



BOURNEMOUTH SCHOOL

Year 7

Knowledge Organiser 3

Spring Term: 2023-24

Name: _____

✓Hard Work

✓Discipline

✓Smart Appearance

✓Respect

Bournemouth School

Knowledge Organiser: Year 7 Spring Term 1

'Knowledge is power' by Francis Bacon

A knowledge organiser provides you with all the most important knowledge you need for each unit of study this half term. Your aim is to transfer all of this information into your long-term memory so you can use it in your lessons and further expand your understanding of this work.

How to use your knowledge organiser (KO)?

1. Ensure you have your KO with you at all times in school and when you need to do your homework at home.
2. Ensure you have your homework learning journal with you at all times in school and when you need to do your homework at home.
3. In lessons when you have covered information that appears on your KO your teacher will ask you to put a tick next to that section. This means that is now added to what you must learn for homework.
4. Initially follow your homework timetable to decide what to revise each evening.
5. There are 4 strategies that you can use to revise. They are progressively more challenging so always start with number 1.

a. Look Cover Write Check

- i. Identify the subject and section of your KO that you want to revise. This should be one of the ticked sections.
- ii. LOOK carefully at the subject and section of your KO you want to revise and try to remember as much as you can. Remember this should be a ticked section.
- iii. Now COVER this information so you can't read it.
- iv. WRITE out what you can remember word for word in your Homework Learning Journal.
- v. CHECK what you have written by comparing it to your KO. Tick each correct word in green pen and correct any errors you have made.
- vi. Repeat this process until you are confident you can remember everything you need.

AIM:

You should be able to repeat the information by rote

b. Self or peer quizzing

- i. Identify the subject and section of your KO that you want to revise. This should be one of the ticked sections.
- ii. Write out a list of questions you could ask either yourself or a friend about this section of the KO. Write these in your homework learning journal.
- iii. If you are working on your own, cover the KO and write a full answer to each question.
- iv. If you are working with a partner swap books and copy down their questions and have a go at answering them.
- v. Now uncover the KO and with a green pen correct your work.

AIM:

You should be able to repeat the information by rote but with a good understanding

c. Playing with words and sentences

- i. Identify the subject and section of your KO that you want to revise. This should be one of the ticked sections.

- ii. You now want to check how well you have learnt the information in your KO.
- iii. Definitions – look at words that are used in this section. Can you write a definition in your own words?
- iv. Rephrasing – can you rewrite the sentences or explanations in your own words
- v. Summary – can you summarise the main points of this section of the KO?
- vi. Synonyms – can you write synonyms for key words and ideas
- vii. New Sentences – Can you write a sentence that includes the key vocabulary or definitions that you have learnt?

AIM

You should be able to use the information in your KO in a flexible and confident way in your writing.

d. Think it, Link it

- i. This is a technique to use towards the end of the half term when you are revising all of the KO.
- ii. Think of the links or connections between different sections of your KO.
- iii. Write these out in your own words in your homework learning journal
- iv. Think about the links between a particular section of you KO and what you have learn in your lessons. Can you expand on this section by linking it to your wider knowledge?
- v. Write this out in your homework learning Journal.

AIM

You should be able to link your homework and your lessons to show a confident understand of the work covered.

Homework Learning Journal

- 1. Always write the subject and the date when you start your homework
- 2. Always write the strategy that you are going to use for your homework
- 3. Use a blue or black pen to complete your homework or a pencil if you need to draw.
- 4. Always use a ruler to underline titles and dates
- 5. Use a green pen to complete corrections of your work

Checking:

Your tutor will check your Homework Learning Journal at least once a week. If they are concerned that you aren't doing your homework properly they will offer support and guidance. If you don't respond to this guidance you will be added to the afterschool 'Success club' where a member of staff will help you complete your homework.

DO NOW tasks:

At the start of every lesson you should expect a Do Now task. This is a low stakes retrieval quiz on what you have learnt so far. If you have completed your homework this should be easy. The aim is to get 100% in each of these. If you miss this target occasionally don't worry. If it happens regularly your teacher will ask your tutor to have a chat and offer you support.

- ☐ **Contrast** - the state of being strikingly different from something else
- ☐ **Weight** – thick or thin
- ☐ **Focal** – where you eye is drawn to
- ☐ **Composition** – placement of elements within an image
- ☐ **Focal-** the centre of interest

☐ **What is an annotation?**

Annotations are written explanations or critical comments added to art or design work that record and communicate your thoughts.

☐ **Why do we look at other artists work to inspire us?**

This can help use understand the theme or subject more clearly.
Inspire ideas.
Learn techniques or processes.
Allow us to see things from different perspectives

☐ **Why do we evaluate our artwork as an artist?**

Evaluation is an opportunity to: discuss your development and final work. help others understand what you were trying to achieve. explain your successes and weaknesses.

- ☐ **Stippling** is the creation of a pattern or texture simulating varying degrees of solidity or shading by using dots. Such a pattern may occur in nature and these effects are frequently emulated by artists.

- ☐ **Impasto** is a technique used in painting, where paint is laid on an area of the surface (or the entire canvas) very thickly, usually thickly enough that the brush or painting-knife strokes are visible. Paint can also be mixed right on the canvas.

☐ **Flat washes**

Flat washes are exactly what they sound like, an area of colour that is flat in tone, very even in colour throughout without streaks, brush marks, or variations in value.

☐ **Graduated wash**

Graduated wash is a gradual blending of one colour into another.

☐ **Graded wash**

A graded wash has a gradual smooth change in tone from dark to light.

☐ **Wet on wet watercolour**

This is a watercolour technique that uses wet paint against wet paint or wet paper. It's used to create beautiful bleeds and blooms between areas of colour and allow the watercolour paint to spread and blend.

☐ **Dry brush**

Dry brush technique allows artists to pick up fresh paint with a slightly moist brush to create hatched strokes.

Spreadsheets with Excel

Formulae:

Calculation	Symbol	Example	✓
Add	+	=A1+A2	
Subtract	–	=A1 –A2	
Multiply	*	=A1 *A2	
Divide	/	=A1 /A3	



Functions:


Function	Example	Definition	✓
SUM	=SUM (A1 : A7)	Calculates the total.	
AVERAGE	=AVERAGE (A1 : A7)	Calculates the average.	
MIN	=MIN (A1 : A7)	Calculates the smallest value in a series.	
MAX	=MAX (A1 : A7)	Calculates the largest value in a series.	
COUNT	=COUNT (A1 : A7)	Calculates how many cells contain a value, i.e. not blank.	
NOW	=NOW ()	Adds the current date and time.	
IF	=IF (A1>5, "Big", "Small")	Allows you to make logical comparisons between a value and what you expect.	

