

2024/25

Cycle 2 Knowledge Navigator

Year 8

Name:

Form:

Morning Meeting Homework

Purpose: to memorise and recall key facts from previous learning

100% Sheets

Purpose: to memorise and recall key facts for current learning

RCWC repeat!

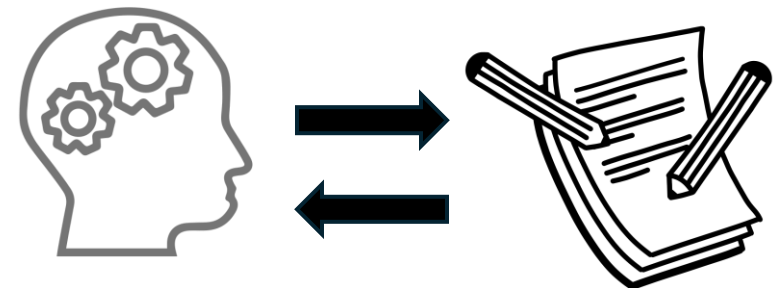
Read the information and try to memorise it.

Cover up the information so you can't see it.

Write down as much as you can remember.

Check what you've written down against the information, and green pen what you've missed.


Repeat this to fill a minimum of 2 A4 sides. The more you repeat this process, the more facts you will remember for your exams!



Contents

1	Homework Schedule
Morning Meeting Homework	
2	French
4	Science
6	History
8	Geography
10	English
12	Spellings

100% Sheets	
13	Maths
15	RE
16	Music
17	IT
18	Drama
19	Art
20	DT

	Week 1		Week 2		Week 3		Week 4		Week 5	
Monday	9/12/24	French	16/12/24	French	06/01/25	French	13/01/25	French	20/01/25	French
Tuesday	10/12/24	Science Body 1 & 2	17/12/24	Science Body 3 & 4	07/01/25	Science Body 5 & 6	14/01/25	Science Metals 1, 2 & 3	21/01/25	Science Metals 4 & 5
Wednesday	11/12/24	History Section A	18/12/24	Geography	08/01/25	History Section B	15/01/25	Geography	22/01/25	History Section C
Thursday	12/12/24	English Box A <i>Sparx Maths</i>	19/12/24	English Box B <i>Sparx Maths</i>	09/01/25	English Box C <i>Sparx Maths</i>	16/01/25	English Box D <i>Sparx Maths</i>	23/01/25	English Box A <i>Sparx Maths</i>
Friday	13/12/24		20/12/24	Spellings Week 2	10/01/25	Spellings Week 3	17/01/25	Spellings Week 4	24/01/25	Spellings Week 5
	Week 6		Week 7		Week 8		Week 9		Week 10	
Monday	27/01/25	French	03/02/25	French	10/02/25	French	24/02/25	French	03/03/25	French
Tuesday	28/01/25	Science Body 1 & 2	04/02/25	Science Body 3 & 4	11/02/25	Science Body 5 & 6	25/02/25	Science Metals 1, 2 & 3	04/03/25	Science Metals 4 & 5
Wednesday	29/01/25	Geography	05/02/25	History Section D	12/02/25	Geography	26/02/25	History Section E	05/03/25	Geography
Thursday	30/01/25	English Box B <i>Sparx Maths</i>	06/02/25	English Box C <i>Sparx Maths</i>	13/02/25	English Box D <i>Sparx Maths</i>	27/02/25	English Box A <i>Sparx Maths</i>	06/03/25	
Friday	31/01/25	Spellings Week 6	07/02/25	Spellings Week 7	14/02/25		28/02/25	Spellings Week 9	07/03/25	
	Week 11		Week 12		Week 13		 DIXONS COTTINGLEY ACADEMY			
Monday	10/03/25	French	17/03/25	French	24/03/25	French				
Tuesday	11/03/25	Science Body 3 & 4	18/03/25	Science Body 5 & 6	25/03/25	Science Metals 1, 2 & 3				
Wednesday	12/03/25	History Section F	19/03/25	Geography	26/03/25	History Section A				
Thursday	13/03/25	English Box B <i>Sparx Maths</i>	20/03/25	English Box C <i>Sparx Maths</i>	27/03/25	English Box D <i>Sparx Maths</i>				
Friday	14/03/25	Spellings Week 11	21/03/25	Spellings Week 12	28/03/25	Spellings Week 13				

Week 1				Week 2		Week 3	
Town nouns				Town verbs		Advantages/Disadvantages	
une maison	house	la circulation	traffic	aller	to go	il y a	there is / are
un appartement	apartment	l'arbre	tree	aider	to help	il n'y a pas de	there is / are not
une chambre	room	le coin	corner	conduire	to drive	on peut	you can
une fenêtre	window	la rue	street	donner	to give	on ne peut pas	you cannot
une ferme	farm	la route	road	se situer	to be situated	il y avait	there used to be
le voisin	neighbour	le ciel	sky	travailler	to work	c'est / c'était	it is
le lieu	place	l'arrêt	stop	traverser	to cross	l'avantage	the advantage
le mur	wall	l'abri	shelter	utiliser	to use	l'inconvénient	the disadvantage
le chômage	unemployment	le printemps	spring	vendre	to sell	chez moi	at my house
les Pyrénées	the Pyrenees	l'été	summer	vivre	to live	derrière / devant	behind / in front

Week 4				Week 5			
Places in Town				Adjectives			
Une bibliothèque	A library	un cinéma	cinema	sale	dirty	vivant	alive, living
une église	church	une usine	factory	propre	clean	peuplé	populated
un château	castle	un marché	market	grand/petit	big / small	calme	quiet
une piscine	swimming pool	un magasin	shop	moderne/vieux	modern / old	vif	lively
une patinoire	ice rink	une mosquée	mosque	joli	pretty	industriel	industrial
un bâtiment	building	un hôpital	hospital	tranquille	quiet	désagréable	unpleasant
un musée	museum	un jardin	garden	vide	empty	égal	equal
un stade	stadium	une rivière	river	ancien	former, ancient	intéressant	interesting
un collègue	secondary school	un côte	coast	étroit	narrow	jeune	young

Week 6		Week 7		Week 8		Week 9	
Ideal Town		Environment Verbs		Environment Verbs		Environment Nouns	
J'irais	I would go	sauver	to save	allumer	to turn on	la poubelle	bin
Je ferais	I would do	améliorer	to improve	bouger	to move	la terre	earth
Je voudrais	I would like	lutter	to combat	brûler	to burn	l'arbre	tree
J'aimerais	I would like	construire	to build	concerner	to concern	le besoin	need
Je mangerais	I would eat	conduire	to drive	menacer	to threaten	l'impôt	tax
Je pourrais	I could	jeter	to throw	diminuer	to lower	la pluie	rain
Ce serait	It would be	tuer	to kill	oublier	to forget	la paix	peace
J'habiterais	I would live	disparaître	to disappear	protéger	to protect	un attentat	an attack
Il y aurait	There would be	augmenter	to increase	recycler	to recycle	l'aide	help
J'aurais	I would have	détruire	to destroy	contribuer	to contribute	espoir	hope

Week 10		Week 11		Week 12		Week 13	
Environment Nouns		Environment Nouns		Adjectives		Adjectives	
le taux	the rate	les voitures	cars	sale	dirty	mondial	global
la guerre	war	les camions	lorries	propre	clean	occidental	western
le terrain	ground	le réchauffement	warming	tranquille	peaceful	puissant	powerful
l'inquiétude	worry, anxiety	La loi	The law	bryant	noisy	le pire	the worst
le mort	death	les déchets	rubbish	animé	lively	efficace	efficient
le souffrance	suffering	la pollution	pollution	affreux	terrible	bénévole	volunteer
espèce	species	la circulation	traffic	pollué	polluted	grave	serious
société	society	une crise	a crisis	industrielle	industrial	mort	dead
pauvreté	poverty	une menace	a threat	mauvais	bad	chaud	hot

1. Movement

The human skeleton works as a system for support, protection, movement & the production of new blood cells.

