – R Band

### Prefixes and Suffixes

Year 7

Term 3

#### Week 1 – (-sion)

The suffix (–sion) turns the verb into the noun:

divide → division

confuse → confusion

divide → decision

collide → collision

#### Week 2 (-able)

The suffix (–able) turns the verb into the adjective:

apply → applicable

consider → considerable

notice → noticeable

comfort → comfortable

#### Week 3 (co-)

The prefix (co-) means ‘together’

**colleague**: someone you work with

**co-dependent**: someone who relies on you

**co-ordinate**: working together to organise something

#### Week 4 (-ity)

The suffix ‘ity’ turns the verb into a noun:

inactive → inactivity

responsible → responsibility

real → reality

clear → clarity

#### Week 5 (pre-)

The prefix (pre-) means ‘before’

historic → prehistoric

read → pre-read

view → preview

caution → precaution

#### Week 6 (de-)

The prefix (de-) means to change or take away

**compose** → decompose

**contaminate** → decontaminate

**activate** → deactivate

**motivate** → demotivate

Those topics highlighted in yellow also appear in Science, Geography or Technology

Year 7

Term 3

## 1 – Financial Maths

### Key Vocabulary

**credit:** money going into a bank account



**debit:** money going out of a bank account



**profit:** make money



**loss:** losing money



## 2 – Multiplying and Dividing

### Key Vocabulary

**product:** The result of a multiplication of two or more values

example: The product of 4 and 9 is 36 because  
 $4 \times 9 = 36$

• **Multiplication is commutative**

Example:  $3 \times 5 = 15$  and  $5 \times 3 = 15$

$3 \times 5 = 5 \times 3$

• **Division is not commutative**

Example:  $45 \div 9 = 5$  and  $9 \div 45 = 0.2$

$45 \div 9 \neq 9 \div 45$

## 3 – Factors and Multiples

### Key Vocabulary

**factor:** When a number can be written as a product of two whole numbers

Example: Factors of 15 are:

1, 15 because  $1 \times 15 = 15$

3, 5 because  $3 \times 5 = 15$

**multiple:** A number in a specified times table

Example:

9, 18, 27, 36 and 45 are multiples of 9

3, 6, 9, 12 and 15 are multiples of 3

## 6 – 9 Times Tables

## Applications of Number

## 4 – Metric Units

### Units of Length



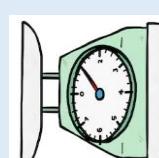
**millimetre (mm)**  
**centimetre (cm)**  
**metre (m)**

### Units of Capacity



**millilitre (ml)**  
**litre (L)**

### Units of Weight



**gram (g)**  
**kilogram (kg)**

## 5 – Fractions

### Key Vocabulary

**numerator:** top number in a fraction

**denominator:** bottom number in a fraction.

**dividend:** number that is being divided

**divisor:** number that you are dividing by

**quotient:** result of a division

**proper fraction:** fractions with a numerator less than the denominator

**improper fractions:** fractions with a numerator greater than the denominator

**mixed numbers:** contain an integer and a proper fraction

## 6 – 9 Times Tables

## 3 – Factors and Multiples

### Key Vocabulary

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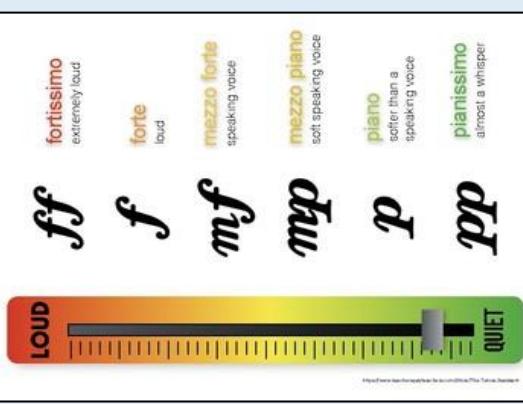
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## 1 – The Elements



