Year 8 Knowledge Organiser Contents

A Bugs

Facts about the different types of bugs.

- **Not All Insects Are Bugs, But All Bugs Are Insects** – True bugs belong to the Hemiptera order and have unique mouthparts for sucking plant sap or animal fluids.

- **They Have Piercing-Sucking Mouthparts** – Unlike insects that chew (like beetles), true bugs use a straw-like proboscis to feed. Examples include aphids, cicadas, and assassin bugs.

- **Stink Bugs Release a Bad Smell** – Many true bugs, like stink bugs, release foul odours to deter predators.

- **Some Bugs Can Sing!** – Cicadas are among the loudest insects, producing sounds by vibrating membranes on their bodies.

- **They Go Through Incomplete Metamorphosis** – Unlike butterflies, which have a full metamorphosis (egg, larva, pupa, adult), true bugs develop through gradual stages (egg, nymph, adult) without a pupal stage.

- **Water Bugs Can "Walk" on Water** – Insects like water striders use surface tension to stay on top of water without sinking.

- **Assassin Bugs Are Deadly Hunters** – Some bugs, like assassin bugs, inject venom into their prey to liquefy their insides before sucking them up.

B Tone

SHAPE
PATTERN
COLOUR

Shape is a closed, two-dimensional area created by lines, colours, or textures. Shapes can be **geometric** (circles, squares, triangles) or **organic** (freeform, irregular).
Example: A painting may use bold geometric shapes for a modern look.

Pattern is a repeated arrangement of shapes, colors, lines, or textures. It can be decorative or structural.
Example: A floral pattern on fabric or a repeated geometric design in architecture.

Colour is the visual perception of different wavelengths of light. It consists of primary colours (red, blue, yellow) and their combinations.
Example: Artists use warm colours (red, orange, yellow) to create energy and cool colours (blue, green, purple) for a calming effect.

C William Morris

Who is William Morris?
William Morris was an English textile designer, poet, artist, writer, and socialist activist associated with the British Arts and Crafts movement. He was a major contributor to the revival of traditional British textile arts and methods of production.

How old is William Morris? Where was he born?
Born: 24 March 1834 Walthamstow, Essex, England
Died: 3 October 1896 (aged 62) Hammersmith, England

What is William Morris known for?
William Morris founded the Arts and Crafts movement in Britain. Discover how he was inspired by nature and went on to design some of the most recognisable textile patterns of the 19th century.

D Mark Making

The four main types of mark making are:

Dot, Shapes, Lines, textures & patterns.

Curriculum Area: Computing   Half Term: 6   Year: 8

A Key Terms

EduBlocks visual block-based programming tool that helps to introduce text-based programming languages.

Python A text-based programming language

Programming Code The process of writing computer program. The instructions that you write to program a computer.

Algorithm A set of rules / instructions.

Sequence Parts of the code that run in order and the instructions for our code.

Selection Using logical tests to change the flow of the sequence.

B Key Terms

Iteration Using loops to repeat sequences of code. Code is repeated (looped) while something is true or for a number of times.

Variable A value that can be changed (speed, lives, score)

Function Inbuilt code that performs a specific task

Data Type: String A sequence of characters that can include letters, numbers, symbols

Data Type: Integer Whole numbers, no decimal point

Data Type: Float Decimal Numbers

While Loop A "While" Loop is used to repeat a specific block of code an unknown number of times, until a condition is met.

C Key Terms

For Loop For loop is a programming language conditional iterative statement which is used to check for certain conditions and then repeatedly execute a block of code as long as those conditions are met.

IF, Else, Elif The if/else statement executes a block of code if a specified condition is true. If the condition is false, another block of code can be executed.

Functions A function is a command which contains the steps needed to perform a task..

Subroutines a set of instructions designed to perform a frequently used operation within a program.

D Comparative & Arithmetic Operators

== Equal to

!= Not equal to

< Less than

> Greater than

<= Less than or equal to

=> Greater than or equal to

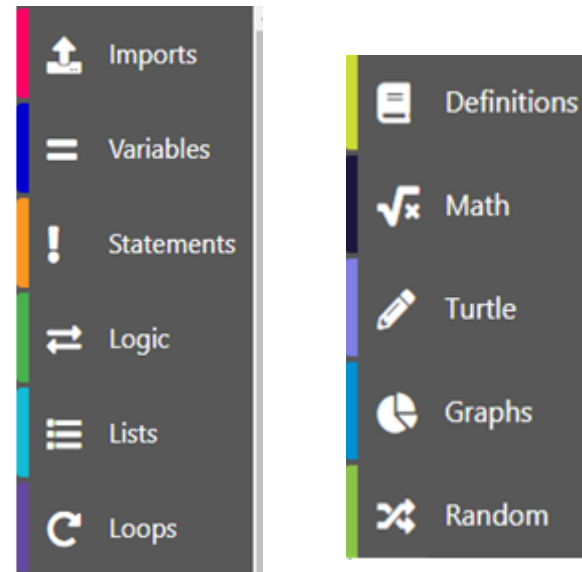**+** Addition

- Subtraction

* Multiplication

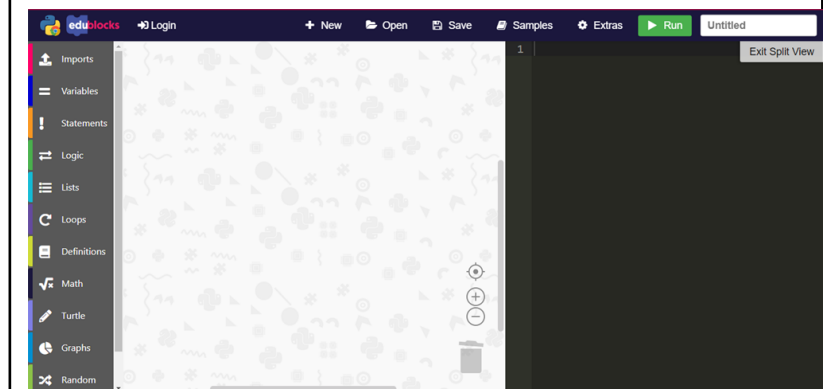**/** Division

// Integer Division

% Remainder

* * Exponent (power of)