Joints: Places where bones meet.

Bone marrow: Tissue found inside some bones where new blood cells are made.

Ligaments: Connect bones in joints.

Tendons: Connect muscles to bones.

Cartilage: Smooth tissue found at the end of bones, which reduces friction between them.

Antagonistic muscle pair: Muscles working in unison to create movement. Antagonistic pairs of muscles create movement when one contracts and the other relaxes.

2. Breathing

In gas exchange, oxygen and carbon dioxide move between alveoli and the blood. Oxygen is transported to cells for aerobic respiration and carbon dioxide, a waste product of respiration, is removed from the body.

Breathing occurs through the action of muscles in the ribcage and diaphragm. The amount of oxygen required by body cells determines the rate of breathing.

Breathing: The movement of air in and out of the lungs.

Trachea (windpipe): Carries air from the mouth and nose to the lungs.

Bronchi: Two tubes which carry air to the lungs.

Bronchioles: Small tubes in the lung.

Alveoli: Small air sacs found at the end of each bronchiole.

Ribs: Bones which surround the lungs to form the ribcage.

Diaphragm: A sheet of muscle found underneath the lungs. Lung volume: Measure of the amount of air breathed in or out.

3. Respiration

Respiration is a chemical reactions, in cells, that breaks down glucose to release energy.

Most living things use aerobic respiration but switch to anaerobic respiration, which provides less energy, when oxygen is unavailable.

Aerobic respiration: Breaking down glucose with oxygen to release energy and producing carbon dioxide and water.



Anaerobic respiration (fermentation): Releasing energy from the breakdown of glucose without oxygen, producing lactic acid (in animals) and ethanol and carbon dioxide (in plants and microorganisms). Yeast fermentation is used in brewing and bread making.

4. Digestion

Organs of the digestive system are adapted to break large food molecules into small ones which can travel in the blood to cells and are used for life processes.

Enzymes: Substances that speed up the chemical reactions of digestion.

Gut bacteria: Microorganisms that naturally live in the intestine and help food break down.

Iron is a mineral important for red blood cells.

Calcium is a mineral needed for strong teeth and bones.

5. Organs of the digestive system

1. Mouth: mechanically breaks down food using the teeth and mixes with saliva to soften and add enzymes.

2. Oesophagus: after swallowing the food is squeezed along this muscular tube to the stomach.

3. Liver: produces bile to neutralise stomach acid and emulsify lipids.

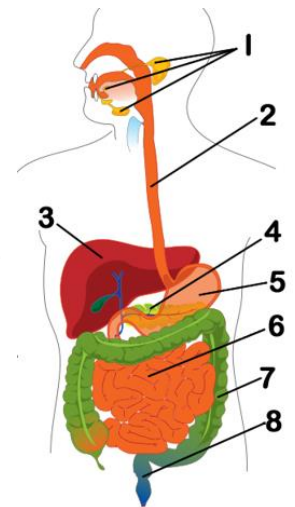
4. Pancreas: produces several enzymes essential for digestion.

5. Stomach: a sac where food is mixed with acidic juices to start the digestion of protein and kill microorganisms.

6. Small intestine: Upper part of the intestine where digestion is completed & nutrients are absorbed by the blood.

7. Large intestine: Lower part of the intestine from which water is absorbed & where faeces are formed.

8. Rectum: faeces (undigested waste) is stored here until it leaves the body through the anus.

**6. Nutrients in foods and their function**

Nutrient group	Function	Examples of nutrient rich food
Carbohydrate	Used to provide energy	Bread, pasta, rice, potatoes
Protein	Used for growth and repair of cells	Fish, meat, eggs, dairy products
Lipids (fats)	Used to provide energy, store energy and insulate	Butter, oil, nuts
Vitamins	Needed in small amounts to maintain health	Fruit and vegetables, dairy products
Minerals	Needed in small amounts to maintain health	Salt, milk (calcium), liver (iron)
Fibre	Helps to keep food moving through the gut	Vegetables and bran
Water	Needed for cells and body fluids	Water, fruit juice, milk

1. Metals vs. non-metals

Metals and non-metals react with oxygen to form oxides which are either bases or acids.

Metals: Shiny, good conductors of electricity and heat, sonorous, malleable and ductile, and usually solid at room temperature.

Non-metals: Dull, poor conductors of electricity and heat, brittle and usually solid or gaseous at room temperature.

2. Reactivity series

Metals can be arranged as a reactivity series in order of how readily they react with other substances.

Some metals react with acids to produce salts and hydrogen.

Metal	Reactivity					
Potassium	React with water	React with acid	React with oxygen	Very reactive		
Sodium						
Lithium						
Calcium						
Magnesium	React with acid				React with oxygen	Very reactive
Aluminium						
Zinc						
Iron						
Tin						
Lead						
Copper		React with acid	React with oxygen	Very reactive		
Silver						
Gold						

3. Special properties

Iron, nickel and cobalt are magnetic elements.

Mercury is a metal that is liquid at room temperature.

Bromine is a non-metal that is liquid at room temperature.

Copper is a good conductor of heat and electricity so is used in saucepans and in wiring.

Aluminium is light so is used for bike frames and malleable so is used for kitchen foil.

4. Types of reaction

Reactivity: The tendency of a substance to undergo a chemical reaction.

Oxidation: Reaction in which a substance combines with oxygen.

Combustion: Reaction with oxygen in which energy is transferred to the surroundings as heat and light.

Thermal decomposition: Reaction where a single reactant is broken down into simpler products by heating.

Displacement: Reaction where a more reactive metal takes the place of a less reactive metal in a compound.

e.g. Magnesium sulphate + Calcium \rightarrow Calcium sulphate + Magnesium

e.g. Aluminium nitrate + Potassium \rightarrow Potassium nitrate + Aluminium

Chemical reaction: A change in which a new substance is formed.

Physical change: One that changes the physical properties of a substance, but no new substance is formed. Reactants: Substances that react together, shown before the arrow in an equation.

Products: Substances formed in a chemical reaction, shown after the reaction arrow in an equation.

Conserved: When the quantity of something does not change after a process takes place.