**Dynamics:** the term used for the volume

**Rhythm:** different note lengths played in a chain

**Texture:** the different layers of sound

**Structure:** how music is put together

**Melody:** the main tune

**Instrumentation:** the instruments used

**Tempo:** the speed

**Harmony:** sounds played together at the same time

## 2 – Notation

**Tone:** an interval of a step

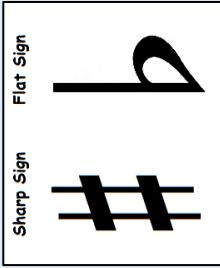
**Semitone:** an interval of half a step. Usually a white note to a black note

**Sharp:** when a note is raised by a semitone

**Flat:** when a note is lowered by a semitone

**Dotted note:** the dot makes the note half as long again

	2 beats		3 beats
	1 beat		1½ beats



## 3 – Pitch

**Stave:** The five lines we write music notes on

**Treble Clef:** Used for high pitched notes

## 4 – Tonality

**Major:** when a piece of music has a bright, happy sound

**Minor:** when a piece of music has a dark, sad sound

**Chords:** two or more notes performed at the same time

**Triad:** three notes performed as a chord

**Key Composer**

**Ludwig van Beethoven:**



- A deaf German composer and pianist from the Classical period

- Composed 'Ode to Joy' and 'Für Elise'

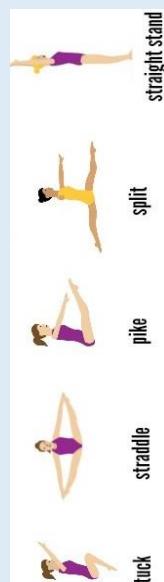
## 1 – Basic Shapes

### 2 – Leaps & Jumps

**tuck-** Straight back, knees into chest, toes pointed, arms above head

**saddle-** back straight, arms to toes, toes pointed, legs straight out to the side

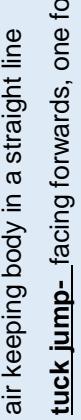
**pike-** back straight, legs in front of body, legs together, toes pointed and legs straight



**split leap-** take 1-3 steps forward, swing opposite leg up and forwards as if you are taking a large step, push hard of the floor into a split position, land on toes



**straight jump-** facing forwards, one foot in front of the other, push through the toes and jump straight into the air keeping body in a straight line



**tuck jump-** facing forwards, one foot in front of the other, push through toes and bend knees and lift to chest to tuck position

## 4 – Handstand

### handstand-

- arms above head squeezing ears, lunge forward with dominant leg, keep weight evenly distributed between the feet
- shift the weight forward onto the front foot whilst lifting the back foot
- reach forward and down to the floor, keep body straight and tight
- keep the shoulders over the hands
- handstand should be as tall as possible

**forward roll-** hands above head squeezing ears, squat with knees and place both hands flat on the floor, tuck head into chest, chin should be on chest.

Push with the legs, back of head should make contact with the mat. Weight should be still on hands



**backwards roll-** tuck chin into chest, squat on keeping shoulder close to knees. Roll backwards and reach with hands. Push off the floor while kicking feet over to land on feet and finish standing straight

## 5 – Cartwheel

### cartwheel:

- start in lunge, reach forward and turn shoulders just before touching the floor
- kick back foot as first hand contacts floor, then push off second foot as second hand contacts floor
- as 1<sup>st</sup> hand pushes off floor, 2<sup>nd</sup> hand contacts floor, then 2<sup>nd</sup> hand pushes off floor as 1<sup>st</sup> foot lands
- arms reach up, finishing in lunge facing opposite direction. It should have a 1-2-3-4 rhythm

### 3 – Rolls

## 6 – Floor Routines

### floor routines-

to create an aesthetically pleasing floor routine you must include elements of all the different skills. Keep your body tight and make sure all moves are fluent from one to the next. Ensure arms and legs are straight and toes are always pointed

- aesthetically pleasing** – beautiful to watch
- body tension** – keeping muscles tight and controlled
- start and finish position** – show you are ready to start and have completed the routine by holding a shape