E Type of blocks

F Edublocks software

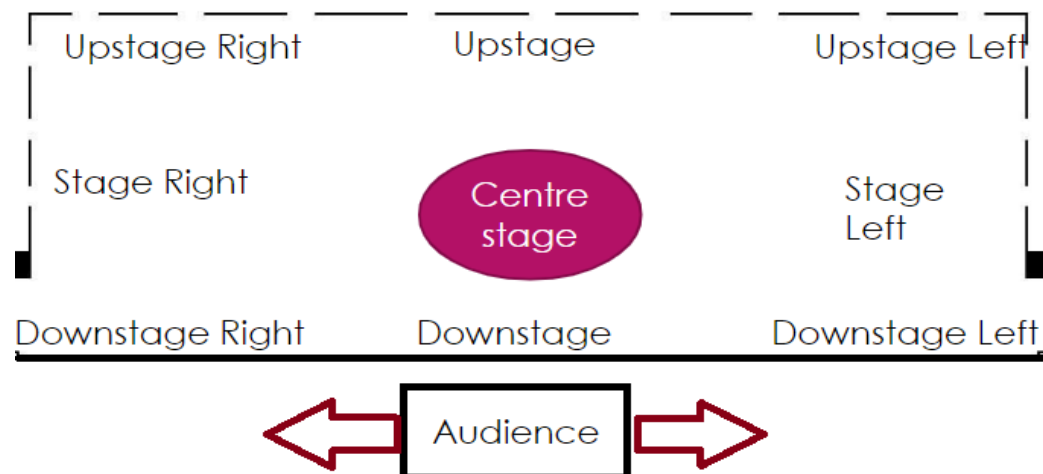You can split the screen to view your code in Python

Curriculum Area: Drama   Half Term: 6   Year: 8

A. Key abbreviations for this term.

DSL	Downstage Left
USR	Upstage Right
CS	Centre stage
SM	Stage manager
SFX	Sound effects

B. Behind the scenes.

Wardrobe	This is where all the costumes are kept. The wardrobe department are responsible for creating costumes and wigs.
Set Design	The set designer will talk to the director to see what he has in mind for the design for the scenery for the performance. They will then create a model box and drawings of their idea. Once it has been agreed, the set designer will lead a team who will build it for the theatre.
Fight Director	This is the person who will train the actors to make any conflict on stage look real whilst remaining safe.

C. Areas of the stage.

D. Performance Skills.

Vocal Skills	Vocal skills involve anything to do with the voice except singing. These skills include: • Using pause to create tension • Using an accent to create character • Using tone to show emotion. • Using pace to feelings and the situation the character finds themselves in.
Physical Skills	Physical skills involve anything to do with the body. These include: • Using gesture to emphasise a word • Gait- the way a character walks shows their personality. • Facial expressions show emotions

Curriculum Area: English - Dystopian Conventions   Half Term: 6   Year: 8

A Themes/Big Ideas

Utopia vs. Dystopia: Exploring ideal vs. flawed societies.

Control and Oppression: How dystopian societies use power and surveillance.

Fear and Resistance: Emotional responses and rebellion in dystopian settings.

Perspective and Morality: Viewing dystopia through different characters' eyes.

B Settings

Futuristic or Alternate Realities: Often set in imagined futures or altered versions of our world.

Urban Decay and Surveillance: Cities dominated by control, technology, and fear.

Symbolic Environments: Settings that reflect societal issues (e.g., Room 101, Panem).

Contrast with Utopia: Settings that highlight the loss of freedom, nature, or individuality.

C Key Words

Dystopia – A society characterized by suffering, oppression, or injustice.

Totalitarianism – A system of government with absolute control.

Premonition – A strong feeling something bad will happen.

Atrocity – An extremely wicked or cruel act.

Speculate – To form a theory without firm evidence.

D Key Writing Skills:

Alliteration: The repetition of the same sound at the beginning of words that are close together.
Example:
"Silly snakes slither silently."
(The 's' sound is repeated.)
Five Senses
Definition: Descriptive language that appeals to sight, sound, smell, taste, and touch to create vivid imagery.
Example:
"The warm bread smelled sweet, felt soft in my hands, and melted in my mouth."
(This sentence uses smell, touch, and taste.)
Metaphor
Definition: A direct comparison between two different things by saying one thing *is* another.
Example:
"Time is a thief."
(This suggests time steals moments from our lives, like a thief.)

A Function of ingredients in bread

Ingredient	Special points	Function (what it does)
Strong Plain Flour	Sieve to aerate	Creates the dough. Contains gluten which forms the framework and structure.
Fat (Butter or margarine)	Rub in with fingertips	Helps retain moisture and extend shelf-life
Yeast	Mix into tepid water. Add a little sugar to help fermentation	Ferments to create carbon dioxide, which helps to make the bread rise.
Water	Must be tepid (slightly warm)	Activates the yeast and the proteins that form gluten.

Gluten
Formed by the proteins Glutenin and Gliadin when water is added to flour. Gluten is developed by kneading the dough to make it soft and stretchy. Gluten forms the framework of the bread and sets in shape when baked.

Yeast
Needs warmth, food, moisture and time to ferment and create CO_2. This pushes up the gluten framework, causing the bread to rise.

B Function of ingredients in pastry

| Ingredient	Special points	Function (what it does)
Plain Flour	Sieve to aerate and remove any lumps.	Creates the dough. Contains gluten which develops to form the structure.
Fat (Butter or margarine) Ratio: ½ fat to flour in shortcrust pastry	Rubbed in using fingertips only as they are the coolest part of the hand. Warmth melts the fat and causes pastry to be tough.	Fat shortens the gluten strands to create a more crumbly texture. Helps to retain moisture and extend shelf life.
Water	Water should be as cold as possible and added a little at a time using a tablespoon.	Brings all the ingredients together to form the dough.

Rolling out pastry
Always roll gently to prevent gluten from stretching. If not, the pastry will shrink in the oven and the filling will leak out.

C Function of ingredients in a white sauce

Ingredient	Special points	Function (what it does)
Flour	For a Roux, melt the fat, stir in the flour and gradually add milk.	Causes gelatinisation. Starch in the flour bursts when heated and causes the sauce to thicken.
Fat	For an All-in-one sauce add all ingredients to the pan before putting on the heat.	Fat prevents gluten from stretching
Milk		Creates the sauce liquid.
Salt, pepper, garlic, stock cube, cheese	The sauce must be stirred or whisked constantly, otherwise starch will fall to the bottom of the pan and burn. Lumps will also form if not stirred.	Creates flavour.