5. Reactions of metals

Metal + water \rightarrow Metal hydroxide + hydrogen

Sodium + water \rightarrow sodium hydroxide + hydrogen

Magnesium + water \rightarrow magnesium hydroxide + hydrogen

Metal + acid \rightarrow Salt + hydrogen

Sodium + hydrochloric acid \rightarrow sodium chloride + hydrogen

Sodium + sulphuric acid \rightarrow sodium sulphate + hydrogen

Metal oxide + acid \rightarrow Salt + water

Sodium oxide + hydrochloric acid \rightarrow sodium chloride + water

Potassium oxide + sulphuric acid \rightarrow potassium sulphate + water

Metal carbonate + acid \rightarrow Salt + water + carbon dioxide

Calcium carbonate + hydrochloric acid \rightarrow calcium chloride + water + carbon dioxide

Sodium carbonate + hydrochloric acid \rightarrow sodium chloride + water + carbon dioxide

Section A - Key Terms

- **Industrial Revolution** – a time of great change between 1750-1900
- **Population** – the number of people living in a particular place
- **Invention** – something new which is created, can be an object or an idea
- **Economy** – the system of how money is used within a particular country
- **Agriculture** – the process of producing food and fibres by farming certain plants or raising animals
- **Poverty** - the lack of basic human needs such as clean water, food, healthcare or shelter
- **Industry** – the process of making products by using machines and factories
- **Sanitation** – system that disposes of human waste
- **Entrepreneur** – creating or taking over a new business – sometimes at a risk

The Main Changes:

1750	1900
11 million people in Britain	40 million people in Britain
20% lived in towns	75% lived in towns
Most people were farmers	Most people worked in factories/offices
Goods were made by hand at home	Goods were made by steam powered machines in factories

Section B – Key People**Richard Arkwright**

- Devised a spinning machine
- Replaced the work of human hands
- Created a water frame – made it possible to spin cotton yarn more quickly
- Allowed for greater quantities

Titus Salt

- Manufacturer, politician, entrepreneur
- Best known for building Salts Mill in Bradford
- Built the village of Saltaire to look after his workers

Robert Peel

- Created the Factories Act of 1833
- Restricted the number of hours that children could work in factories
- Set safety standards for machinery

John Snow

- Discovered that the water in his local well was making everyone ill.
- Cholera – the link between dirty water and disease
- Encouraged people to drink clean water

Section C – Changes During the Period

- Agriculture – new tools, fertilizers and harvesting techniques were introduced. Increased productivity and prosperity.
- Industry – factories sprung up all over the country – more efficient ways to produce goods. Brought thousands of new jobs
- Transport and communications – ‘Railway mania’ – lots of new railroads and canals were built. Allowed people to transport goods faster
- Technology – scientific discoveries and technological inventions changed society and industry. Improvements to medical treatments and sanitation increased quality of life.

Key inventions

- Steam Engine 1717 – First Steam Engine invented. Steam engines replaced water and horse power in a wide variety of industries which allowed factories to be built anywhere.
- Spinning Jenny 1770 – Spun more than one ball of yarn at a time – makes it faster and cheaper to make cloth. Increases the amount of factories built.

Section D – Factory Conditions

- **Long working hours** – normal shifts 12-14 hours a day
- **Low wages** – a typical wage for a male was about 15 shillings a week but women and children were paid much less.
- **Cruel discipline** – there was frequent ‘strapping’ (hitting with a leather strap), nailing children’s ears to the table and other harsh punishments
- **Accidents** – forcing children to crawl into dangerous unguarded

Why were conditions so bad?

1. There were no laws to prevent it
2. No-one could make the link between dirt and disease
3. The government did not see it as their responsibility to help the poor
4. Poor working class people did not have the right to vote

Section E – Living Conditions

- **Overcrowding** – due to people moving to cities, there were not enough houses for people to live in
- **Diseases** – typhus, typhoid, tuberculosis and cholera all existed in the cities of England. Poor conditions helped to spread disease
- **Waste disposal** – gutters were filled with litter. Human waste was discharged directly into the sewers which flowed straight into rivers.
- **Poor quality housing** – houses were built very close together so there was little light or fresh air inside them. They did not have running water and people found it difficult to keep them clean.
- **Lack of fresh water:** people could get water from a variety of places, such as streams, wells and stand pipes, but this was often polluted by human waste.

Section F – Improvements

- 1819** – No children under 9 should work and fines introduced for those breaking the law
 - 1833** – 9 hour working day for children between 9-13 and four factory inspectors employed to check conditions
 - 1844** – all machinery to have guards and cleaning of moving machinery was banned
 - 1847** – 10 hour maximum working day introduced for all women and children
 - 1895** – Factories had be clean, well ventilated and not overcrowded. Accidents had to be reported
- Problems with the laws:** many factory owners were taken to court and **FINED** – this shows they **did not always follow** the laws. It took a **LONG TIME** to cover all the problems in factories (e.g. air quality not mentioned until 1890s). Young children (**over 11**) were **still working in factories** even by 1900.

Week

Key Knowledge to learn

2 – Key Terms

Natural Event: something which happens because of physical geography e.g. *A volcano on an uninhabited island would be a natural event as if it erupted no one would be affected*

Natural Hazard: an event which can cause damage and death e.g. *A volcano surrounded by urban areas would be a natural hazard as if it erupted it would affect people*

Hazard Risk: chance that a hazard might take place in an area e.g. *Yorkshire has no risk of a Tsunami but a high risk of heavy rainfall and flood event*

Hazard Risk Changes - Recorded natural hazards have increased over time > more people are at risk from hazard:

- **Population Increase** - More people on the planet > living in more areas > experience more hazards
- **Urbanisation** - More living in urban areas > more affected if a hazard takes place in that area > less people affected in rural areas as spread out
- **Wealth** - Poorer people live in riskier areas as the land is cheaper > more at risk

4 – Location and Causes of Wildfires

Australian Wildfires 2020**Requirements**

- Leaf litter / soil on the ground
- Warm and wet climate for vegetation growth then hot and dry
- Source of ignition

Natural Causes (10% of fires)

- Hot and dry spell due to Indian Ocean Dipole dried out forest floor
- Temperatures of 41.9 °C plus
- Strong winds spread fires

Human Causes (90% of fires)

- CO2 increase: climate change
- Camping, cigarettes, arson

Wildfires are **unevenly** distributed around the world and occur in **clusters**. The area that experienced the greatest distribution of wildfires was in the south of **Africa**. There is an exception with a wildfire taking place near the north pole in **Greenland** compared to the rest of the fires mainly at **low** latitudes.



6 – Effects and Responses and distribution of Wildfires

•Primary Effects

- S: 6,000 buildings and 3,000 homes destroyed > homelessness
- \$: Billions spent on fire and rescue > less money for other services
- Env: Millions of animals killed > loss of biodiversity > ecosystem collapse

•Secondary Effects

- S: Canberra worst air quality in the world > more death: asthma
 - \$: Damaged infrastructure > loss of tourism > loss of money / jobs
 - Env: 1 billion animals will die after the fires due to a loss of food and habitat
- Monitoring:** look at the climate and weather to detect changes and development of conditions for fires

Prediction: using monitoring to say when a fire will occur and where which allows evacuation

Planning: People know what to do when a warning is given that a fire may occur. E.g. having fuel in a car to drive away

Preparation: by trying to reduce damage when the hazard does occur. E.g. keeping areas around houses clear of vegetation