## 1 – Set up, grip, stance and rally

### Key Vocabulary

**pistol grip:** the correct positioning of the hands on the bat



**backhand push:**

- Start with bat around waist height, in front of your body
- Bat face is neutral
- As the ball approaches, move your bat forwards, leading with elbow



## 2 – Backhand

### Key Vocabulary

**serve:** an act of hitting the ball to start play.

**forehand serve:**

- Stand with knees slightly bent
- Face sideways with shoulder pointing towards target
- Hold ball in front of body with an open palm
- Toss the ball up 16cm
- As the ball drops strike the ball with the bat angled towards the table.
- Ball must bounce servers side of the table first



## 3 – Serve

### Key Vocabulary

**serve:** an act of hitting the ball to start play.

**forehand serve:**

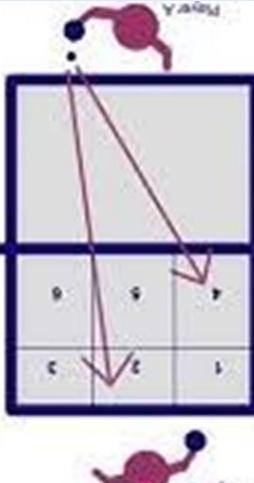
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## 5 – Tactics to Overcome an Opponent

### Key Vocabulary

**tactics:** an action or strategy carefully planned to achieve specific outcome

- shot placement:** playing the ball in different directions to move your opponent around the table



## 6 – Rules and Regulations

### Key Vocabulary

**volley rule:** The ball cannot be hit before it has bounced, would result in a point lost

**singles:** Every two serves, the serve switches to the opponent

A point is lost if you:

- Hit the net with the ball and it doesn't go over to your opponent's side
- Does not hit the table
- Bounces twice on your side
- Volleying, hitting the ball before it has bounced

## 4 – Forehand

### Key Vocabulary

**forehand push:**

- Start with bat around waist height
- Elbow action: moving elbow and shoulder back together
- Contact the ball just in front of your body
- Your bat should follow through and finish in front of your body



## 1 – The Prophet Muhammad (PBUH)

### Key Vocabulary

**prophet:** a messenger of God

**Mecca:** a city in Saudi Arabia

**Allah:** the Arabic word for God

**Qur'an:** the Muslim holy book

- The Prophet Muhammad (PBUH) is the most important prophet in Islam. This is because they believe he is the final prophet
- Muhammad was born in the city of Mecca
- Muslims believe Allah chose Muhammad to be his prophet because he was a fair and wise man and because he was concerned for his people
- Allah revealed the words of the Qur'an to Muhammad through the Angel Jibril

## 3 – The 5 Pillars

## 2 – The Nature of Allah

### Key Vocabulary

**tawhid:** belief in the oneness of God

**sin:** an act that goes against God

**authority:** the power or right to give orders

- Muslims learn about the nature of Allah in the Qur'an
- The Qur'an also gives Muslims guidance on how to live a life which pleases God.
- Muslims believe that there is only one God, who is all powerful and the creator of everything. This is the most important belief in Islam
- Muslims believe that you cannot ever draw pictures of Allah. This is because it is a sin to think we would ever know what he looks like or that his power and authority can be summarised in one picture

## 4 – Hajj

### Key Vocabulary

**pillar:** something that holds something else up

- The 5 pillars are the 5 main central beliefs of Islam. They are called pillars because the beliefs hold the religion up
- 1. Shahadah – the declaration of faith. The belief that there is one God, Allah, and that Muhammad (PBUH) is his messenger
- 2. Salah – prayer. Muslims must pray 5 times a day to ensure they always have God in their mind
- 3. Zakah – giving to charity. Muslims must give 2.5% of their income to charity
- 4. Sawm – fasting during Ramadan. During the month of Ramadan, Muslims must fast during daylight hours
- 5. Hajj – the pilgrimage to Mecca