Gelatinisation
At about 60 ° flour granules start to absorb liquid and swell. As the sauce is heated to about 80 ° the granules burst and release starch. The sauce starts to thicken. The sauce fully gelatinises at 100°.

D Food safety

The Danger Zone
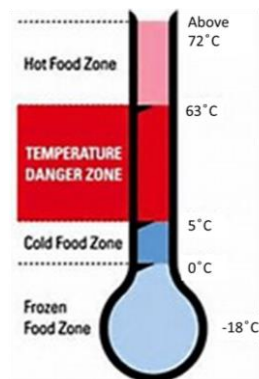
Conditions needed for growth of microorganisms

Food   Moisture   Warmth   Time

E Practical skills

Preparing vegetables	Peel slice dice chop shred julienne
Use of equipment	Blender hand mixer microwave cooker
Making dough	Bread pastry pasta
Cooking methods	Shallow fry dry fry boil simmer bake
Sauce making	Roux all-in-one blended reduction

Top Tips
Always use the correct knife and chopping board for the job
Never leave a pan unattended on the hob/stove
Always use oven gloves to put in and take out of the oven

F Preventing food waste

Ways to prevent food waste	How to make it work
Check use by dates	Know the difference between use-by and best before dates
Store food properly	Fridge temperature below 5° Tins, packets and jars in cupboard. New items at back.
Plan meals	Decide what to cook and only buy for those recipes.
Make a shopping list	Stick to a list to prevent unnecessary purchases
Use your freezer	Freeze foods on day of purchase. Freeze left over portions.
Measure food out	Measure portions for pasta and rice
Reduce portion sizes	Cook less. Use smaller plates.
Use left- overs	Make leftovers into a new meal the next day.
Buy Wonky fruit and veg	Buy less than perfect fruit and veg to prevent waste at source.
Donate to charity	Give tins, packets, jars to foodbanks and homeless charities.

A Describing your house/flat and your

Il y a/j'ai (there is or there are/I have)

Rooms:
Une pièce (room)
une salle de bains attenante (en suite bathroom)
un bureau
un salon (lounge)
une cuisine (kitchen)
une salle de bains (bathroom)
une salle à manger (dining room)
un jardin (garden)
un garage
une entrée (entrance hall)
une buanderie (utility room)
une chambre (la chambre de mes parents/de ma soeur/de mon frère)

Floors:
Au sous-sol (basement)/
au rez-de-chaussée (ground floor)
au premier étage (first floor)
au deuxième étage (second floor)

Adjectives:
Beau
Joli
Grand
Petit
Ancien
neuf (brand new)
moderne

B Prepositions and furniture

sur - on
Dans - in
sous - under
devant - in front
derrière - behind
entre - between
près de – near to
à côté de – next to
loin de – far from

LES PRÉPOSITIONS

sur   sous   dans
devant   derrière   à côté de
entre   près de

Furniture:
un lit (bed)
une armoire (wardrobe)
un bureau (desk)
une lampe - lamp
une étagère (shelf)
une commode (chest of drawers)
des posters
une table de nuit(bedside table)
un tapis (rug)
une chaise (chair)
une table - table

C Places in town

un bâtiment (building)

un café ,
un parc,
un cinéma ,
une patinoire ,
un bowling ,
un collège ,
une gare routière
une gare ,
un centre commercial,

un supermarché ,
un marché
un hôpital
une piscine
une mosquée
une église
un centre de jeunes
un centre sportif
un magasin

D Compass points

Il y a (there is or there are)
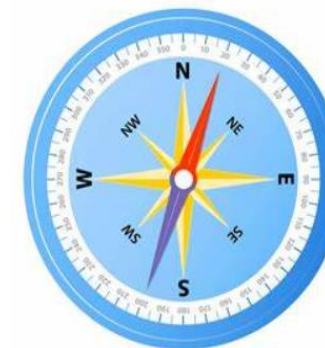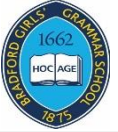
(dans) le Nord
(dans) le sud
(dans) l'est
(dans) l'ouest

le supermarché   le parc   le marché   le restaurant
le cinéma   le café   le stade   l'hôpital
la mairie   la poste   la gare   la bibliothèque
la piscine   la banque   l'église   l'école

A
- Superpowers are nations or groupings of nations (eg European Union), that have a large amount of power compared to other nations.
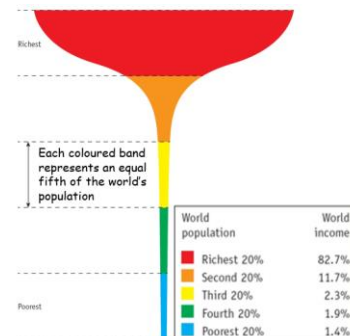
Characteristics of a global superpower
- Natural resources
- Culture
- Population size
- Political power
- Military size
- Economy
- Country size

- There is only one global superpower – the USA
- Potential superpowers include:

China (potential)
European Union (potential)
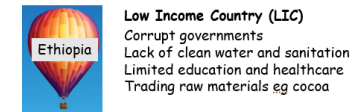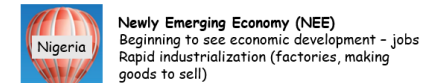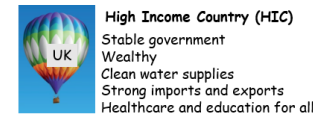Russia (potential)
India (potential)

The British Empire is a term used to describe all the places around the world that were once ruled by Britain. The British Empire was successful because of its size, its economic power being the first to industrialise, and its military and navy strength. The British Empire was one of the largest and most powerful empires in history.

