

Knowledge Organisers

1st Autumn Term

Science

History

Geography

Art

PSHE

Latin

Computing

R.E.

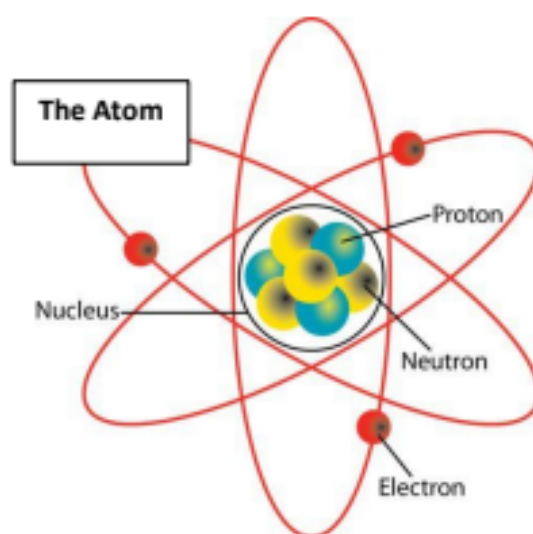
Music

P.E.

Year 6

Knowledge Organiser – Science – Year 6 - Chemistry

Key Vocabulary	Definition
atom	a basic unit of matter and the smallest unit of an element
molecule	molecule is formed when two or more atoms are joined by a chemical bond
proton	particle within the nucleus of an atom that holds a positive charge
neutron	particle in the nucleus of an atom that has no electric charge
electron	particle of an atom that orbits the atom's nucleus and carries a negative charge
nucleus	central core of an atom containing the protons and neutrons.
Periodic Table	table of the chemical elements arranged by atomic number.
elements	pure chemical substance that is made up of one type of atom
neutral	not a positive or a negative charge
compound	compound is a pure substance made up of two or more elements
reversible	Reversible changes, like melting and dissolving, can be changed back again.
irreversible	Irreversible changes, like burning, cannot be undone



Key Knowledge
I understand how small an atom is and what it is.
I understand what the numbers on the Periodic Table mean.
I know who Dmitri Mendeleev is and how he organised the Periodic Table.
I understand how atoms and molecules move around.
I know the difference between physical and chemical reactions.

**Dmitri Mendeleev
(1834 - 1907)**



Periodic Table of Elements

1 H HYDROGEN 1.00794	2 He HELIUM 4.002602																			18 Ar ARGON 39.948	19 K POTASSIUM 39.0983	20 Ca CALCIUM 40.078	21 Sc SCANDIUM 44.955912	22 Ti TITANIUM 47.88	23 V VANADIUM 50.9415	24 Cr CHROMIUM 51.9961	25 Mn MANGANESE 54.938045	26 Fe IRON 55.845	27 Co COBALT 58.933195	28 Ni NICKEL 58.6934	29 Cu COPPER 63.546	30 Zn ZINC 65.38	31 Ga GALLIUM 69.723	32 Ge GERMANIUM 72.64	33 As ARSENIC 74.9216	34 Se SELENIUM 78.96	35 Br BROMINE 79.904	36 Kr KRYPTON 83.798	37 Rb RUBIDIUM 85.468	38 Sr STRONTIUM 87.62	39 Y YTIPIUM 88.90584	40 Zr ZIRCONIUM 91.224	41 Nb NIOBIUM 92.90638	42 Mo MOLYBDENUM 95.94	43 Tc TECHNETIUM 98	44 Ru RUTHENIUM 101.07	45 Rh RHODIUM 102.90550	46 Pd PALLADIUM 106.42	47 Ag SILVER 107.8682	48 Cd CADMIUM 112.411	49 In INDIUM 114.818	50 Sn TIN 118.710	51 Sb ANTIMONY 121.757	52 Te TELLURIUM 127.60	53 I IODINE 126.90547	54 Xe XENON 131.29	55 Cs CAESIUM 132.90545	56 Ba BARIUM 137.327	57-71 Lanthanoids and Actinoids	72 Hf HAFNIUM 178.49	73 Ta TANTALUM 180.94788	74 W WOLFRAM 183.84	75 Re RHENIUM 186.207	76 Os OSMIUM 190.23	77 Ir IRIDIUM 192.222	78 Pt PLATINUM 195.084	79 Au GOLD 196.96657	80 Hg MERCURY 200.59	81 Tl THALLIUM 204.3833	82 Pb LEAD 207.2	83 Bi BISMUTH 208.9804	84 Po POLONIUM 209	85 At ASTATINE 210	86 Rn RADON 222	87 Fr FRANCIUM 223	88 Ra RADIUM 226	89-103 Lanthanoids and Actinoids	104 Rf RUTHENIUM 261	105 Db DUBNIUM 262	106 Sg SEABORGIUM 266	107 Bh BOHRIUM 264	108 Hs HASSIUM 277	109 Mt MEITNERIUM 268	110 Ds DARMSTADTIUM 271	111 Rg ROSGOLDIUM 272	112 Cn COCHIN 285	113 Nh NIHONIUM 286	114 Fl FLEROVIUM 289	115 Mc MOSCOWIUM 288	116 Lv LIVERMORIUM 293	117 Ts TENESSIUM 294	118 Og OGANESSIUM 294	119 La LANTHANUM 138.90547	120 Ce CELESIUM 140.12	121 Pr PRASEODYMIUM 140.90768	122 Nd NEODYMIUM 144.242	123 Pm PROMETHIUM 144.9127	124 Sm SAMARIUM 150.36	125 Eu EUROPEUM 151.964	126 Gd GADOLINIUM 157.25	127 Tb TERBIUM 158.92535	128 Dy DYSPROSIUM 162.50014	129 Ho HOLMIUM 164.93033	130 Er ERBIUM 167.259	131 Tm THULIUM 168.93048	132 Yb YTERBIUM 173.05468	133 Lu LUTETIUM 174.967	134 Ac ACTINIUM 227	135 Th THORIUM 232.0377	136 Pa PROTACTINIUM 231.03688	137 U URANIUM 238.02891	138 Np NEPTUNIUM 237.04817	139 Pu PLUTONIUM 244.0642	140 Am AMERICIUM 243.06136	141 Cm CURIUM 247.0763	142 Bk BERKELEYIUM 247.0713	143 Cf CALIFORNIUM 251.0833	144 Es EINSTEINIUM 252.083	145 Fm FERMIUM 257.10528	146 Md MEDECIUM 258.10528	147 No NORWELIUM 259.10828	148 Lr LAWRENCIUM 262.1093
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John Dalton (1766 – 1844)