### Key Vocabulary

**pilgrimage:** a special journey, made for religious reasons

- Hajj:** the fifth pillar of Islam where Muslims go on pilgrimage to Mecca
- Muslims must travel to Mecca, in Saudi Arabia, at least once in their lifetime.
- The only reasons why a Muslim would be excused from visiting Mecca at least once would be if they could not afford it (although charities can help them) or if they are too ill!
- The journey must take place within the month of Dhul-Hijja (the 12<sup>th</sup> and final month of the Islamic calendar)
- Everyone taking part in Hajj is treated as an equal, no matter who they are or where they are from
- The journey shows self-discipline and brings Muslims closer to God

B1 – Diffusion	C1 – Chemical Reactions	P1 – Forces
<p><b>Key Vocabulary</b></p> <p><u>diffusion</u>: the net movement of particles from an area of high concentration to an area of low concentration</p> <p><u>concentration</u>: the amount of particles of a substance in a set volume</p> <p><u>exchange</u>: the act of giving one thing and receiving another</p> <p><u>net movement</u>: the overall movement</p> <p><u>particle</u>: the smallest unit of a substance</p>	<p><b>Key Vocabulary</b></p> <p><u>molecule</u>: two or more atoms bonded together</p> <p><u>chemical reaction</u>: a process which involves the rearrangement of atoms to form new substances</p> <p><u>reactants</u>: substances at the beginning of a reaction</p> <p><u>products</u>: substances produced at the end of a reaction</p> <p><u>physical reaction</u>: a process which no new substance is formed</p> <p><u>precipitate</u>: an insoluble solid formed from a reaction</p>	<p><b>Key Vocabulary</b></p> <p><u>force</u>: a push or pull effect that can cause a change in shape, direction or speed of an object</p> <p><u>contact force</u>: a force produced by two objects that are touching</p> <p><u>non-contact force</u>: a force produced when two objects are not touching</p> <p><u>friction</u>: a force that goes against a moving object</p> <p><u>air resistance</u>: a force created by air particles acting against a moving object</p>
<p><b>B2 – Gas Exchange</b></p> <p><b>Key Vocabulary</b></p> <p><u>alveoli</u>: tiny air sacs in the lungs where gas exchange occurs</p> <p><u>stomata</u>: small opening on the surface of a leaf for gas exchange occurs</p> <p><u>diaphragm</u>: a sheet of muscle found under the ribs</p> <p><u>intercostal muscles</u>: muscles in between the ribs that help move the ribcage</p> <p><u>inhale</u>: the process of breathing air into the lungs</p> <p><u>exhale</u>: the process of breathing air out of the lungs</p>	<p><b>C2 – Combustion and Oxidation</b></p> <p><b>Key Vocabulary</b></p> <p><u>compound</u>: a pure substance that contains two or more different types of atoms chemically joined together</p> <p><u>element</u>: a pure substance that contains one type of atom</p> <p><u>mean</u>: calculated by adding all values together then dividing by the number of values</p> <p><u>word equation</u>: a written equation to show the reactants and products in a chemical reaction</p> <p><u>observe</u>: to look closely at something</p>	<p><b>P2 – Weight, Mass and Gravity</b></p> <p><b>Key Vocabulary</b></p> <p><u>normal contact</u>: a force applied to an object by a supporting surface</p> <p><u>weight</u>: the force an object applies downwards due to gravity</p> <p><u>mass</u>: the amount of matter in an object</p> <p><u>gravity</u>: the force that attracts an object to the centre of the earth</p> <p><u>gravitational field strength</u>: the strength of the gravity acting on an object</p> <p>Weight (N) = Mass (kg) x Gravitational Field Strength (N/Kg)</p>

## 1- ACCESS FM

### 2 – Drawing Techniques

**ACCESS FM** is a tool used to analyse, evaluate and design products. It helps you to consider the main features of the product using the key headings below

**aesthetics:**  
what something looks like, the appearance of it

**construction:**

how something has been made; the processes that have been used to manufacture it

**customer:**

who is going to buy and use the product

**environment:**

the impact of a product on the environment, and how environmentally friendly it is

**safety:**

how safe a product is to use, and are there any dangers associated with it

**size:**

how big or small a product is, including dimensions (measurements)