B
- **Soft power** – when an organisation tries to persuade others through its own influence and presence
- **Hard power** is when a country forces its will on another country through its military force, money or economic sanctions (penalties)

High Income Country (HIC)
UK
Stable government
Wealthy
Clean water supplies
Strong imports and exports
Healthcare and education for all

Newly Emerging Economy (NEE)
Nigeria
Beginning to see economic development – jobs
Rapid industrialization (factories, making goods to sell)

Low Income Country (LIC)
Ethiopia
Corrupt governments
Lack of clean water and sanitation
Limited education and healthcare
Trading raw materials eg cocoa

MINT countries are the next new kids on the block:

Mexico — Mexico City
Nigeria — Abuja
Indonesia — Jakarta
Türkiye — Ankara

C
- Champagne glass distribution of wealth showing all the wealth resting on so little. It subtly suggests that the wealthy are resting on the poor and that the balance is quite precarious/unsteady
- **Reasons why a country does not develop:** There are **historical** reasons such as colonisation by a more powerful country, political reasons such as a corrupt government or war and **geographical** reasons such as being landlocked, a hot or dry climate or affected by **natural** hazards. This makes it difficult for a country to develop.
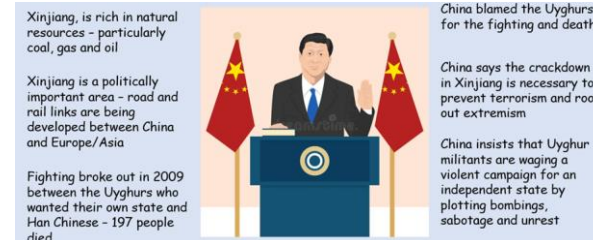
Richest

Each coloured band represents an equal fifth of the world's population

Poorest

	World population	World income
Richest 20%		82.7%
Second 20%		11.7%
Third 20%		2.3%
Fourth 20%		1.9%
Poorest 20%		1.4%

D Is there inequality in China?
- There are about 12 million Uyghurs, mostly Muslim, living in Xinjiang. The Uyghurs speak their own language, which is similar to Turkish, and have different cultures. They make up less than half of the Xinjiang population but worry that their culture is under threat by the Chinese government
- China set up special schools to fight extremism and encourage a shared culture
- But – the Chinese government feel differently

Xinjiang, is rich in natural resources – particularly coal, gas and oil

Xinjiang is a politically important area – road and rail links are being developed between China and Europe/Asia

Fighting broke out in 2009 between the Uyghurs who wanted their own state and Han Chinese - 197 people died

China blamed the Uyghurs for the fighting and deaths

China says the crackdown in Xinjiang is necessary to prevent terrorism and root out extremism

China insists that Uyghur militants are waging a violent campaign for an independent state by plotting bombings, sabotage and unrest

A Key dates

1750- 80% of people lived in the countryside. Most people worked in their homes and created things by hand.

1888- Matchstick girls strike- To demand for better working conditions and pay. The matchstick girls were exposed to phosphorus- which caused cancer in the face and rotted the jaw. Known as phossy jaw. **The strike was successful as the factory owners increased wages, abolished petty fines and gave a safe place to eat food away from phosphorus.**

1900- 75% of people lived in towns. They worked in factories and had machines that helped their job.

People used trains to get around some cars. For example, The journey from London to Edinburgh took 30 hours by boat, at least 46 hours by road and 9 hours by train.

B How were children treated in the factories?

In the Midlands, a common punishment was to nail an ear into a wooden bench.

Work started at 5:30 am Monday to Saturday. Sunday short day 4-6 hrs.

On average a pauper apprentice was smaller and lighter than a children who did not work in a factory.
Apprentice: 140 cm
Non worker: 145cm.

Some children spent years carrying heavy baskets which deformed their bodies.

Life in the factories.

Children as young as 5 worked in the factories.

You could be fined if you broke the factory rules such as 3d if you were late to work.

A 12-day working day was common, but sometimes it could be 14 or 15 hours.

Pauper apprentices: orphans who were sent to work in the factories, in return for a bed and food.

C How did factory conditions improve?

Not all factories were bad. Titus Salt gave his workers fair wages, reasonable working hours and fitted smoke consuming boilers and ventilation in rooms.

Read the details of the various new acts to protect workers in the 1800s.

1833 FACTORY ACT
• No children under nine to work in factories.
• Nine hours of work per day for children aged nine to 13.
• Two hours of school per day.
• Factory inspectors appointed (but there were only four!).

1847 TEN HOUR ACT
• Maximum ten-hour day for all women and workers under 18.

1842 MINES ACT
• No women or children under ten to work down a mine.
• Mine inspectors appointed.

1895 FACTORY ACT
• Children under 13 to work a maximum of 30 hours per week.

1844 FACTORY ACT
• No women to work more than 12 hours per day.
• Machines to be made safer.

1871 TRADE UNION ACT
• Trade unions made legal. Workers all doing the same job (trade) – like railway workers or dockers, for example – were allowed to join together (form a union) to negotiate with their employers for improvements to pay and working conditions. As a last resort, all union members could go on strike.

1878 FACTORY AND WORKSHOPS ACT
• No women to work more than 60 hours per week.
• No children under ten to work.
• Laws on safety, ventilation and mealtimes.

D Key words

Industrial Revolution- A big change in how people worked. A time of great technological advances.

Domestic system- People working in the home and making items by hand.

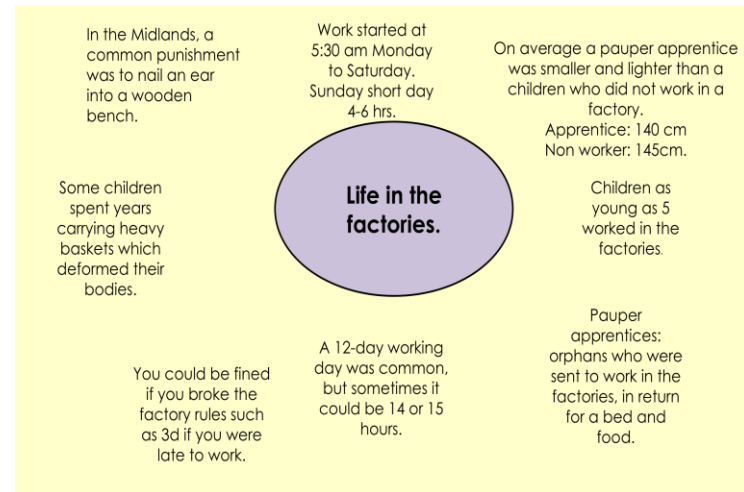**Factory system-** People working in big buildings with machines.

Pauper apprentice- Orphans who were sent to work in the factories in return for a bed and food.

Reformer- A person who makes changes to something in order to improve it.

Laissez faire- No government interference (control) with the economy and allowing businessmen to act how they please.

Chartists- An organisation to gain political rights for working class people.

E

3 Workers weren't just fined or sacked for breaking rules – they were sometimes beaten with sticks or whipped. In one factory in the Midlands, a common punishment was to nail an ear into a wooden bench.

Fig. 98.

F How did living and social conditions improve?

• **John Snow- 1854-** he proved cholera was spread through water. As there were no more deaths after the handle was removed.

• **1875 Public Health Act-** They would force different cities to build drains and sewers. The local authorities also had to provide fresh water and organise rubbish collection.