Phrase	Definition	✓
Spreadsheet	A computer program that allows the entry, calculation, and storage of data in columns and rows.	
Excel	A spreadsheet program created by Microsoft.	
Worksheet	A single page in a file created with a spreadsheet program.	
Workbook	The name given to an Excel file - contains one or more worksheets.	
Cell	Each box in a spreadsheet.	
Column	Run vertically, up and down.	
Row	Run horizontally, side to side.	
Cell reference	Made up of the column letter and the row number the cell is in.	
Label	Words that help you understand what the numbers mean.	
Value	The numbers you already know.	
Active cell	The cell that you have currently selected. It has a thick black line around it.	
Formula	Performs calculations on data.	

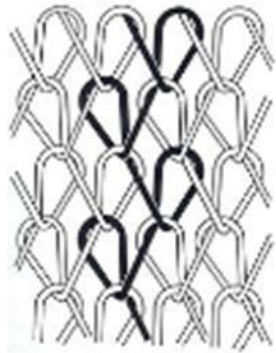


Papers and boards					
Type	Description	Uses	Advantages	Disadvantages	Tick
Copier paper 80gsm	Thin, lightweight, cheap, bright white paper with smooth, bleached, uncoated surface.	Writing, printing and drawing	Takes colour well; good surface for pencils, pens & markers; cheap; readily available & in range of colours	Prone to jamming printer feed mechanisms; can bleed through	
Cartridge paper 120-150gsm	Creamy, thick, heavyweight paper	General drawing and printing; takes watercolour paint without buckling.	Accepts most types of drawing media and is opaque	Costs more than copier paper	
Tracing paper 60-90gsm	Thin, smooth, translucent, dense, usually 60-90gsm	Art, making copies, envelope windows, overlays.	Strong, translucent	Can be expensive, limited ink absorption; longer drying time	
Folding boxboard	Stiff layers of: 1. Printable bleached top surface 2. Unbleached yellowish centre 3. Bleached inside layer	Cereal boxes, cartons, food packaging	Excellent for scoring and bending without splitting; accepts print well; inexpensive	Lower strength than solid white board	
Corrugated board	Two or more layers of fluted paper between two paper liners	Protective packaging, e.g. for electrical products, etc.	Impact resistant, recyclable and inexpensive, strong, lightweight	Brown finish does not suggest quality, can deform under pressure, not water resistant	
Solid white board	Strong, rigid board from pure, bleached wood pulp	Book covers; food; cosmetics; medicine packaging	Strong, rigid, accepts print very well	Can be expensive	

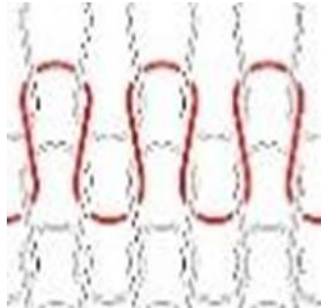
Textiles				
Woven textile	Description	Properties	Uses	Tick
Plain weave (calico) 	Uses a warp and weft: one yarn over and one yarn under repeatedly	Strong, hardwearing, same on both sides, cheap to make, prints well	Shirts, Bags, Beddings, Textiles	
Twill weave (denim) 	Uses a warp and weft: two over and two under with staggered rows	Hardwearing, strong, less stiff (more flexibility), more interesting to look at due to the weave	Jeans, Jackets, Curtains, Blankets, Furnishings	
Non-woven textile	Description	Properties	Uses	
Felted wool	Fibres of wool are rubbed together and become tangled when wet	Resistant to chemicals, doesn't fray, good sound insulator, not stretchy, expensive	Pool table surface, Hats, Bags, Coats, Slippers	
Bonded fibres	Webs of other fibres i.e. polyester are glued or melted together	Doesn't fray, cheap, stable, not very strong	Wet wipes Face masks Disposable overalls	

Natural fibres	Properties	Uses	Tick
Wool (from animals)	Warm, absorbent, durable, creases drop out, dries slowly, can feel itchy, can shrink when wet	<ul style="list-style-type: none"> • Coats • Jumpers • Blankets • Suits • Upholstery 	
Cotton (from plants) 	Cool, absorbent, resists abrasion, durable, dyes well, creases easily, dries slowly	<ul style="list-style-type: none"> • Towels • Denim • Socks • Underwear • Bedding • T-shirts 	

Synthetic fibres	Properties	Uses	Tick
Polyester (manmade)	Strong when wet or dry, dries quickly, abrasion resistant, crease resistant, low warmth, not breathable	<ul style="list-style-type: none"> • Raincoats • Fleece • Nightwear • Medical textiles • Jackets 	
Acrylic (manmade)	Warm, dries quickly, durable, crease resistant, poor absorbency, can feel stiff	<ul style="list-style-type: none"> • Imitation wool and knitwear • Upholstery • Blankets • Sportswear 	


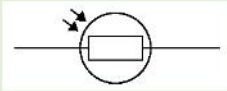



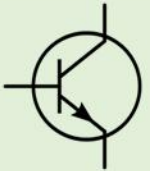

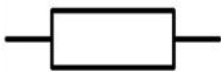





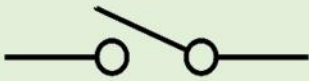


Warp knit






Weft knit

Knit type	Properties	Uses	Tick
Warp knit	Fairly stretchy, retains heat, doesn't unravel, curls at the edges	<ul style="list-style-type: none"> • Geotextiles • Lace • Fleece 	
Weft knit	Stretchy, comfortable, fast to produce, ladders easily	<ul style="list-style-type: none"> • T-shirts • Jumpers • Socks 	

Component	Picture	Symbol	Function	Tick
LDR (Light Dependent Resistor)			Light on LDR, the resistance changes. More light = less resistance; electricity flows.	
Thermistor			Resistance changes with temperature. Hot = low resistance cold = higher resistance.	
Transistor			Acts as a tiny electronic switch. It is known as a semi conductor. It can also amplify small currents.	
Resistor			Added to a circuit to change the resistance and limit the flow of electricity through part of a circuit.	
LED (Light Emitting Diode)			Gives out light when electricity passes through.	
Buzzer			Makes a sound when electricity flows through.	
Switches			Turns the flow of electricity on in a circuit on or off.	