Week	Key Knowledge to learn		
8 – Key terms and cold places	Key Terms Landscape: key visual features of an area Relief: height and the shape of the land. Altitude / elevation: height above sea level Gradient: how steep the land is Contour Lines: <ul style="list-style-type: none"> • Thin brown lines on OS maps • Each line represents a height above sea level • Contours close together show a steep gradient • Contours far apart show a gentle gradient 	Polar Environments <ul style="list-style-type: none"> • Below freezing all year; low precipitation levels ;High latitudes at the poles Tundra Environments <ul style="list-style-type: none"> • Short seasonal summers; precipitation mainly snow; High latitudes and in linear bands High Mountain Ice <ul style="list-style-type: none"> • High altitude so precipitation as snow; Linear bands following mountain ranges UK Examples of Past Cold Areas <ul style="list-style-type: none"> • Snowdonia, Wales; Lake District, England; Highlands, Scotland 	
10 – Processes and features	Processes Removing Material Erosion: wearing away of rock through movement Abrasion: rocks at base of glacier scrape along bedrock leaving scratches Plucking: rocks become frozen in the bottom of the glacier and are plucked out Weathering: wearing away of rock in situ Freeze-Thaw Weathering: water enters cracks, freezes and expands putting pressure on the rock, melts and repeats, rock breaks off	Glacial Features Corrie: armchair shaped hollow > steep back wall created by plucking and deepened base by abrasion > after glaciation hollow filled by a lake called a tarn Arête: narrow knife edge ridge where two corries have eroded back to back by freeze-thaw weathering and plucking. U-Shaped Valley: steep valley sides and a wide floor formed by erosion of a V Shaped Valley by a glacier.	
12 – Malham – Opportunities and challenges + Sustainable Management	Malham Location & Formation Malham: Northern England, North Yorkshire, Yorkshire Dales National Park. Situated to the North West of Bradford. Geology (rock type) is limestone: Created under the sea 330 million years ago <ul style="list-style-type: none"> • Buried animal shells and deposits compact to form sedimentary rock • Land moved from equator northwards • Uplifted from the sea to form land • Malham cove formed by erosion from glaciers including abrasion of floor and plucking of wall Weathering created clints and grykes (gaps)	Opportunities and Challenges 3 Pubs and 1 B&B > tourists stay in the area and spend money > profit for local business > honey pot site > <i>can cause congestion, litter and pollution which would put people off visiting</i> Transportation to Malham > 90% of people arrive by car > congestion and air pollution on small roads > loss of natural beauty > <i>locals can earn money by charging cars to park</i>	Sustainable Future Management <ul style="list-style-type: none"> • Walkers may disrupt sheep, leave gates open and damage dry stone walls > clear signs to indicate paths, improved path routes to stop tourists going into sensitive areas > rely on tourists to be sensible • 90% of visits are by car which causes congestion and not enough car parks > creation of new field car parks operated by local people for summer tourism of which the car park fee goes towards local community projects

10	English	Reading and Writing Fiction & Shakespeare		CYCLE 2	Year 8
Box A: Shakespeare		Box B: Stagecraft/Plays			
Stage directions	this is an instruction in the text of a play indicating the movement, position, or tone of an actor, or the sound effects and lighting	The Plot	The plot is the overarching story that links the events together to tell the audience what, when and how things are happening. There can sometimes be more than one plot entwined in the story.	Flashforwards /Flashbacks	Playwrights sometimes use flashbacks to give an insight to a particular moment or character to provide context or highlight something specific. Flashforwards are used to increase tension and make the audience question how the characters end up there.
Aside	remarks made by characters which only the audience can hear	Drama	Plays need to have drama to be successful. They need to include dramatic moments/events or characters to be effective.	Props	Props are physical items used within a play to visually convey an event, emotion, topic or to show the audience the effect of these. E.g. The Gun in Blood Brothers)
Soliloquy	where a character speaks their thoughts aloud to the audience	Rhetoric	The use of rhetoric is important as it helps us understand character's personalities and what they are trying to inform or persuade us about/to do or think.	Context	Crucial information around what is happening when the playwright is writing the play. This information shapes the play as often the events and characters of the play are vehicles for the playwrights' thoughts, opinions and ideas.
Patriarchy	a society or organisation where men are more powerful. In Jacobean society, fathers or later husbands saw women as a possession.				
Hierarchy	The uneven distribution of power where a small number of people hold the majority of the power				
Character Analysis		Character Analysis	Analysis of- why, when and how the character does something, what they represent and how they interact with their environment or other characters.	The Playwright	Analysing the playwright is as crucial as analysing the play. Once we learn why they have written the play we gain an important understanding of the characters and events and why they have been included (links to context).
Great Chain of Being	The Great Chain of Being is like a ladder that shows the importance of everything in the world. The hierarchy of the Great Chain of Being starts with God at the top, followed by angels, humans, animals, plants, and non-living things.	Dialogue	Speech between the characters or potentially to themselves (see Box A). usually, this dialogue helps us understand the relationship between the characters and also with the tone and even class of the characters speaking.	Tone	Tone is the 'feeling' of the work, this is built through a character's actions, stage directions and events. Tone is how the play feels as we read it and helps us understand the emotions at the time.
Jacobean Era	The literary and artistic period marked by the rule of King James I (1603-1625)	Setting	Setting is the physical setting of the play. This includes time period, dates, what building/room and also weather.	Themes	The themes within the plays are the big ideas and core messages of the text. This can include topics such as violence, gender, class and conflict.

Box C: Narrative Writing		Box D: Key word and definitions (Themes in Plays/Blood Brothers)	
Symbolism	Symbolism is when something in a story (like an object, character, or event) stands for a bigger idea or meaning.	Identity	Exploration of self and personal or cultural identity.
Dialogue	Speech between two or more characters.	Class	A system of ordering society whereby people are divided into sets based on perceived social or economic status.
Setting	Creating a setting that reflects the characters mood and decision making.	Love	Depiction of romantic, familial, or platonic love within relationships.
Character/s	Building complex and vivid characters to carry the story forward.	Conflict	Central struggles between opposing forces, which can be internal or external.
Point of View	Using a perspective to that best conveys the mood of the characters or setting.	Redemption	The process of atonement or salvation, where characters seek forgiveness or a second chance.
Stream of Consciousness	Using the thoughts and feelings of the character to drive the narrative forward.	Religion	The use of inspiration or messages given regarding religion in literature. This could be allegories, allusions, warnings etc.
Sensory Imagery	Using the 5 senses to create imagery for the reader.	Nature	Relationship between humans and the natural world, often highlighting themes of beauty, conflict or environmental issues.
Foreshadowing	Creating a feeling that something is going to happen.	Loss	Exploration of grief, mourning, and the impact of losing loves ones or something important.
Chronology	Either linear (in time order) or non-linear (using flashbacks, forwards, changes in time)	Morality	Exploration of right and wrong, ethical dilemmas, and the consequences of moral choices.
Tone/Atmosphere	Creating a 'feeling' of the text specifically, through the setting/ characters.	Society	Examination of social structures, normal, values, often critiquing or reflecting on cultural issues.
Language Techniques	Metaphors, similes, hyperbole etc. used for effect.	Fate	The concept of destiny and how it shapes character's lives, often exploring the tension between free will and predetermined outcomes.
Motifs	A motif is something you notice being repeated in a story which links to a bigger idea. E.g. Light and dark could be motifs for good and evil.	Power	Examination of authority, control, and influence, highlighting how power is gained, maintained and lost.
Framed Narrative	A narrative within a narrative.	Gender	The examination of gender roles within society. This also includes the power imbalances and control between genders.
Narrative Voice	Writing a narrative in 1 st person, 3 rd person or as an omniscient narrator.	Freedom	The quest for liberation, autonomy, and self-determination, often against oppressive systems or circumstances.