**function:**

how a product works, what it does, or what it is used for

**materials:**

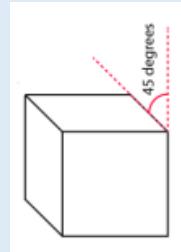
what a product is made from, the materials that have been used in the construction of it

There are a range of technical drawing techniques that communicate ideas to others

*Notice how the same cube looks different using the 2 different methods of technical drawing.*

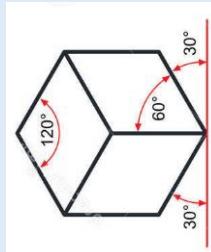
**oblique drawing:**

- simple 3D drawing technique
- uses 45° projection lines
- start by drawing a 2d shape
- use squared paper to help you

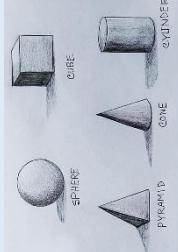


**isometric drawing:**

- complex 3D drawing technique
- uses 30° projection lines
- use isometric paper to help you



**rendering:** the process of adding shading or colour to a outline or wireframe shape to make it appear more realistic and 3D



**shape:** a 2D geometric figure such as a square, triangle or rectangle. Has height and width

**form:** a 3D figure such as a cone, cylinder, cube, sphere. Has height, width and depth

**SCAMPER** is a useful creativity tool that helps you generate ideas for new products and services, or to improve existing ones



**substitute:**

replace a part of a product or idea with something else

**combine:**

merge 2 or more ideas or products together

**adapt:**

adjust or tweak, to make small changes to a product

**modify:**

change the overall process to bring new ideas or products **put to another use:**  
do something else with a product, find another purpose, or another function for it

**eliminate:**

take out parts of a process or product

**reverse/ rearrange:**

change the layout of parts of a product or service

## 1 – Our Local Community

### Key Vocabulary

**community:** a group of people living in the same place or sharing in a common feature

**census:** an official count and survey of a population

- You go to school in a town called Sowerby Bridge
- Sowerby Bridge is located 3 miles outside of Halifax town centre
- In the 2011 census, there were 11,703 people living in Sowerby Bridge
- At Trinity Academy Grammar, we have students who come from a variety of local areas. These include: Halifax, Sowerby Bridge, Bradford, Ovenden, Ilklingworth, Mixenden, Pellon, and many more
- You are part of the community where you live, but also part of our school community

## 2 – Our Local MP

### Key Vocabulary

**Member of Parliament:** someone who represents the people of their local area in Parliament

**Parliament:** the group of people who make laws for the UK

- In Sowerby Bridge, our current local MP is Holly Lynch
- Holly Lynch is a member of the Labour party and has been the MP for Sowerby Bridge since 2015
- Holly's job is to make sure that the people of Sowerby Bridge have their views represented in Parliament, so that all people feel part of the decision making process

## 3 – Our Local Charities

### Key Vocabulary

**charity:** an organisation set up to provide help and raise money for those in need

**charity:** a mental health charity which offers free talking groups for

- men. They aim to challenge the stigma around male mental health
- Healthy Minds is a mental health charity based in Halifax. They provide a variety of services with the aim of helping people reach a state of wellbeing where all can meet their full potential
- SmartMove Calderdale help people who are homeless or at risk of becoming homeless
- You can fundraise for a charity. This means that you take part in events to raise money for the charity
- You can donate to a charity. This means that you give items to a charity that they can sell to raise money

## 4 – How we can Help

### Key Vocabulary

**volunteer:** working for something without being paid

**donation:** something that is given to a charity

**fundraising:** raising money for a charity

- One important part of belonging to a community is caring for other people
- Supporting charities is one of the best ways to do this
- You can volunteer for a charity. This means that you will give some of your time to the charity without being paid
- You can fundraise for a charity. This means that you take part in events to raise money for the charity
- You can donate to a charity. This means that you give items to a charity that they can sell to raise money





## 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



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



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

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.