Non-Renewables

Type	How converted to energy	Advantages	Tick
Coal 	Heat and hot gases convert water into steam which is used to turn a turbine, which creates high voltage electricity. Smaller amounts used to heat homes.	<ul style="list-style-type: none">Generates stable, large-scale and high-power electricityReliable	
Oil 	Oil is processed and split into petroleum products, including petrol and diesel. In power plants oil products are burnt to heat water into steam, which turns turbines to produce electricity.	<ul style="list-style-type: none">Generates stable, large-scale and high-powered electricityRelatively cheap to extract and convert	
Gas 	Burning gas powers turbines; waste heat used to turn steam turbines. Natural gas is used in homes for heating or cooking. It has lower emissions than other fossil fuels – half the rate of coal.	<ul style="list-style-type: none">Generates stable, large-scale and high-powered electricityRelatively cheap to extractCleaner than oil or coal	

Renewables

Source	What it is & how it is converted/used	Advantages	Tick
Biomass	<ul style="list-style-type: none">Organic matter such as wood, crops, rubbish, landfill gasCan be burnt to produce heat or converted to electricity	<ul style="list-style-type: none">Uses waste products	
Biodiesel	<ul style="list-style-type: none">Made from plants, vegetables and fermented waste cooking oilCan be used in diesel powered vehicles without modifying the engine	<ul style="list-style-type: none">Uses waste productsDoes not give off harmful chemicals	
Tidal	<ul style="list-style-type: none">Turbines turned by tidal movement of water, generating electricityArtificial barriers constructed on tidal rivers, bays, estuaries, trapping water	<ul style="list-style-type: none">No emissionsVery powerfulPredictable & stableBarriers can be used as bridges	
Wind	<ul style="list-style-type: none">Turbines turned by propeller blades, creating electricity through a generator	<ul style="list-style-type: none">Freely availableCan be used in remote areasNo emissions	
Solar	<ul style="list-style-type: none">Photovoltaic cells convert sunlight into electricityThermal plants heat fluid, which then turn water to steam, driving turbines and generating electricity	<ul style="list-style-type: none">Reliable source in warmer countriesCan be small scale for homesMore electricity in stronger sunshine	
Hydro-electric	<ul style="list-style-type: none">Dam built to trap water, which turns turbines and generators	<ul style="list-style-type: none">Large amount of low-cost powerCan be used as water reserve	



Year 7 English Poetry and Creative Writing

All One Race – *Oodgeroo Noonuccal*

Oodgeroo Noonuccal, had the original Anglo-Australian name of Kathleen Jean Mary Ruska.

She was born on 3rd November 1920 in Australia.

She died on September 16th 1993 in Brisbane, eastern Australia.

She was an Aboriginal writer and political activist, considered the first of the modern-day Aboriginal protest writers.

Her first volume of poetry, *We Are Going* (1964), was the first book by an Aboriginal woman to be published.

The key to successful creative writing

Your writing must show **variety** and **accuracy**.

Be consistent with the tense you use.

Term	Definition	
Explicit	When something is stated clearly and in detail, leaving no room for confusion or doubt.	
Implicit	When something is suggested though not directly expressed.	
Interpretation	A way of explaining the meaning behind a piece of writing. An interpretation can vary from person to person.	
Inference	A conclusion reached on the basis of evidence and reasoning.	
Connotations	An idea or feeling associated with a word in addition to its literal or primary meaning.	

Term	Definition	
Adjectives	A word which describes a noun. E.g., The <u>sleek black</u> cat sloped along the fence.	
Adverbs	A word which describes a verb. E.g., She skipped <u>joyfully</u> down the road.	
Conjunctions	Words which join parts of the sentence together. E.g., <u>Neither</u> the wind <u>nor</u> the rain abated for a second the whole day.	
Nouns	A person, place or thing.	
Pronouns	Short words like it, she, he, you, we, they, us and them - often used to replace nouns.	
Interjection	A short phrase to express an emotional response. E.g., "Oh dear! How awful that you experienced that."	

Term	Definition	
Pathetic Fallacy	Pathetic fallacy is often used to describe the environment. The weather and season can be described with human emotions to reflect the mood of the scene.	
Foreshadowing	An indication of a future event.	
Personification	When an inanimate object is giving a human quality.	
Atmospheric language	Words used to create a specific mood or atmosphere.	
Juxtaposition	The use of contrasting two different ideas.	

Narrative Hooks		
The puzzling/subtle hook	This immediately makes you ask questions about the narrative. Who? What? How?	
The atmospheric hook	This is descriptive and creates a specific mood.	
The direct address hook	You are spoken to directly and feel involved from the start.	

Consider these areas when developing a character	
Their clothing/their movement/their facial expression.	
The setting they are placed in/the objects around them.	
The language they use (keep speech to a minimum).	

Term	Definition	
Figurative language	Figurative language is the use of descriptive words, phrases and imagery to convey a message that means something without directly saying it.	
Symbolism	The use of symbols to represent ideas or qualities, e.g. a dove could represent peace.	
Narrative perspective	The point of view from which a story is told. E.g., first person, second person, third person.	
A complex sentence	A sentence with one main clause and one subordinate clause that add detail but cannot stand alone.	

Name:

Date:

Year 7 Knowledge Organiser The Eatwell Guide

- When choosing food and drinks, current healthy eating guidelines should be followed.



Fruit and vegetables

- This group should make up just over a third of the food eaten each day.
- Aim to eat at least five portions of a variety each day.
- Choose from fresh, frozen, canned, dried or juiced.
- A portion is around 80g (3 heaped tbs).
- 30g of dried fruit or 150ml glass of fruit juice or smoothie count as a max of 1 portion each day.

Potatoes, bread, rice, pasta or other starchy carbohydrates

- Base meals around starchy carbohydrate food.
- This group should make up just over a third of the diet.
- Choose higher-fibre, wholegrain varieties.

Dairy and alternatives

- Good sources of protein and vitamins.
- An important source of calcium, which helps to keep bones strong.
- Should go for lower fat and lower sugar products where possible.

The Eatwell Guide

- Comprises 5 main food groups.
- Is suitable for most people over 2 years of age.
- Shows the proportions in which different groups of foods are needed in order to have a well-balanced and healthy diet.
- Shows proportions representative of food eaten over a day or more.

Beans, pulses, fish, eggs, meat and other protein

- Sources of protein, vitamins and minerals.
- Recommendations include to aim for at least two portions of fish a week, one oily, and;
- People who eat more than 90g/day of red or processed meat, should cut down to no more than 70g/day.

Oil and spreads

- Unsaturated fats are healthier fats that are usually from plant sources and in liquid form as oil, e.g. olive oil.
- Generally, people are eating too much saturated fat and need to reduce consumption.

Foods high fat, salt and sugar

- Includes products such as chocolate, cakes, biscuits, full-sugar soft drinks, butter and ice cream.
- Are high in fat, sugar and energy and are not needed in the diet.
- If included, should be had infrequently and in small amounts.

8 tips for healthier eating

These eight practical tips cover the basics of healthy eating, and can help you make healthier choices.

- Base your meals on starchy carbohydrates.
- Eat lots of fruit and veg.
- Eat more fish – including a portion of oily fish.
- Cut down on saturated fat and sugar.
- Eat less salt (max. 6g a day for adults).
- Get active and be a healthy weight.
- Don't get thirsty.
- Don't skip breakfast.

Hydration

- Aim to drink 6-8 glasses of fluid every day.
- Water, lower fat milk and sugar-free drinks including tea and coffee all count.
- Fruit juice and smoothies also count but should be limited to no more than a combined total of 150ml per day.