Week 1	Week 2	Week 3	Week 4	Week 5
1. issue 2. intrepid 3. echo 4. question 5. separately 6. choir 7. eager 8. atomic 9. constitute 10. deaf	1. heaviness 2. subsidiary 3. warfare 4. continued 5. hesitate 6. subsided 7. movement 8. telephone 9. sorrowful 10. haemoglobin	1. enjoyment 2. formation 3. finance 4. sludge 5. cried 6. advance 7. hopper 8. acquire 9. social 10. chariot	1. epidemic 2. level 3. gnarled 4. theory 5. tortoise 6. sketch 7. partial 8. beret 9. pitiful 10. searched	1. marries 2. sequence 3. court 4. accidents 5. principle 6. stationary 7. championship 8. extremely 9. contraptions 10. holiday
Week 6	Week 7	Week 8	Week 9	Week 10
1. explaining 2. ancient 3. knuckle 4. misadventure 5. mucus 6. razor 7. unattainable 8. contemplative 9. swimming 10. pedigree	1. unexpectedly 2. extrovert 3. disinfectant 4. breathless 5. access 6. coupon 7. silhouette 8. circumspect 9. claustrophobia 10. encapsulate	1. inarticulate 2. misconstrue 3. climatic 4. avoid 5. murmur 6. restoration 7. pincer 8. cellar 9. benefit 10. woeful	1. insolent 2. indecently 3. squadron 4. project 5. quarter 6. complained 7. conductor 8. relevant 9. nutrient 10. unachievable	1. umbrella 2. patch 3. recruitment 4. rhinoceros 5. believing 6. agreeable 7. moreover 8. insincerely 9. pertinent 10. conceit
Week 11	Week 12	Week 13		
1. desperation 2. physically 3. lullaby 4. consequently 5. temporary 6. column 7. easily 8. trying 9. neighbourhood 10. fraught	1. trace 2. conduct 3. exonerate 4. stroking 5. gregarious 6. initial 7. profession 8. persuasive 9. physicist 10. invincible	1. baulk 2. society 3. biology 4. copious 5. earnest 6. fellowship 7. vengeance 8. kingdom 9. flavour 10. inexcusable		

BOX 1: Brackets, Equations and Inequalities

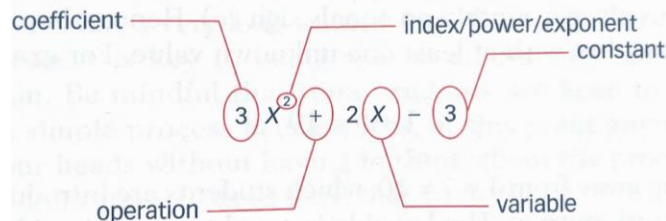
ALGEBRAIC SHORTHAND: EXAMPLES

b	$1 \times b$
$3b$	$3 \times b$
b^3	$b \times b \times b$
$3b^3$	$3 \times b \times b \times b$
$(3b)^3$	$(3 \times b) \times (3 \times b) \times (3 \times b)$
$\frac{a}{b}$	$a \div b$

ALGEBRAIC NOTATION

Unknown value	A value that is not known . In algebra, they are represented by a letter .
Variable	A value that can change . In algebra, they are represented by a letter .
Coefficient	A number used to multiply a variable. Algebraically, it is the number that comes in front of a letter. e.g. $3b$ means $3 \times b$. The coefficient is 3 . The variable is b .
Constant	Something that doesn't change in a formula.
Indices	Power of a variable or number.
Term	A number or letter on its own, or numbers and letters multiplied together. e.g. -2 , $3x$ or $5a^2$
Like terms	Like terms are the same apart from their numerical coefficients: they are the same variable and have the same power .

EXAMPLE



EXPRESSIONS, EQUATIONS, IDENTITIES AND FORMULAE

Expression	A set of terms combined using the 4 operations $+$, $-$, \times or \div . There is no "=" sign . e.g. $4x-3$, $5a - 3xy + 17$	
Equation	Where two expressions are equal in value – there is always an "=" sign . e.g. $4b = 18$.	
Inequality	Strict	$<$ less than $>$ greater than
	Non-strict	\leq less than or equal to \geq greater than or equal to
Formula(e)	A special type of equation, used to find the value of a specific thing. e.g. $F = ma^2$	
Identity	An equation that is true for all of its variables. e.g. $b + b = 2b$	
Function	A special type of equation where each input has a single output .	
	Input	– A variable you choose .
Output	– A variable that is calculated .	

INSTRUCTIONS: EQUATIONS

Solve	Find the value of an unknown or variable. We use inverse operations and the balance method.
Inverse	The opposite .
Balance an equation	Do the same to both sides of the "=" . We use this to solve an equation, or rearrange an equation.

INSTRUCTIONS: GENERAL

Evaluate	In maths, this means find the value of
Form	To write or produce .
Substitute	Replacing letters with numbers to calculate the numerical value
Expand	Multiply terms inside a bracket by those outside the bracket
Factorise	Finding the factors of an expression. The reverse of expand , it is when we write an expression using brackets
Simplify	To reduce to its simplest form by collecting like terms

BOX 2: Indices

INDEX NOTATION		SPECIAL POWERS	
$a = b^n$ <i>a is the Power.</i> <i>b is the Base.</i> <i>n is the Index.</i>		p^0	Anything to the power of 0 is 1
		p^1	Anything to the power of 1 is itself

INDEX LAWS: MULTIPLICATION AND DIVISION

When the base is the **same**, we use the following laws when multiplying and dividing.

Multiplying	Add the powers E.g. $a^m \times a^n = a^{m+n}$
Dividing	Subtract the powers E.g. $a^m \div a^n = a^{m-n}$
Raising a power by another power	Multiply the powers E.g. $(a^m)^n = a^{mn}$

POSITIVE INTEGER POWERS

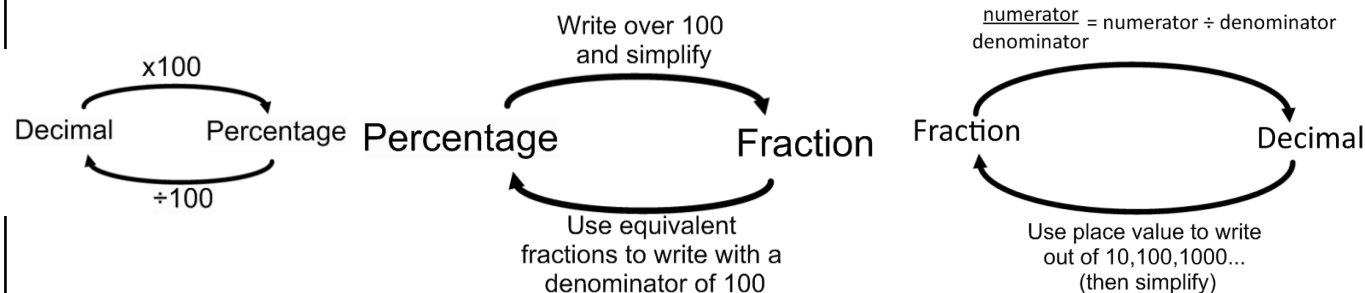
Square numbers	The answer when you multiply a number by itself . n^2 : 1, 4, 9, 16, 25, 36, 49, 64, 81, 100, 121, 144...
Cube numbers	The answer when you multiply a number by itself, and then by itself again . n^3 : 1, 8, 27, 64, 125, 216, 343, 512, 729, 1000...
Powers of 2	2^n : 2, 4, 8, 16, 32, 64, 128, 256, 512, 1024...
Powers of 3	3^n : 3, 9, 27, 81, 243, 729...
Powers of 4	4^n : 4, 16, 64, 256, 1024...
Powers of 5	5^n : 5, 25, 125, 625...
Powers of 10	10^n : 10, 100, 1000, 10 000, 100 000...

BOX 3: Fractions and Percentages**PERCENTAGE CALCULATIONS**

Multiplier	A percentage written as a decimal . You can then use multiplication to find the percentage.	
Percentage increase	Adding a percentage to the original amount.	
Percentage decrease	Subtracting a percentage from the original amount.	
Percentage Change	The change between the old value and the new value as a percentage	$\frac{\text{Difference}}{\text{Original}} \times 100$
Reverse Percentage	Working backwards to find 100%	

COMMON FDP CONVERSIONS

Fraction	Decimal	Percentage
1/2	0.5	50%
1/4	0.25	25%
3/4	0.75	75%
1/10	0.1	10%

FDP CONVERSIONS**BOX 4: Standard Index Form****STANDARD FORM: NOTATION**

Allows us to write very large or very small numbers without lots of zeros.