Why did the Chartism movement fail in the short term?

The government mainly stopped any local meetings and gatherings by using the police.

The standard of living increased during the 1850s so people did not support Chartism as much. There were also other working-class movements such as trade unions instead.

▼ F The Chartist aims and the dates they were met

Votes for all men! 1918
Equal-sized constituencies! 1884
Voting in secret! 1872
Wages for MPs! 1911
No property qualifications to be able to vote! 1918 (men)
An election every year! Never

A – Key terms

Conflict: A physical or verbal disagreement between two or more people/countries. This can be caused by a single act, or actions built up over time.

Divorce: A legal separation of a married couple by a court or other competent body.

Consent: To freely permission for something to happen or agreement to do something.

Relationship: the way in which two or more people or things are connected, or the state of being connected.

B Self love

Foundations of Self-Love

Mental Health — Focusing on stress management and mental health. Learning healthy coping skills.

Self-Discovery — Learning your likes. Developing goals, hobbies, & interests that make you happy.

Self-Acceptance — Accepting that you do not have to be perfect to be worthy of love.

Inner Voice — Changing the way you talk to and about yourself. Working on the voice in your head.

Self-Care — Making the time to meet your needs as best you can. Spending time on your hobbies and interests.

Boundaries — Cultivating healthy communication and boundaries in your relationships. Give and take.
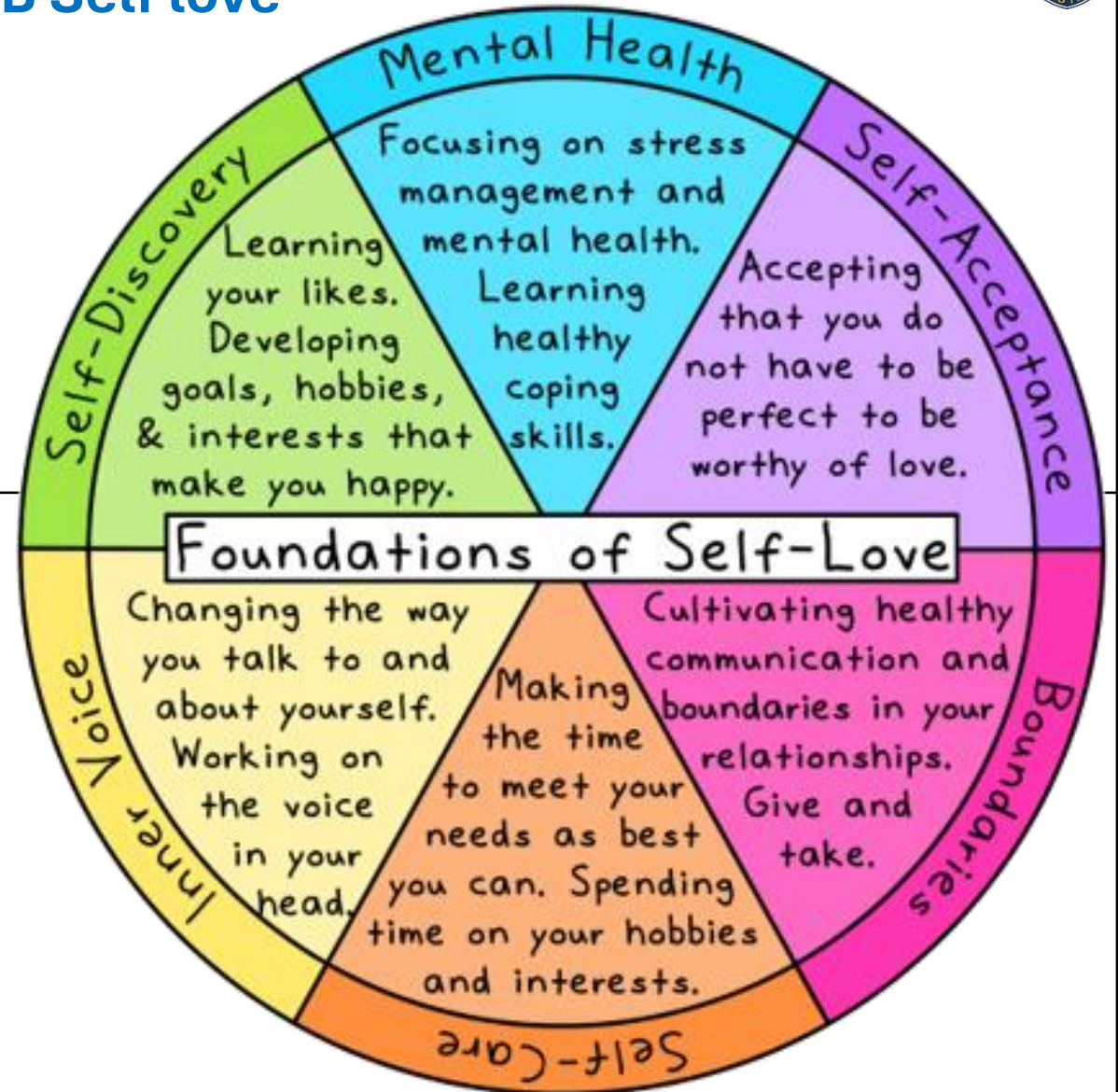
C Being Yourself!

Self-Love: Making sure you look after your own well-being and happiness.

Self-Acceptance: The ability to accept who you are with all your skills, quirks and flaws.

Inner Voice: A stream of thoughts, feelings, and self-talk that occurs within a person's mind.

Emotional Resilience: the ability to adapt well in the face of adversity, trauma, tragedy, threats, or significant sources of stress

A The data handling cycle

Colour	Tally	Frequency
Red	HHT HHT III	13
Blue	HHT IIII	9
White	HHT HHT HHT HHT IIII	24
Black	HHT HHT II	12
Other	HHT IIII	9

Primary data: original information collected directly from firsthand sources to address specific research questions

Secondary data: It involves the use of pre-existing information collected for purposes other than the researcher's current study

Sample: A number of people or things taken from a larger group

Biased: Favours one outcome

Frequency: How often something happens

Chart: A visual representation of the data (bar charts, pie charts, line graphs etc.)