Fibre

- Dietary fibre is a type of carbohydrate found in plant foods.
- Food examples include wholegrain cereals and cereal products; oats; beans; lentils; fruit; vegetables; nuts; and, seeds.
- Dietary fibre helps to: reduce the risk of heart disease, diabetes and some cancers; help weight control; bulk up stools; prevent constipation; improve gut health.
- The recommended average intake for dietary fibre is 30g per day for adults.

Cutting down on Salt- Reducing the amount of salt we consume can reduce blood pressure, reduce the risk of heart disease, reduce the risk of a stroke. Adults should have no more than 6g of salt a day and children should have less, remember- Salt is added to many of the foods you buy so you need to check labels carefully. It is also used as a preservative in bacon and cheese.

Composite/combination food

Much of the food people eat is in the form of dishes or meals with more than one kind of food component in them. For example, pizzas, casseroles, spaghetti bolognese and sandwiches are all made with ingredients from more than one food group. These are often called 'combination' or 'composite' foods.



Meals and snacks can be sorted into The Eatwell Guide food groups.

Composite/combination food - Lasagne



Pasta (lasagne sheets): **Potatoes, bread, rice, pasta or other starchy carbohydrates**
Onions, garlic and chopped tomatoes: **Fruit and vegetables**
Lean minced meat (or meat substitute): **Beans, pulses, fish, eggs, meat and other protein**
Cheese sauce made with milk and cheese: **Dairy and alternatives**
Olive/vegetable oil used to cook onions and mince: **Oil and spreads**



Les opinions

Français	Anglais	
J'aime	I like	
J'aime bien	I like...a lot	
J'aime assez	I quite like	
Je n'aime pas	I don't like	
Tu aimes/est-ce que tu aimes?	Do you like?	
Je déteste	He doesn't like	
C'est ma matière préférée	It's my favourite subject	
Moi aussi	Me too	
T'es fou/folle	You're crazy	

Les raisons/ reasons

Français	Anglais	
c'est	It is	
intéressant	interesting	
facile	Easy	
difficile	Difficult	
génial	Great	
marrant	Fun/funny	
on a beaucoup de devoirs	We have lots of homework	
le/la prof est sympa	The teacher is nice	
le/la prof est trop sévère	The teacher is too strict	

High frequency words

Français	Anglais	
à	At	
Pourquoi?	Why?	
Tous les jours	Every day	
Aujourd'hui	Today	
Pardon	Excuse me	
Est-ce que (tu)?	Do (you)?	
Qu'est-ce que (tu)?	What do (you)?	

Intensifiers

Français	Anglais	
beaucoup	a lot	
très	very	
assez	quite	
un peu	a bit	
vraiment	really	

Quelle heure est-il? What time is it?

il est	It is	
huit heures	8 o'clock	
huit heures dix	Ten past 8	
huit heures et quart	Quarter past 8	
huit heures et demie	Half past 8	
neuf heures moins vingt	Twenty to 9	
neuf heures moins le quart	Quarter to 9	
midi	Midday	
minuit	Midnight	
midi/minuit et demi	Half past 12 (midday/midnight)	

Key verbs

manger	To eat	
Je mange	I eat	
Tu manges	You eat	
Il/elle mange	He/she eats	
Nous mangeons	We eat	

Connectives

Français	Anglais	
aussi	also	
mais	but	
et	and	
parce que/car	because	
avec	with	

Avoir

To have

J'ai	I have	
Tu as	You have	
Il/elle/on a	He/she/we have	
Nous avons	We have	



Section 1: Facts

- Russia is the **Largest** country in the world. It covers **1/10th** of all the land on the earth.
- It is the **70** times the size of the **UK**.
- It spans across two continents (**Asia and Europe**).
- The **Ural Mountains** physically separate Asia and Europe.
- It spans across **11 time zones**.
- It has **14 neighbouring countries** and a coastline on **two oceans**

Section 2+3 : Russia's Climate

- Russia experiences a **continental climate**, this means two main seasons.
- (1) *Long dark cold winters with*
- (2) *brief warm summers*
- *Precipitation is low throughout the year*
- **Yakutsk is the coldest city** in Russia and on Earth. Temperatures can drop to **-45C**.



Section 4: Russia's population

- 144 million people live in Russia.
- They are not evenly spread out, they are **unevenly distributed**.
- Most people in Russia live in areas where it is easier to live (**good soils, good communication, good weather conditions**)
- **77%** of the Russian population live on the European part of the country (West to the Ural Mountains)
- Russia is one of the most **sparsely populated** countries in the world.



Section 5: Russia's Biomes

There are four biomes distributed across Russia.

- **Temperate forest**
- **Taiga**
- **Steppe**
- **Tundra**

Most of Russia is dominated by Taiga and Tundra.

Section 5: The Taiga

The Taiga

- **Coniferous forest**
- Made up of pines, larch's, spruce
- The largest biome in the world (apart from oceans)
- The largest biome in Russia
- The largest forested area on the earth (larger than the Amazon)
- At risk of fires



Section 6: The Tundra

The Tundra

- The coldest of all biomes
- It is too cold for trees to grow
- Located in the north-eastern Russia 60-80N
- Winters are long and summers are short
- Soil forms very slowly
- Much of the land is permafrost
- Climate change is melting the land



Section 5+6: Adaptations

Arctic Fox (Tundra)

- Thick camouflaged fur to help keep it warm in the freezing conditions.
- Its fur is white in the winter and brown in the summer.
- A very keen sense of hearing.



Larch Tree (Taiga)

- Long thin needles to reduce moisture loss.
- Down sloping branches so that snowfall can fall off easily.
- Evergreen and has thick bark and cones to protect it during the harsh conditions.

Section 7: Russia and the Arctic

- The Arctic is a region surrounding the North Pole that is made up of a large ocean.
- It is the Northernmost region of Earth.
- There are many natural resources located here.
- Taking these resources can have social and environmental impacts.

Environmental impacts:

- Greenpeace are concerned about the damage to the environment from oil spills.

Social impacts:

- The Nenets migrations routes are now affected by the gas and oil pipelines, making it difficult to move the reindeer herds.



Definitions

Continental climate	A climate influenced by large landmasses. Often hot in summer and cold in winter.
Biome	An area classified according to the species that live in that location
Uneven distribution	Something that is not spread evenly around an area
Environmental impacts	A change to the air, water or living creatures in an area
Social impacts	A change to the people living in an area



Colour theory to memorise:

Red compliments green
Blue compliments orange
Yellow compliments purple

Key questions to answer:

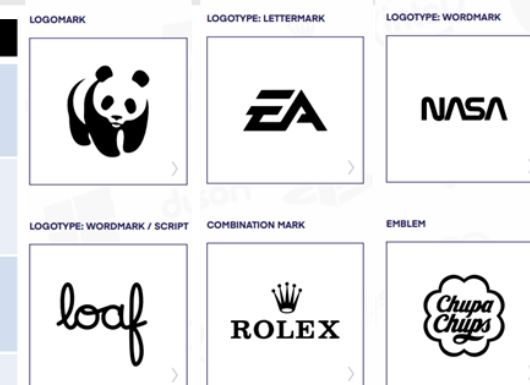
- what makes a successful logo and why?
- What is a limited colour palette?