Numbers written in the form $A \times 10^n$.

A is between **1 and 10**.

N is any **integer**

'n' is positive **Large number** (≥ 1)

'n' is negative **Small number** (< 1)

STANDARD FORM: LAWS (MULTIPLY & DIVIDE)

Multiplication
 $A \times 10^n \times B \times 10^m = (A \times B) \times 10^{n+m}$

Division
 $A \times 10^n \div B \times 10^m = (A \div B) \times 10^{n-m}$

15	RE	Buddhism and Humanism	CYCLE 2	Year 8
Area	Key Knowledge to learn			
1- Buddhism introduction/ importance of the Buddha	<ul style="list-style-type: none"> Buddhism originated in India around 400BC, which is around 2500 years ago. It is a popular religion, with 360 million followers and is the fourth largest religion in the world. Buddhists do not believe in a supreme being or creator God, It is generally accepted that Buddhism started with Siddhartha Gautama, an extraordinary and noble person, who came to be known as the Buddha After Siddhartha was born, a prophecy foretold that he would be a great ruler or a holy man. The king wanted him to be a great ruler so he shielded his son from seeing any pain or suffering. Siddhartha lived a life of luxury in a palace. The king made sure his son had everything in the palace, so he wouldn't want to leave. Siddhartha left his palace in his late 20's and Siddhartha witnessed four things (old man, sick man, dead man and a holy man) which changed his perspective on life. Siddhartha continued to meditate over time and eventually became enlightened. He then became known as the Buddha, which means 'enlightened one'. 			
2 – Worship in Buddhism	<ul style="list-style-type: none"> In Buddhism there is no single place of worship. This is because Buddhists can worship in the home or in the temple. Although Buddhists show devotion at home, they also use the temple as this is the heart of the community. Buddhists mainly pray at a temple, however, there are other places of worship such as a shrine, stupa and meditation hall. Buddhists use a variety of different methods in their devotional practice. Such as Mantras, mala and meditation. 			
3 – Nature of human life and life after death	<ul style="list-style-type: none"> Buddhists believe in a cycle of death and rebirth called samsara. Through karma and eventual enlightenment, they hope to escape samsara and achieve Nirvana, an end to suffering. Buddhists believe in karma or 'intentional action'. Through good actions, such as helping those in need, and by developing concentration and wisdom, Buddhists hope to either gain enlightenment or to ensure a better future for themselves. Good actions will result in a better rebirth, while bad actions will have the opposite effect. Depending on the actions performed in previous lives, rebirth could be as a human or animal or even ghosts, demi-gods, or gods. Being born as a human is seen by Buddhists as a rare opportunity to work towards escaping this cycle of samsara. The escape from samsara is called Nirvana or enlightenment. Once Nirvana is achieved, and the enlightened individual physically dies, Buddhists believe that they will no longer be reborn. 			
4 – Humanism introduction and human origins.	<ul style="list-style-type: none"> Humanism is a Non-Religious Worldview approach to Life Shared by millions of people in the UK and around the world. Humanists believe it is possible to lead a good, happy, and meaningful life without the need for religion. We can find humanist ideas over 2,000 years ago in ancient India, China, and Greece. Humanist thinking became increasingly popular during a period called the Enlightenment in the 18th century. Around 5% of the population of the UK use the label 'humanist' to describe themselves. However, many more share humanist beliefs and values. Humanists don't believe in a god or that human beings were created. They look for natural explanations and believe that science provides the best way to answer questions about where we come from. 			
5 – Humanism: understanding the world and the best way to live.	<ul style="list-style-type: none"> Many humanists believe that we should be prepared to question our beliefs. We have a responsibility to ask questions, think clearly, carefully and look at the evidence. Humanists believe the world is a natural place. There is no scientific evidence for the existence of supernatural beings, supernatural powers, or supernatural forces (such as miracles). Humanists think we should try to explain how the world works without relying on anything supernatural. Although humanists don't believe in a god, they recognise that many people do. Humanists support freedom of belief. We should be allowed to question each other and disagree. However, we should not tell people what they must believe. We should not let our disagreements get in the way of friendship. Humanists believe this is the one life we have. For many of us it will be around 1,000 months long, for some it will be much shorter. That motivates many humanists to try to make the most of life in the here and now, and support others to do the same. For humanists it is the fact that it will come to an end that makes life so valuable. Good things are precious because they come to an end. It is the finite nature of life that gives it meaning, value, and shape. 			

Keyboard skills Knowledge Organiser

How to construct chords

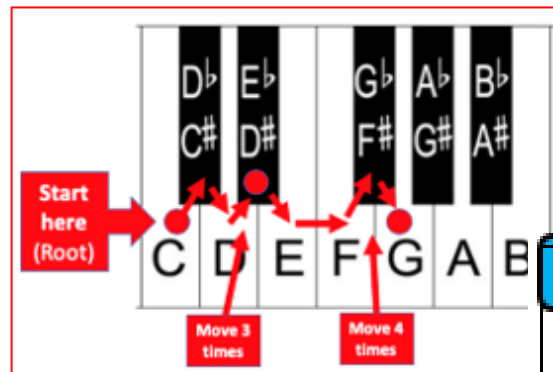
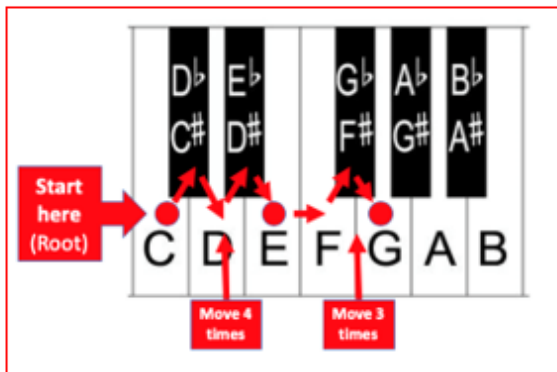
Major chords

4 – 3

Use these numbers to count the notes needed in different chords

Minor chords

3 – 4



Keywords

Key Word	Definition
Beat	A single 'pulse' that musicians feel to stay in time with each other
Note	Single sound played by all instruments
Chord	When 2 or more notes are played together
Dynamics	How loud or quiet the music is
Accuracy	How correct the music is
Fluent	Being able to perform confidently without help
Confident	When performers know what they are performing and know they will get it right
Warm up	A simple performance or exercise at the start of rehearsal so you don't hurt yourself

BOX 1: Basic commands used in python turtle

Using the Turtle

```
import turtle
```



Moving the Turtle

```
turtle.forward(distance)
```



Go forward 100 pixels

Moving the Turtle

```
turtle.left(degrees)
turtle.right(degrees)
```

```
turtle.left(45)
```

Anti-clockwise

```
turtle.right(45)
```

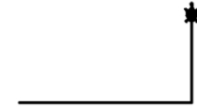
Clockwise

Moving the Turtle

```
turtle.left( )
turtle.right( )
```

Moving the Turtle

```
turtle.forward(100)
turtle.left(90)
turtle.forward(50)
```