Interpret: Read and understand the data

Grouped data: Data put into groups so summarise the data

Discrete: Data that can only take certain values

Continuous: Can take any value within a range

B Measure of location

Mean — Average
Find the total of all the numbers, then divide by the amount of numbers.
2, 2, 3, 5, 8
2+2+3+5+8 = 20
20÷5 = 4
Mean = 4

Median — Middle
The middle value when numbers are in order.
1, 3, 6, 8, 9 Median = 6
2, 3, 5, 7, 9 Median = 5
1, 4, 5, 6, 8, 9
Median = (5 + 6) ÷ 2 = 5.5

Mode — Mode = Most
The value which is written the most.
2, 4, 4, 5, 6 Mode = 4
3, 3, 3, 4, 6, 6 Mode = 3
1, 1, 2, 2, 2, 4, 5 Mode = 2
4, 5, 7, 7, 8 Mode = 7

Range — LARGEST – smallest
The largest number subtract the smallest number.
1, 1, 3, 5, 6 Range = 6−1 = 5
3, 6, 6, 8 Range = 8−3 = 5
2, 3, 4, 4 Range = 4−2 = 2

Range: A measure of the spread of data (largest – smallest)

Average: One value that represents the population (mean, median and mode)

Mean: Sum of all the values divided by the number of values

Median: The middle value when all the data is put in order from smallest to largest

Mode: The most common value (can be more than one)

Outlier: A value that lies outside of the general trend of the data (stands out)

C Recap

Equivalent: Of equal value

Power: How many times we multiply the base number

Integer: Whole number with no decimal part

Reflex: An angle that is more than 180° but less than 360°

Perpendicular: Crosses/meets at 90°

Radius: The distance from the centre of the circle to any point on the circumference

D Times table – 8 times table

TABLE 8

8 X 1 =	8
8 X 2 =	16
8 X 3 =	24
8 X 4 =	32
8 X 5 =	40
8 X 6 =	48
8 X 7 =	56
8 X 8 =	64
8 X 9 =	72
8 X 10 =	80

A Careers: Employability Skills

- **Resilience** – The ability to keep going despite several things seeming to go wrong.
- **Interpersonal Skills** – the skills required to effectively communicate, interact, and work with individuals and groups
- **Collaboration** – working together and listening to each others ideas to create something.
- **Time Management –** Being able to manage time effectively and complete all your tasks.

SKILLS

B: Key words

Discrimination - The unjust or prejudicial treatment of different categories of people, especially on the grounds of ethnicity, age, sex, or disability

Equality – when all things are equal, especially in status, rights, or opportunities.

Prejudice – This means to pre judge someone. It means to form an opinion about something or someone without having a reason.

C British Values

- Democracy
- Rule of Law
- Individual Liberty
- Mutual Respect
- Tolerance of other beliefs or faiths.

British Values
Tolerance Respect Liberty Democracy Rule of Law
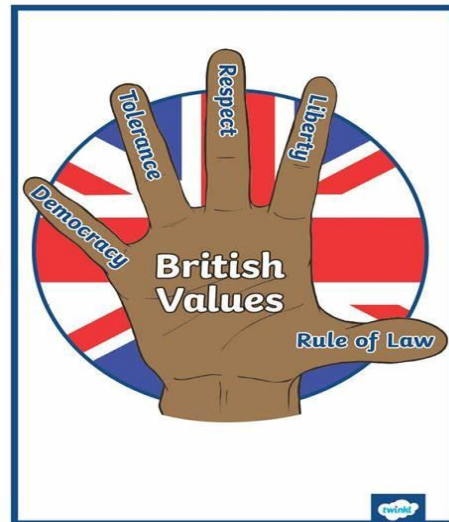
D: 4 of 9 the Protected Characteristics

Age

Disability

Sex

Marriage and Civil Partnership

Curriculum Area: Religious Studies   Half Term: 6   Year: 8

A: Key terms

Afterlife	Some form of existence after death
Empirical evidence	Proof or evidence that can be seen or tested
Sceptic	A person who doubts or questions things
Resurrection	Belief that the body will rise from the dead and go heaven or hell.
Reincarnation	Belief that the soul moves on to another body after death.
Soul	Spiritual part of a person which connects them to God.

B: Why believe in life after death?

- **Holy books** in all religions teach that there will be an afterlife.
- Real life **experiences** with the supernatural (ghosts).
- Life would be pointless if there was no afterlife – so no reward or punishment for our behaviour.
- It **brings comfort** to people when someone has died.
- There is **evidence** of life after death e.g. Near-death experiences, remembering past lives etc.
- **Some people doubt this evidence and would challenge each of the points above.**

C: The Soul

Christians and Muslims believe that only humans have a soul, so humans are God's highest creation. It is the spiritual part of a person which connects them to God. Christians believe that God 'breathed' life into Adam at Creation and withdraws this life-giving breath when people die. Christians and Muslims believe that the soul is immortal and will live on after death.

Hindus believe that all living things have a soul (Atman). The body will die but the soul will transmigrate into another body. This is called reincarnation. The soul is more important that the body. Eventually the soul will be freed from the cycle of rebirth and rejoin Brahman.

D: Christian beliefs

Heaven
A Paradise with streets of pure gold, pearl gates and rivers with crystal clear water for anyone who has obeyed God.

Purgatory
A place between heaven and hell where sinners would be punished but could then go to heaven once they had paid for their sins. (RC)

Hell
A place of eternal punishment described as a "fiery furnace" where people cry and grind their teeth.

E: Muslim beliefs

- The angel of death **(Azrael)** removes the soul and takes it to **Barzakh** (literally 'the barrier') and the body is buried.
- Muslims are questioned in the grave: Who is your God?, What is your religion? Who is your Prophet?
- On judgement day every person will be resurrected and reunited with their soul to be judged by Allah.
- Those whose good deeds outweigh the bad will go to Paradise **(Al-Jannah).**
- Those who have sinned and not asked for forgiveness will go to hell **(Jahannam)** a place of heat and torment that will purify the sinner.

F: Hindu beliefs

Brahman
Brahmin
Human
Animal
Bug
Plant
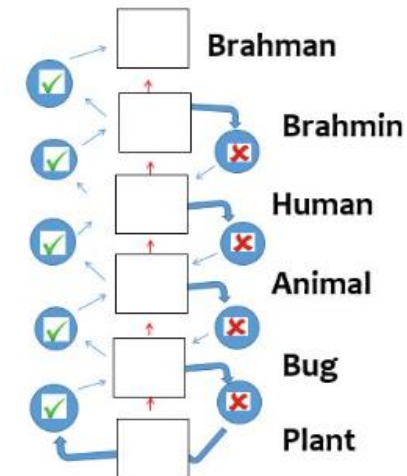
SAMSARA – the continuous cycle of birth death and rebirth

ATMAN – A person's soul or eternal unchanging self

KARMA – The effect of a person's actions on their future lives.