Logo File Formats:

1. Vector: Ideal for scalability, as it can be resized without losing quality (e.g., AI, EPS, SVG).
2. PNG: Supports transparency and is suitable for web and digital platforms.
3. JPEG: Commonly used for print materials but lacks transparency support.

Keywords/terms	Definition – read, cover, write, check, redo	tick
Graphic Design	Graphic design is the art of visual communication that combines images, words, and ideas to convey information to an audience, especially to produce a specific effect.	
Layout	Layout design is a fundamental branch of graphic design that concerns the arrangement of text and visuals.	
Typography	Typography is the art and design of text	
Design brief	A design brief is a document that outlines the core details and expectations of a design project for a client.	
Design specification	A design specification is a list of criteria a product needs to address. Using the brief as a starting point for research, a specification can be written when more facts are known.	
Complementary	Complementary colours appear opposite each other on the colour wheel. Complementary colours create high contrast when used together.	
Analogous colours	Colours are called analogous colours when they are very similar to each other, especially when they are next to each other on a colour wheel. For example, red, red-orange, and orange are analogous colours.	
Branding	A brand is a name, design or symbol, or some other feature which identifies a particular company or product.	

Types of Brand logos	Tick
A logomark , also known as a logo symbol or brandmark, consists of a graphic element or symbol representing a brand or company. A logomark focuses solely on the visual representation without incorporating any accompanying typography.	
Lettermark logos, also known as monogram logos or letter logos, consist of initials, abbreviations, or acronyms of a brand or company name. Instead of using the full name of the organisation, these logos focus on creating a visual representation using one or more letters.	
A wordmark logo consists of a stylised or custom-designed typography-based representation of a brand or company name. It focuses on the visual arrangement and design of the text itself, rather than incorporating additional graphic elements or symbols.	
A wordmark or script logo consists of the company or brand name represented in a unique, stylised, and often artistic manner. Instead of relying on symbols, icons, or graphic elements, it focuses solely on typography and the visual presentation of the text.	
A combination mark logo combines both text and a visual symbol or icon. It typically incorporates a unique visual element alongside the brand name or company name.	
Emblem logos combine text and imagery into a single integrated unit. They are characterised by their compact, symmetrical shapes and often have a traditional or vintage aesthetic. They typically feature a detailed, illustrated graphic or symbol enclosed within a border or frame, with the company or brand name placed below or around the graphic.	







Remember: A well-designed logo is timeless, memorable, and represents the essence of the brand. Using a limited palette means that you're only using a few select colours in your piece. It's not an entire gamut of the rainbow, but just two or three colours that you stick to for the entire illustration

Adobe Illustrator is a vector based design program developed to create logos, icons, drawings, typography and complex illustrations.



Bournemouth School: History Department: Knowledge Organiser: Year 7: Spring 1: Monarchs

Medieval and Early Modern monarchs: Key terms/definitions			Roles of a medieval king:			✓		
Term	Definition	✓	Look rich/powerful and impress his people					
Monarchy	Political system based upon the undivided power or rule of a single person		Win support/trust of barons and listen to their advice					
Magna Carta	'Great Charter' – rules agreed between King John and barons to rule England		Lead the army, win wars and keep his land					
Renaissance	Revival/rebirth of European art/literature following classical models		Raise taxes fairly, in the same ways as previous kings					
Reformation	Split of the Christian church into Protestant and Catholic religions		Stamp out crime, keep law and order in the country					
Protestant	Section of the Christian church created as a 'protest' against Catholicism		Support the Church					
Annulment	Break up of a marriage, stating that the marriage never took place		Have sons to avoid dispute over the next king					
Henry II and Thomas Becket: Key events: <u>1154:</u> Henry II becomes King of England <u>1150s:</u> Henry II quarrelled with the Church over the church courts and who should choose the bishops <u>1162:</u> Thomas Becket becomes Archbishop of Canterbury <u>1164:</u> Thomas Becket fled to France <u>December 1170:</u> Thomas Becket returned to England <u>29th December 1170:</u> Becket was killed in Canterbury Cathedral by four armed knights <u>1173-4:</u> Rebellion against Henry II led by his own wife and sons along with the Kings of France and Scotland <u>1174:</u> Henry II approached Pope Callixtus III to ask for support against the rebellion <u>July 1174:</u> Henry II walked barefoot to Canterbury Cathedral and was whipped by bishops, abbots and 80 monks		✓	Key people					
					✓			✓
				Henry II: King of England 1154-89			John: King of England 1199-1216	
				Martin Luther: German monk, created Protestant religion			Henry VIII: King of England 1509-57	
			Magna Carta: Some key clauses:					✓
			1	The English Church shall be free and have its rights protected				
			8	No widow shall be forced to remarry if she chooses not to				
			12	No taxes to be charged by the monarch without general consent				
			39	No man should be arrested or imprisoned without a fair trial				
			The significance of the Tudors and the Reformation in England Over five hundred years ago, people were only just realising that America existed and they had no idea about Australia or New Zealand. England and Scotland were separate kingdoms and each had their own Monarch. The Tudors were a Welsh / English family and they ruled England and Wales from 1485 – 1603: 118 years!			✓	Henry VIII: Key events: <u>1491:</u> Henry was born (son of Henry VII) <u>1502:</u> Henry's older brother, Arthur, died - Henry married Arthur's widow, Catherine of Aragon <u>1509:</u> Henry VIII was crowned King of England <u>1527:</u> Henry VIII first asked Pope Clement VII for permission to divorce his wife (the Pope refused, partly because he was imprisoned by Charles V, who was both Holy Roman Emperor and Catherine of Aragon's nephew) <u>1533:</u> Henry was granted an annulment of his marriage by Archbishop of Canterbury Thomas Cranmer <u>1534:</u> Act of Supremacy was passed: Henry was now Head of the English Church and the country was Protestant <u>1536:</u> Henry started the Dissolution of the Monasteries	
Catholic	A member of the Christian church led by the Pope							
Dissolution of the Monasteries	From 1536, the policy of Henry VIII to close down and confiscate the lands and wealth of all monasteries in England and Wales							
Excommunicate	To be expelled from the Catholic church: a serious punishment							
Heretic	Someone who challenges the ideas of the Catholic church							
Pilgrimage of Grace	A popular revolt in Northern England against the Reformation							
Treason	A crime against the Monarch, punishable by death							