Changing the Pen

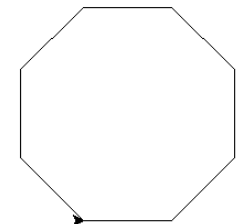
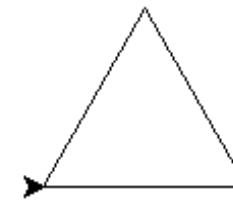
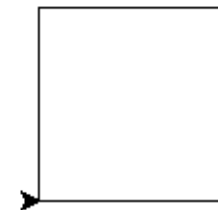
```
turtle.width(4)
```

```
turtle.color("red")
```



BOX 2:

Shape 1	Shape 2	Shape 3
<pre>import turtle turtle.forward(100) turtle.left(90) turtle.forward(100) turtle.left(90) turtle.forward(100) turtle.left(90) turtle.forward(100) turtle.left(90)</pre>	<pre>import turtle turtle.forward(100) turtle.left(120) turtle.forward(100) turtle.left(120) turtle.forward(100) turtle.left(120)</pre>	<pre>import turtle turtle.forward(80) turtle.left(45) turtle.forward(80) turtle.left(45) turtle.forward(80) turtle.left(45) turtle.forward(80) turtle.left(45) turtle.forward(80) turtle.left(45) turtle.forward(80) turtle.left(45) turtle.forward(80) turtle.left(45) turtle.forward(80) turtle.left(45)</pre>



Method: to work out the left/right turn $360 \div (\text{sides})$ How many sides does each shape have? = Answer

For example a square: $360 \div 4 = 90$

Box A – Drama Skills	Box B – Drama Techniques	Box C – Context
<p>Body Language – Using your body to communicate your character. E.g an old man would have hunched body language.</p> <p>Facial Expressions – Using your face to communicate your characters emotions.</p> <p>Voice – altering the tone, pitch, and pace of your voice to fit your character.</p> <p>Levels – How high or low your character is to the ground. Can be used to communicate status, class or power.</p> <p>Proxemics – How close or far away you stand to other characters on stage based on your relationship.</p> <p>Posture – How you stand during your performance to represent your character</p> <p>Gestures – using body parts to communicate non-verbally. E.g waving, thumbs up, shaking head.</p>	<p>Tableau – Can also be called a freeze frame or still image. A moment of stillness in a performance, used to highlight key moments within a scene.</p> <p>Thought Tracking – Saying your characters thoughts out loud to the audience so they know what your character is thinking or feeling.</p> <p>Forum Theatre – a technique where the audience becomes the director. They can stop the performance at any time, give feedback, then rewind. Used during rehearsals to develop scenes.</p> <p>Narration – Reading part of the story aloud to the audience, either instead of acting it out or alongside mime.</p> <p>Mime – Using only your body to communicate, no talking.</p> <p>Flash-forward – A scene which is set further in the future.</p> <p>Flashback – A scene set in the past, sowing past events.</p> <p>Cross Cutting – Where two or more scenes happen on stage at the same time, switching between the two.</p>	<p>Social, Historical, Political and Cultural Contexts. Have you thought about the different contexts for your devising piece? These elements should build up your research section.</p> <p>Social Context – A social setting or environment which people live.</p> <p>Historical Context – A part of history which has happened (this could be when the play was set)</p> <p>Political Context – The political party in power at the time and how this impacted on society.</p> <p>Cultural Context – How culture can affect behaviour, choices and decisions for characters.</p>

Box D – Evaluation Sentence Starters	Box E – Roles and Responsibilities in Performing Arts	Box F - Stagecraft
<p>I have demonstrated multiple skills during my rehearsals. An example of this is when...</p> <p>During my performance, I was good at demonstrating drama skills such as.... This is important because...</p> <p>Within my work, I used a variety of drama techniques to improve my overall performance. For example, I used This was effective because...</p> <p>One area I would like to improve on is ... It is important to use this skill in performance because... I could improve on this skill by...</p>	<p>Director - The directors role is to bring to life the playwrights work. They are responsible for choosing the right cast, the right acting style and making sure the performance is well rehearsed.</p> <p>Actor - The actors role is to rehearse their lines before a rehearsal. They are responsible for performing as a certain role within the play, using the directors instructions.</p> <p>Set Designer - The set designer is responsible for creating a set which matches the location or time period the play is set in. They might need to make some set themselves or buy this.</p> <p>Playwright - playwrights role is to create and write the entire play. They are responsible for the entire story, setting, location and characters.</p> <p>Costume Designer – The costume designer will need to research the historical and social context of the play to make sure costumes reflect this. They will also need to measure the actors to ensure all costumes fit.</p>	<p>Every performance should have a clear starting position and a clear end position (freeze frame). You should NEVER have your back to the audience, we use the red cross rule.</p> <p>You must pronounce and enunciate your words clearly, even if you are playing a shy character. You should rehearse the exact lines you will say and exactly when you will say them.</p> <p>We work collaboratively, this means there is no director in the scene.</p> <p>No hands in pockets, even if it is part of your character, you must consider different ways of communicating this.</p> <p>Every character is aiming for an equal amount of lines to say and time on stage, the group must work collaboratively to achieve this.</p>

Section A- ARTIST INFORMATION

Wassily Kandinsky was born in Moscow, Russia on December 16, 1866. He grew up in the Russian city of Odessa where he enjoyed music and learned to play the piano and the cello. Kandinsky would remark later that, even as a child, the colours of nature dazzled him. Both music and colours would have a huge impact on his art later in life.

Kandinsky went to college and then became a law teacher. However, when he was thirty he decided to change careers and become an artist. He attended art school at Munich, Germany. Early on his art was influenced by painters like Claude Monet as well as music composers and philosophers.

In 1909 Kandinsky began to think that painting didn't need a particular subject, but that shapes and colours alone could be art. Over the next several years he would start to paint what would become known as Abstract Art. Kandinsky was one of the founding fathers of Abstract Art.

Kandinsky felt that he could express feelings and music through colours and shapes in his paintings. For example, he thought that yellow had the crisp sound of a brass trumpet and that certain colours placed together could harmonize like chords on a piano. The shapes he was most interested in were the circle, triangle, and the square. He thought the triangle would cause aggressive feelings, the square calm feelings, and the circle spiritual feelings.

Key terms:

Expressive art- showing thought or feeling/emotion by the application of the brush strokes or the colours used.

Non figurative - without recognisable figures or objects eg just shape and colour

Figurative art.- showing recognisable figures or objects eg.people, houses

Abstract Art - Non figurative, art that only uses the formal elements to give meaning

Composition- The plan or layout, - where things go in a picture

Formal Elements- the parts that make up a piece of art...line, shape and colour are the main elements that Kandinsky uses

Wassily Kandinsky

THE ART STORY
Modern art insight



1903



1923

His work became increasingly abstract until only formal elements- line, colour, shape were used



Line

A mark made by a pointed tool such as a brush, pen or stick; a moving point.



Shape

A flat, enclosed area that has two dimensions, length and width. Artists use both geometric and organic shapes.



Color

Is one of the most dominant elements. It is created by light. There are three properties of color; Hue (name,) Value (shades and tints,) and Intensity (brightness.)

Section B - FORMAL ELEMENTS

Kandinsky used shape, lines and colour to express emotion or meaning rather than trying to make objects look real. His art was termed

ABSTRACT because he did not show recognisable objects in his work.

He particularly used colour to express what he was feeling and he wanted to use colour to make his viewers feel emotion, too....just like when you listen to music.

DESIGN PRINCIPLES -how the elements are arranged to make the picture look good or show feeling and mood

MOVEMENT

Elements might jump or fall or follow and lead us around a picture suggesting movement

EMPHASIS

Some elements stand out more

BALANCE

Elements on one side are equal to or linked to something on the other side.