MOKSHA – Release from the cycle of Samsara.

A Extracting metals

Metals are a natural resource, with most being found in compounds.
• Naturally occurring metals and their compounds are known as **minerals**.
• An **ore** is a naturally occurring rock which contains enough of a mineral to be worth extracting.

If a metal is below carbon in the reactivity series, it can
Be extracted by heating with carbon **(displacement)**.

If a metal is above carbon in the reactivity series, it can
Be extracted using electricity in a process called
ELECTROLYSIS.

Reactivity series
magnesium
aluminium
(carbon)
zinc
iron
lead
copper

B Climate change

Long term changes to weather patterns are known as **climate change.**
This can cause the **ice caps to melt**, leading to **sea levels rising** and **flooding.**
We can prevent climate change by:
• Using renewable resources
• Using fewer cars
• Recycling

C Sustainability

Sustainability means to not sue up too many resources, so there are plenty left for future generation.
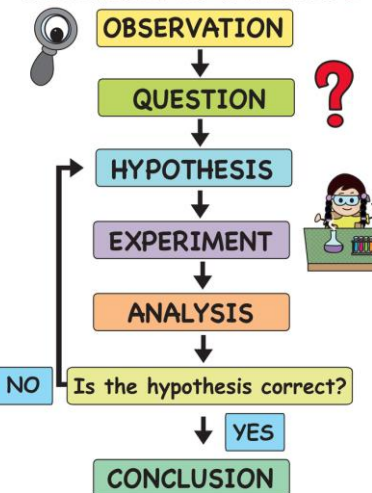
We can be more sustainable by:
• Buying pre-owned goods.
• Using less electricity.
• Not wasting water.
• Reducing food waste.
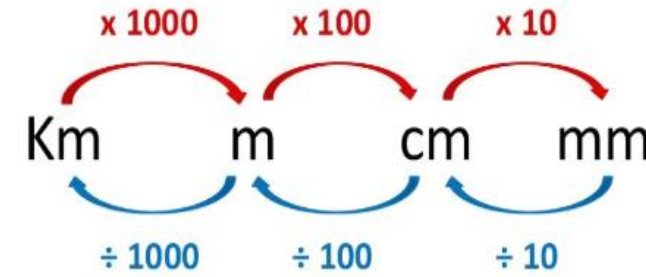• Eating more plant-based foods instead of meat.

D Variables

INDEPENDENT VARIABLE	DEPENDENT VARIABLE	CONTROL GROUP
• What is tested by the scientist • What is changed by the scientist	• What is observed and measured • The effect caused by the I.V. • The data	• Kept constant (the same) by scientists • These allow for a fair test.

SCIENTIFIC METHOD
OBSERVATION → QUESTION → HYPOTHESIS → EXPERIMENT → ANALYSIS → Is the hypothesis correct? — NO / YES → CONCLUSION

E Unit conversions

x 1000   x 100   x 10
Km   m   cm   mm
÷ 1000   ÷ 100   ÷ 10

F MENAU

In science, always use the following do show your workings out for calculations

ME: Mathematical Equation

N: Numbers (and check if you need to covert or rearrange)

A: Answer

U: Units

1w ¿Que hora es? ¿Que hago a las siete?

la una (1:00)
las dos (2:00)
las tres (3:00)
las cuatro (4:00)
las cinco (5:00)
las seis (6:00)
las siete (7:00)
las ocho (8:00)
las nueve (9:00)
las diez (10:00)
las once (11:00)

la una menos cinco (12:55)
las tres menos cuarto (2:45)
las cinco y veinticinco (5:25)
las cuatro menos veinte (3:40)
las cinco menos veinticinco (4:35)
las cuatro y veinte (4:20)
las dos menos diez (1:50)
la una y cinco (1:05)
las dos y diez (2:10)
las tres y cuarto (3:15)
las seis y media (06:30)

Tell the time:
Es la una – it's one o'clock
Son las dos - it's two o'clock

A la una – at one o'clock
A las dos – at two o'clock

2w Reflexive verbs:

Reflexive verbs in Spanish
Los verbos reflexivos

Spanish reflexive verbs are formed by joining a verb in infinitive with a reflexive pronoun (me, te, se...). They are very useful to talk about activities, routines and commands Here are some examples:

INFINITIVE	REFLEXIVE PRON.		REFLEXIVE VERB
Bañar	Se		Bañarse
Bañar	Nos	=	Bañarnos
Vestir	Te		Vestirte

EXAMPLES:
1. Yo me baño todos los días. (I take a shower every day)
2. Tengo que bañarme (I have to take a shower)

me levanto (I get up)
me peino (I do my hair)
me visto (I get dressed)
me lavo los dientes (I brush my teeth)
me acuesto (I go to bed)

Reflexive verbs in different tenses

Reflexive verbs generally need a reflexive pronoun (me, te, se, nos, os, se) placed before the verb.

me ducho	I have a shower
me relajo	I relax

When using the present continuous or near future tenses you can put the reflexive pronoun at the start of the expression or on the end of the infinitive or present participle:

- estoy duchándome / me estoy duchando
- vamos a relajarnos / nos vamos a relajar

3W Actividades diarias

almuerzo (I have lunch)
ceno (I have dinner)
desayuno (I have breakfast)
descanso (I rest)
escucho música (I listen to music)
hago los deberes (I do the homework)
leo el periódico (I read the newspaper)
leo mis mensajes (I read my messages)
me conecto a las redes sociales (I connect myself on social media)
juego en el ordenador (I play on the computer)

navego por internet (I surf the internet)
paseo al perro (I walk the dog)
preparo mi mochila (I get my bag ready)
salgo de casa (I leave my home)
veo la tele (I watch TV)
voy al colegio en autobús (I go to school by bus)
vuelvo a casa (I go back home)

4 -5 W The perfect tense

The perfect tense (regular verbs)

The perfect tense is used to describe things that have happened in the recent past. To form it, use the verb *haber* (to have) in the present tense:

he	I have
has	you (singular) have
ha	he/she/it has
hemos	we have
habéis	you (plural) have
han	they have

Then add the past participle of the verb you want to use (see page 132).