Year 7 – Maths – Spring 1 – Unit 7

Keyword	Definition	Example
Fraction	Represents how many parts of a whole.	$\frac{3}{10}$ means 3 out of 10.
Decimal	A number with a decimal point used to separate ones, tenths, hundredths etc.	0.52 represents 5 tenths and 2 hundredths .
Percentage	Represents how many parts per hundred.	7 hundredths = $\frac{7}{100} = 7\%$
Convert	Change into an equivalent representation, often fraction to decimal to a percentage.	$\frac{24}{100} = 0.24 = 24\%$
Percentage of an amount	To find the percentage of a value.	15% of 80 10% = 8, 5% = 4 so 15% = 12
Multiplier	A decimal that scales a quantity.	0.35 is a multiplier representing 35%
Percentage increase	Increasing a value by a given percentage.	Increase by 24% Increase Multiplier = $\frac{100+P}{100}$ Increase Multiplier = $\frac{124}{100} = 1.24$
Percentage decrease	Reducing a value by a given percentage.	Decrease by 42% Decrease Multiplier = $\frac{100-P}{100}$ Decrease Multiplier = $\frac{58}{100} = 0.58$
Percentage change	The amount that a quantity has changed, expressed as a percentage of the original value. % change = $\frac{\text{difference}}{\text{original value}} \times 100$	Original value £80; New value £55; Difference £25 % change = $\frac{25}{80} \times 100 = 31.25\%$
Reverse percentages (Calculating the original value)	Calculating the original value before a percentage change. Original value = $\frac{\text{New value}}{\text{Multiplier}}$	New value £80 has been reduced by 25% in a sale. Decrease Multiplier = 0.75 Original value = $\frac{80}{0.75} = \textbf{£106.67}$
Repeated percentage change (RPC)	Repeated Percentage Change is when an amount changes a number of times by a given %. RPC = original \times multiplier ⁿ where n is the number of times to apply it.	Increase in height 5% per year. Original height 130 cm . After 3 years: Multiplier = 1.05 ; n = 3 RPC = $130 \times 1.05^3 = 150.5\text{cm}(1\text{dp})$

Keyword	Definition	Example
Simple interest	Simple interest pays the same interest each year.	£500 invested in an account paying 6% simple interest. After 3 years: $500 + 3(0.06 \times 500) = \textbf{£590}$
Compound interest	Compound interest is repeated percentage change.	£500 invested in an account paying 6% compound interest. After 3 years: $500 \times 1.06^3 = \textbf{£595.51}$

Increase 1700 by 35%

- The original amount is 100%. 1700 is 100%
- Add** on the percentage the amount is being increased by (35%) to get the total percentage (135%)
 $100\% + 35\% = 135\%$
- Convert the total percentage (135%) to a multiplier by **dividing** the total percentage value by 100
 $135 \div 100 = 1.35$. This is the multiplier.
- Multiply** the original amount (1700) by the multiplier (1.35)
 $1700 \times 1.35 = 2295$
1700 increased by 35% is **2295**

A shop offers 30% off everything in a sale. The sale price of a pair of designer shoes is £84. Calculate the cost of the shoes before the sale.

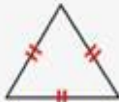







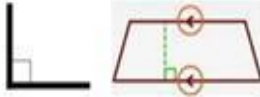



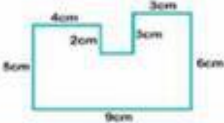
Sale of 30% $\rightarrow (100\% - 30\% = 70\%)$

70% of the cost of the shoes = £84

$1\% \rightarrow 84 \div 70 = \textbf{£1.20}$

$100\% \rightarrow \textbf{£1.20} \times 100 = \textbf{£120}$

The cost of the shoes before the sale was **£120**.

Keyword	Definition	Example
Triangle	A polygon with three straight edges. The angles sum to 180°.	  Equilateral Isosceles
Quadrilateral	A polygon with four straight edges. The angles sum to 360°.	   Square Rectangle Rhombus    Trapezium Parallelogram Kite
Notation	Symbols and diagram annotations that can represent shape properties.	
Perimeter	The distance around the edge of a shape.	 
Area	The amount of space taken up by a 2D shape.	
Compound shapes	A shape that is made up of two or more basic shapes.	

Keyword	Definition	Example
Variable	A symbol, often a letter, to represent an unknown value.	a, b, c, x, y, θ
Coefficient	A number used to multiply a variable.	$2x \rightarrow 2$ is the coefficient $\frac{1}{3}ab \rightarrow \frac{1}{3}$ is the coefficient
Expression	A group of terms with a minimum of two numbers and/or variables and an operator connecting them.	$2x + 3y$ $4ab - \frac{1}{2}b^2$
Solve	To find the numerical answer that is represented by a variable .	$x = 5$
Inverse operation	The opposite operation to the one given in the equation.	The opposite of $+a$ is $-a$, and vice versa The opposite of $\times b$ is $\div b$, and vice versa The opposite of squaring is square rooting , and vice versa
Equation	A mathematical statement showing that two expressions are equal. The two expressions are linked with an equals symbol (=).	$2x + 1 = 1$ $3x + 5 = x - 7$
Solving equations	The process of finding the values that make an equation true.	$2x + 1 = 15$ $2x = 14$ $x = 7$

$$12x = 6 \quad (\div 12)$$

$$x = \frac{6}{12} \quad (\text{simplify})$$

$$x = \frac{1}{2}$$

$$2x - 3 = 7 \quad (+3)$$

$$2x = 10 \quad (\div 2)$$

$$x = 5$$

$$\frac{x}{5} - 3 = 7 \quad (+3)$$

$$\frac{x}{5} = 10 \quad (\times 5)$$

$$x = 50$$

$$3x + 5 = x - 7 \quad (-x)$$

$$2x + 5 = -7 \quad (-5)$$

$$2x = -12 \quad (\div 2)$$

$$x = -6$$

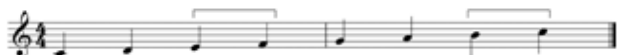


Orchestra A large group of string, woodwind, brass and percussion instruments directed by a conductor

Conductor Directs the orchestra, using their hands or a baton

Key The set of notes that a piece uses, and the note that it uses as 'home'

Major key music which uses the major scale is in a major key. The major scale has a fixed pattern of where the semitones come:



The key of C major only uses white notes on the keyboard.

Bar regular groupings of beats in a piece of music, in which some are stronger than others. The most common groupings are 2, 3 or 4 beats.