BOX 1: Health and Safety**D&T Health & Safety Rules**

The biggest danger in the D&T room is YOU!
You are at risk when you don't understand the hazards or you are careless, or both. The person most likely to suffer from your mistakes is YOU!

1. Only enter a D&T room when told to do so by a teacher.
2. Never rush about or throw things in a D&T room.
3. Keep your work area and floor area clear, with bags and coats well out of the way.
4. Follow instructions precisely; only touch or use tools, equipment, machines and materials when told to do so by a teacher.
5. Never remove anything from any D&T room without permission.
6. Wear eye protection when told to do so and keep it on until you have finished the work that needs the eye protection.
7. When using naked flames (eg. gas torches in workshops, gas cookers in food rooms), make sure that ties, hair, baggy clothing etc are tied back or tucked away.
8. Always stand up when doing practical work in Food Tech or in workshops so you can quickly move out of the way if you need to.
9. Always wash your hands carefully before starting work in Food Technology and after the end of lessons in all areas.
10. If you are scalded, burnt or a chemical splashes on your skin, wash the affected part at once with lots of water. Tell your teacher. Also report any cuts or abrasions.
11. Report all spillage of any substance or anything that breaks to your teacher.

**BOX 2: Finishing Tools/Equipment****Glass Paper**

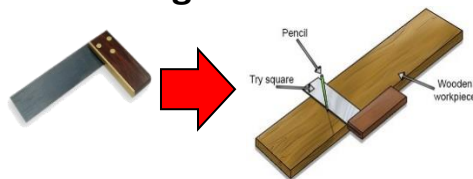
Used to remove scratches from the surface of wood. Glass paper is available in a wide range of grades for removing deep scratches to fine surface finishing.

**Disc/Belt Sander**

Used to sand and shape the edges of wood. The sanding disc/Belt is very coarse and will remove waste quickly. A sliding fence can be used when sanding at a required angle.



GRIT ARRANGED HORIZONTALLY
GRIT ARRANGED VERTICALLY
TWO LAYERS OF ADHESIVE
PAPER / CLOTH BACKING

BOX 3: Marking out tools**Try square**

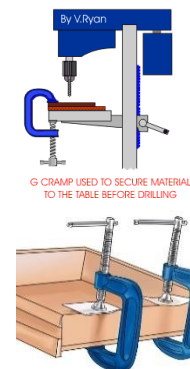
For marking out accurate right angles and checking if work is square when gluing up.

BOX 4: Clamping and holding tools**Machine Vice**

For holding work securely when drilling holes on the pillar drill.

**G Clamp/Crimp**

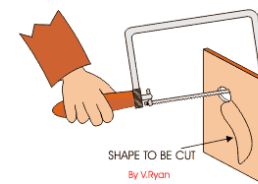
Used to hold work together whilst gluing and holding work securely on a bench or pillar drill.

**Woodworking Vice**

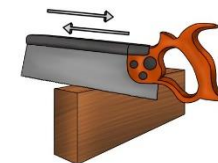
To hold the wood securely when cutting, chiseling, drilling etc.

**BOX 5: Cutting and shaping tools****Coping Saw**

Used for making curved cuts in wood.

**Tenon Saw**

Used for making straight cuts in wood.

**Bench Hook**

To hold the wood securely when making straight cuts with the Tenon Saw.

**Pillar Drill**

To drill holes into wood, metal and plastic.

**Forstner Bit**

For drilling large, flat bottomed holes into wood.



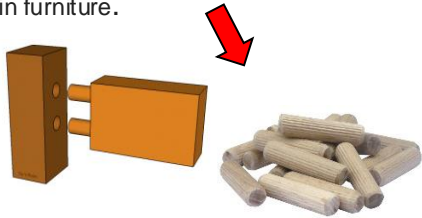
Wood joints can be either **PERMANENT** or **TEMPORARY** depending on the type and if glue is used.

BOX 6: Permanent Jointing Techniques

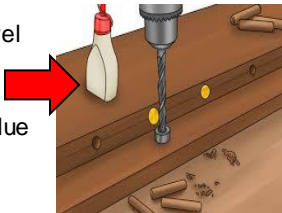
Permanent Joint:
When we do not want to take the pieces apart again E.G. Glues & Jointing

The Dowel Joint

A dowel is a cylindrical rod, usually made from wood, plastic, or metal. Dowels are commonly used as structural reinforcements in furniture.



Accurate drilling of holes for wooden dowels. Dowel joint is then assembled using PVA glue



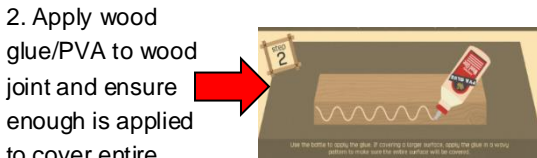
PVA or Wood Glue used to make permanent joints with wood.



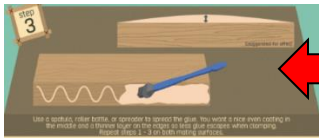
Glued Joints



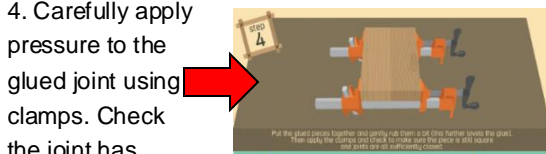
1. Ensure pieces fit together correctly and are smooth and free of any dust.



2. Apply wood glue/PVA to wood joint and ensure enough is applied to cover entire surface.



3. Spread glue using a spatula to evenly cover the entire surface.



4. Carefully apply pressure to the glued joint using clamps. Check the joint has closed up fully.



5. Remove excess glue with a damp cloth and allow the glue to dry over night.

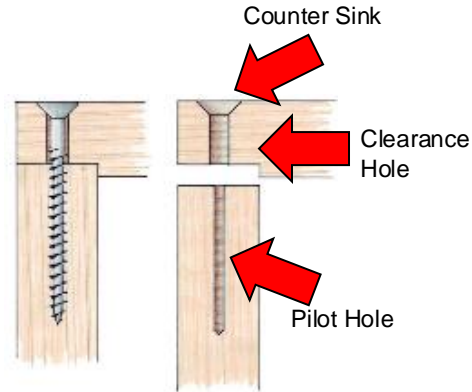
BOX 7: Temporary Jointing Techniques

Temporary Joint:

When we will, or might need to take pieces apart again E.G. Screws and nails

Wood Screws

A screw is a type of fastener typically made from metal with an external thread, Screws are available in a wide range of shapes/sizes and are commonly used to fasten wood together.



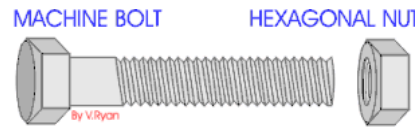
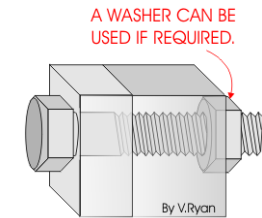
Wood screws are driven into the wood using a screwdriver or cordless screw driver/drill

Wood screws are available in different head types including slotted, phillips & pozidriv.



Nuts & Bolts

Nuts and Bolts are used to join wood, metal and plastic together temporarily and can be taken apart if required. Many steel structures, including buildings, are simply bolted together. For example, the Eiffel Tower in Paris was originally a temporary structure and after twenty years it was to be dismantled.



Spanners are used to tighten the nuts and bolts, holding the parts together securely.



Wing nuts have two wings protruding from the nut, this makes it very easy to tighten/loosen by hand.