- he visitado — I have visited
- hemos comido — we have eaten

Infinitives from the same verb families are conjugated in the same way:

- escribir (to write) — he escrito
- describir (to describe) — he descrito
- poner (to put) — he puesto
- proponer (to propose) — he propuesto

The perfect

	hablar – to talk	comer – to eat	vivir – to live
yo	he hablado	he comido	he vivido
tú	has hablado	has comido	has vivido
él/ella	ha hablado	ha comido	ha vivido
nosotros/as	hemos hablado	hemos comido	hemos vivido
vosotros/as	habéis hablado	habéis comido	habéis vivido
ellos/as	han hablado	han comido	han vivido

6W

Things to do in Spain and Spanish-speaking countries

contemplar las vistas	to look at the views
descubrir la cultura de una región	to discover the culture of a region
hacer un paseo marítimo / ir de excursión en barco	to go on a boat trip
ir a un parque temático	to go to a theme park
ir a la sierra/la montaña	to go to the mountains
ir de excursión en autocar	to go on a coach trip
ver los monumentos	to see the sights
visitar un pueblo antiguo/el casco antiguo	to visit an old town/ the old quarter
visitar la catedral/el castillo/el museo	to visit the cathedral/castle/ museum
visitar los sitios de interés/las atracciones turísticas	to visit sites of interest/ tourist attractions
hacer una excursión	to go on a trip

7W The imperfect tense

The imperfect tense

This tense is used to describe repeated actions in the past (what 'used to' be done) or what someone was doing. To form it, remove the last two letters of the infinitive and add the following endings:

	–ar	–er/–ir
yo	aba	ía
tú	abas	ías
él/ella	aba	ía
nosotros/as	ábamos	íamos
vosotros/as	abais	íais
ellos/as	aban	ían

The imperfect tense and the preterite tense can be used together to narrate events.

Un día, cuando jugaba al fútbol, vi una llama en mi jardín.

One day, when I was playing football, I saw a llama in my garden.

ser – to be	ir – to go	ver – to see
era	iba	veía
eras	ibas	veías
era	iba	veía
éramos	íbamos	veíamos
erais	ibais	veíais
eran	iban	veían

jugaba	I used to play/I was playing
vivían	they used to live/they were living
llevabas	you used to wear/you were wearing

There are only three irregular verbs in the imperfect tense:
ser → era
ir → iba
ver → veía

The imperfect

	hablar – to talk	comer – to eat	vivir – to live
yo	hablaba	comía	vivía
tú	hablabas	comías	vivías
él/ella	hablaba	comía	vivía
nosotros/as	hablábamos	comíamos	vivíamos
vosotros/as	hablabais	comíais	vivíais
ellos/as	hablaban	comían	vivían

Curriculum Area: Textiles   Half Term: 6   Year: 8

A

ESSENTIAL PARTS

Thread Guide, Bobbin Winder Tension Disc, Stitch Selector, Stitch Length Dial, Spool Pins, Bobbin Winder Pin, Take-Up Lever, Tension Control, Bobbin Winder Stop, Hand Wheel, Needle, Presser Foot Lever, Needle Clamp, Power Switch, Presser Foot, Reverse Stitch Lever, Needle Plate, Feed Dogs
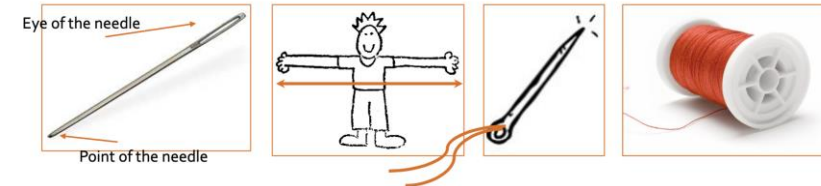
JANOME — Reliability by Design

B Embroidery

Embroidery: The art of decorating fabric with stitches using thread or yarn to create designs or patterns.

How to thread a needle :

Eye of the needle — Point of the needle

1. **Prepare the Thread**: Cut a piece of thread about as long as your arm. Trim the end to make it smooth.
2. **Thread the Needle**: Hold the needle steady. Push the trimmed end of the thread through the needle's eye until a small part comes out the other side.
3. **Tie a Knot**: Hold both ends of the thread together. Wrap them around your finger to make a loop. Roll the loop between your fingers 2 to 3 times, then pull the thread tightly to form a knot at the end

C

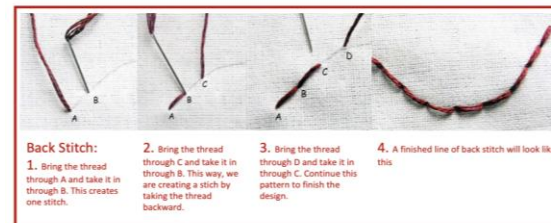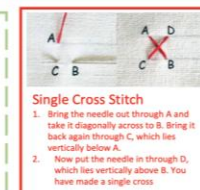# Health and Safety   Irons

- Irons must be used on a flat surface with a protective mat.
- Irons must not be left unattended.
- Do not touch the sole of the plate if it has been switched on or is plugged in.
- Always hold the iron by the handle.
- Do not leave the iron face down at any time, stand it upright.
- Unplug the iron when it is not in use.
- Ensure there is adequate room to operate the iron.
- Do not use an iron if you have dropped it, unplug it and inform the teacher.
- Do not use the iron if it was any visible signs of damage.

D Embroidery

Use this sheet to help you with your embroidery. Remember you can get a higher level for more decorative stitches. But they must be accurate and completed to a high quality finish!

Running Stitch:
With your know on the back of the fabric, push the needle up through the fabric, then back down.
To get the beauty of the stitch, I would suggest to try to keep the length of the stitches on the upperside and underside as same as possible.

Back Stitch:
1. Bring the thread through A and take it in through B. This creates one stitch.
2. Bring the thread through C and take it in through B. This way, we are creating a stich by taking the thread backward.
3. Bring the thread through D and take it in through C. Continue this pattern to finish the design.
4. A finished line of back stitch will look like this

Single Cross Stitch
1. Bring the needle out through A and take it diagonally across to B. Bring it back again through C, which lies vertically below A.
2. Now put the needle in through D, which lies vertically above B. You have made a single cross

Row of Cross Stitch
1. Make a row of diagonal stitches as shown.
2. On the return journey, complete the crosses by connecting the ends using diagonal stitches as shown.

Intervals: The spaces between the stiches

Embellishment : Adding decorative features, like beads, sequins, or stitching, to make fabric look more beautiful.