Year 7

Unit 3

Instruments of the orchestra

String instruments (instruments where a vibrating string makes the sound)

Violin A high pitched string instrument played with a bow

Viola A larger (and lower) version of the violin

Cello The largest instrument in the same family as the violin and viola

Double bass A low pitched string instrument played with a bow

Harp A plucked string instrument with one string for each note

Woodwind instruments (instruments where the sound is made by a vibrating column of air)

Piccolo A smaller (and higher) version of the flute

Flute A woodwind instrument played by blowing over a hole in the mouthpiece

Oboe A high pitched woodwind instrument with a double reed

Cor Anglais A larger (and lower) version of the oboe

Clarinet A high pitched woodwind instrument with a single reed

Bassoon A low pitched woodwind instrument with a double reed

Brass instruments (instruments where the player uses their lips to make the air vibrate)

Trumpet A high pitched brass instrument which has valves

French horn A brass instrument with keys. Horns are often associated with hunting

Trombone A low pitched brass instrument with a slide

Tuba A low pitched brass instrument with valves

Percussion instruments (instruments which are hit – or scraped or shaken – to make sound)

Pitched percussion instruments which can play a definite note

- Glockenspiel
- Timpani
- Xylophone

Unpitched percussion instruments that make a sound which isn't a definite note

- Bass drum
- Castanets
- Cymbals
- Snare drum
- Tambourine
- Tam-tam/Triangle
- Whip
- Woodblock



This QR code will take you to a Spotify playlist with audio examples of many of the concepts covered on this sheet and in lessons. You will find it helpful to listen to these as you learn.

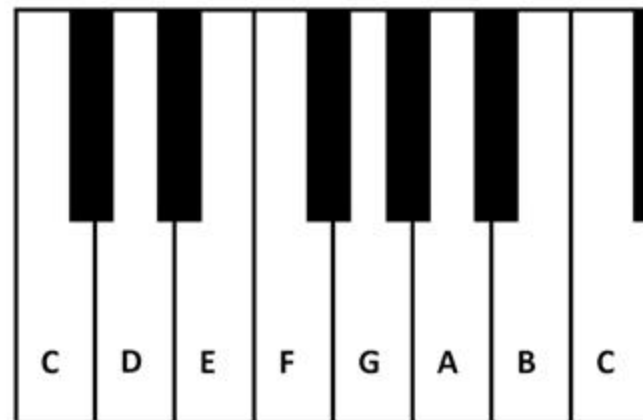


The keyboard

Notes on the keyboard

The notes are arranged in alphabetical order, from low to high.

Look for the pattern of black notes. C is always the white note to the left of the group of two black keys.



Notes on lines—an easy way to remember



Spaces spell 'FACE'



Treble clef

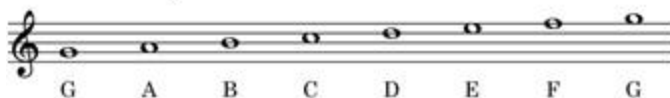
The **treble clef** sets the note G as the second line up on a musical **stave**. Any note with the note head (the round bit) covering that line is a G:



Notes are arranged in alphabetical order, using lines and spaces. It's always the note head that tells you which note it is. The first C (middle C) needs to be on a line, but there isn't one, so it gets its own (a **ledger line**).



Because we only use the letters A-G, the note above G is A, and we start again.



This will help you remember the keyboard layout.

How we learn



- Your working memory can only handle roughly 4-9 items before you stop being able to concentrate.
- Your long-term memory is limitless!
- We can retrieve material stored in our long-term memory by going back over it regularly.
- The "Forgetting Curve" is an illustration of how we forget information if we make no effort to remember it.
- Different techniques, such as self and peer quizzing, can be used to embed knowledge.

How to make polite conversation



- Often known as "small talk".
- Show an interest in others.
- Actively listen.
- Ask questions.
- Make eye contact.
- Offer clear responses, rather than just a nod or shake of head.
- Have a "bank" of topics you can call upon to avoid an awkward silence!

How to deal with difference



- Prejudice - a pre-conceived opinion that is not based on evidence or experience.
- Discrimination - unjust treatment, often on grounds of ethnicity, age, disability, or gender.
- Ethnicity - a person's ethnic background.
- Respect - a positive feeling shown towards someone.
- Tolerance - the ability to accept the behaviour or beliefs of others.
- Conflict - to be unable to agree on ideas, interests, beliefs, often resulting in verbal or physical dispute.
- Resolution - to decide to do something; to reach a conclusion to bring a matter of conflict to an end.

Keyword	Learn	✓
Career	An occupation undertaken for a significant period of a person's life and with opportunities for progress.	
Prospects	The possibility of being successful, especially at work - the opportunity for promotion and development.	
Skills	The ability to do something well.	
Qualities	A distinctive attribute or characteristic possessed by someone.	
Stereotypes	A generalized belief about a particular category of people. It is an expectation that people might have about every person of a particular group.	
Equality of opportunity	Exists when individuals are treated similarly, unhampered by artificial barriers, prejudices, or preferences.	
Respect	Due regard for the feelings, wishes, or rights of others.	
Peer Pressure	The strong influence of a group on members of that group to behave as everyone else does.	
E-cigarette or vape	a device used for inhaling vapour containing nicotine and flavouring.	

Never starting is easier than giving up an addiction!

Choosing a career

Choosing a career is never easy as you need to consider lots of information and know what you want.

Consider the following:

- labour market - what types of careers are available where you want to live
- prospects - are there opportunities for promotion and development
- job satisfaction - will you like the job or is this not important
- pay - what is the pay rate now and in the future
- skills and qualities - what are your attributes and talents
- qualifications - what qualifications are needed? Can you achieve them?
- working conditions. - what are the hours? what will you have to wear? what is the environment like?

Career Stereotypes

Career stereotypes are not acceptable.

People should be able to follow any career regardless of their gender, race, religion, age or any career stereotype.

Smoking and vapes - some facts.

- Smoking is a major risk to health (for the smoker and those around smokers).
- The risks of smoking are well known because people have been smoking for a very long time.
- Vaping or the use of e-cigarettes has risks but the extent of these risks are not clear yet.
- It is illegal for retailers to display cigarettes.
- It is illegal for retailers to sell cigarettes to anyone under the age of 18 years old.
- It is illegal for retailers to vapes or vape liquids to anyone under the age of 18 years old.
- The possession of and use of cigarettes and vapes is NOT allowed in school.

Helpful websites:

<https://www.childline.org.uk> – Childline has lots of useful information and advice.

[The NHS and the risks of smoking](#)

[The NHS and advice on E-cigarettes](#)

[The national careers service and exploring careers](#)



Authority:	Having the power to tell others what to do; having specialist knowledge.	Parable:	Comparison between one thing and another, typically for the purpose of explanation or clarification.	Ascension:	Jesus returned to heaven 40 days after the resurrection in the presence of his followers.
Source of Authority:	A book or other source able to supply reliable information or evidence.	Analogy:	Comparison between one thing and another, typically for the purpose of explanation or clarification.	Heaven:	A state of eternal happiness in the presence of God; the place of eternal peace ruled by God.
Gideons International:	An evangelical Christian association founded in 1899 in Wisconsin. The Gideons primary activity is distributing copies of the Bible free of charge.	Allegory:	Story, poem, or picture that can be interpreted to reveal a hidden meaning.	Afterlife:	The belief that there is a life after death; for Christians, heaven or hell.
Pentateuch:	The first five books of the Bible.	Metaphor:	A figure of speech in which a word or phrase is applied to an object or action to which it is not literally applicable.	Judgement Day:	At the end of life everyone will stand before God and give an account; some will be rewarded with heaven whilst others punished with hell.
The Epistles:	Letters included in the New Testament and written by Paul, Peter and John among others.	Crucifixion:	Roman method of execution by which criminals were nailed to a cross.	Purgatory:	(Catholic teaching) A place where sins are purged before entry into heaven.
The Apostles:	The twelve chief disciples (followers) of Jesus Christ.	Atonement:	Reparation for a wrong that has been committed (covers sin).	Eschatology:	Refers to beliefs about 'last things': death, judgement, heaven and hell.
Messiah:	A king or High Priest traditionally anointed with holy anointing oil. In Abrahamic religions, a messiah is a saviour or liberator of a group of people.	Sacrifice:	Giving up something to help others; surrendering something for the sake of something or someone else.	Zoomorphic:	Having or representing animal forms or gods of animal form
Incarnation:	Becoming flesh, taking a human form.	Sacrificial atonement:	Jesus, who committed no sin, offered His life to God as reparation for sins committed by others.	Picts (Pictish):	The people of eastern and northern Scotland from the late Iron Age to the Early Middle Ages.
The Trinity:	The three persons of the Christian Godhead; Father, Son, and Holy Spirit.				
Blasphemy:	The action or offence of speaking profanely about God or sacred things.	Redemption:	Clearing a debt; the action of regaining or gaining possession of something in exchange for payment. Jesus' sacrificial atonement paid the price for sin.	Celtic:	The languages and respective cultures of Ireland, Scotland, Wales, Cornwall, the Isle of Man, and Brittany, also known as the Celtic nations.
Prophecy:	The future told in advance by God through a prophet.				
Prophet:	A person regarded as an inspired teacher or proclaimer of the will of God.	Resurrection:	Rising from the dead after 3 days; Jesus rising from the dead on Easter day. An event recorded in all four gospels and the central belief of Christianity.	Revision task: Believing in miracles	Outline the key miracles of Jesus and explain: What is the point of the miracle? Why do these miracles require faith in today's world?
Eschatology:	The study of end times (life after death).			Revision task: Flashcards	Create a series of flashcards, copying the key term or key concept on one side and the answer on the other side.
Miracle:	An extraordinary event that is not explicable by natural or scientific laws and is therefore attributed to a divine agency.				

Chemistry C – Acids and Alkalies

Keyword	Learn	
pH	Scale of acidity and alkalinity from 0 to 14.	
Indicators	Substances used to identify whether unknown solutions are acidic or alkaline.	
Acid	Acids have a pH below 7. Strong acids have lower pH values than weak acids.	
Base	A substance that neutralises an acid.	
Alkali	Bases that dissolve in water are called alkalis. Alkalis have a pH above 7.	
Concentration	A measure of the number of particles in a given volume.	
Weak acids	Acetic and citric acid are weak acids.	
Strong acids	Hydrochloric, sulfuric and nitric acid are strong acids.	
Neutral solutions	Neutral solutions have a pH of 7.	
Salts	When an acid and an alkali react they produce a salt.	
Hydrochloric acid	Makes a salt called a chloride.	
Sulfuric acid	Makes a salt called a sulfate.	
Nitric acid	Makes a salt called a nitrate.	
Safety	Acids and alkalis can be corrosive or irritant and require safe handling.	

Physics C – Static Electricity and Current

Keyword	Learn	
Electrostatic force	Non-contact force between two charged objects. Two similarly charged objects repel, two differently charged objects attract.	
Electric field	Around a charged object, the electric field affects other charged objects, causing them to be attracted or repelled. The field strength decreases with distance.	
Electrons	Tiny particles which are part of atoms and carry a negative charge.	
Negatively charged	An object that has gained electrons as a result of the charging process.	
Positively charged	An object that has lost electrons as a result of the charging process.	
Charged up	When materials are rubbed together, electrons move from one surface to the other.	
Current	Rate of flow of electric charge, in amperes (A).	
In series	If components in a circuit are on the same loop. Current is a movement of electrons and is the same everywhere in a series circuit.	
In parallel	If some components are on separate loops. Current divides at a branch and combines when branches meet.	

Chemistry D – Metals and Non-metals

Keyword	Learn	
Metals	Shiny, good conductors of electricity and heat, 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.	
Oxidation	Reaction in which a substance combines with oxygen.	
Metal oxides	Metals react with oxygen to form oxides which are bases.	
Non-metal oxides	Non-metals react with oxygen to form oxides which are acids.	
Reactivity	The tendency of a substance to undergo a chemical reaction.	
Reactivity Series	Metals arranged in order of how readily they react with other substances.	
Metal-acid reaction	Some metals react with acids to produce salts and hydrogen.	
Displacement	Reaction where a more reactive metal takes the place of a less reactive metal in a compound.	
Magnetic elements	Iron, nickel and cobalt are magnetic elements.	
Liquids	Mercury is a metal that is liquid at room temperature. Bromine is a non-metal that is liquid at room temperature.	

Biology D - Variation

Keyword	Learn	
Variation	The differences within and between species.	
Species	A group of living things that have more in common with each other than with other groups.	
Continuous variation	Where differences between living things can have any numerical value. Usually plot a line graph.	
Discontinuous variation	Where differences between living things can only be grouped into categories. Usually plot a bar graph.	
Continuous variable	A variable that has numerical values.	
Categoric variable	A variable based on descriptions.	
Causes of variation	Some variation is inherited, some is caused by the environment, and some is a combination.	
Benefit of variation	Variation between individuals is important for the survival of a species, helping it to avoid extinction in an always changing environment.	

How long should I spend on my homework?

Monday		Tuesday		Wednesday		Thursday		Friday	
Maths	15	Science	15	Free choice	15	Maths	15	Free Choice	15
English	15	Free Choice	15	Free Choice	15	English	15	Free Choice	15
Reading	30	Reading	30	Reading	30	Reading	30	Reading	30

- You should spend a maximum of 30 minutes revising each day.
- You should spend a maximum of 30 minutes reading each day.
- You can decide what you revise in each slot that is called Free Choice. You can do this at the start of the year and have a fixed plan or you can decide on each day based on how well you feel you know your Knowledge Organisers. An example is provided below.

Monday		Tuesday		Wednesday		Thursday		Friday	
Maths	15	Science	15	RS / Personal Dev	15	Maths	15	Art / Tech	15
English	15	History / Geography	15	Computing / Music	15	English	15	French	15
Reading	30	Reading	30	Reading	30	Reading	30	Reading	30

Timetable

[illegible]