Knowledge Organiser- World War One – History - Year 6

Key vocabulary	Definition
Imperialism	When a country increases its power and influence by colonising (taking over) another country.
Alliance	A union or relationship formed between countries/ organisations, to benefit them both
Mechanised warfare	The use of armoured fighting vehicles in modern warfare. Sometimes referred to as 'armoured' or 'tank' warfare.
Chemical warfare	The use of the toxic chemicals to kill or injure enemies. In WWI, Chlorine, Phosgene and Mustard Gas were used.
Trench warfare	Where opposite sides of the war fight from trenches dug into the ground, facing each other
No Man's Land	The land between the trenches of opposing armies
Home Front	The Home Front refers to life in Britain during WWI
Conscription	A law that says that if you are able to fight in the war, you have to. During WWI, by 1916, all men aged 18-41 had to go to war and fight for their country.
Armistice	An agreement made to stop fighting a war, also referred to as a 'truce'
The war was fought between:	
The Triple Alliance	Germany, Austria-Hungary and their allies
The Triple Entente	France, Britain and Russia

28th June 1914, Archduke Franz Ferdinand is assassinated

8th August 1914, the Defence of the Realm Act is passed







1916, British Summer Time is introduced

28th June 1919, Germany signed the Treaty of Versailles

4th August 1914, Britain declares war on Germany

1st July- 18th November 1916, the Battle of the Somme took place

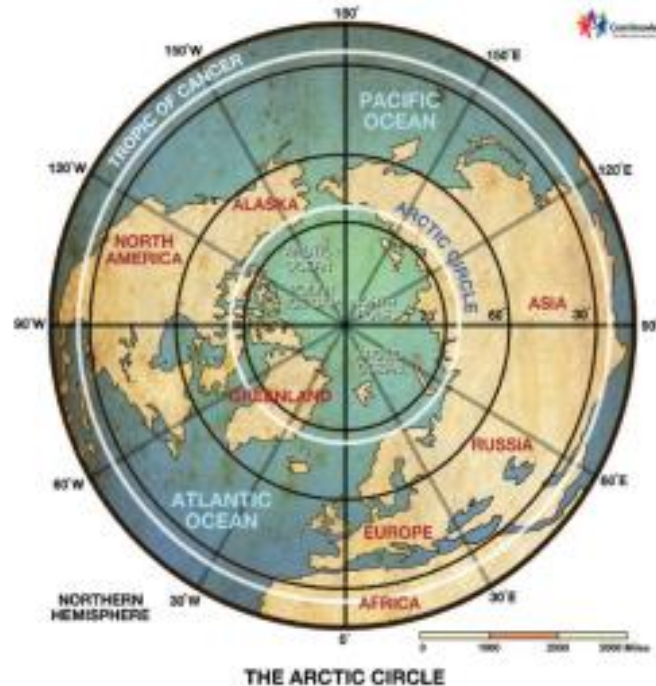
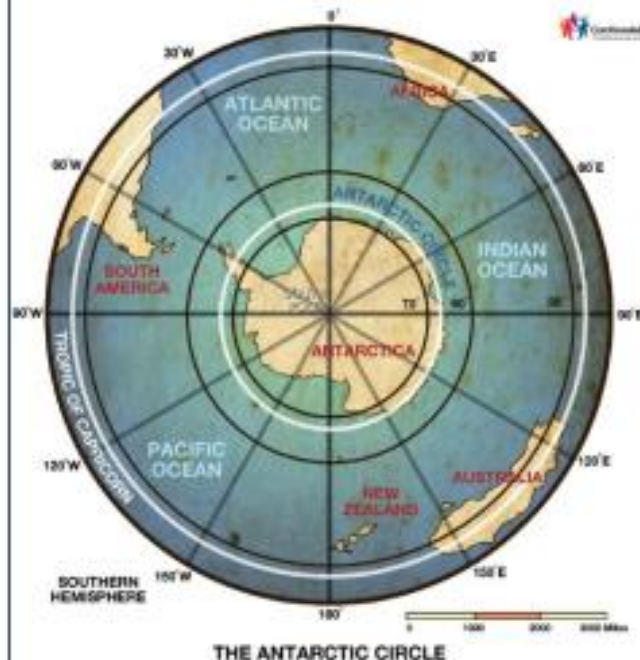
11th November 1918, Germany signed an armistice and the war ended

Key Knowledge	
I understand the causes of World War One.	
I understand that World War One was fought on land, in the air and at sea.	
I know what life was like for soldiers on the Western Front in the trenches.	
I understand what life was like on the Home Front, I know it was a 'total' war and that everyone was involved in the war effort.	
I understand the consequences of World War One and that the peace treaty was the Treaty of Versailles.	
Key People:	
Archduke Franz Ferdinand (heir to the throne of Austria-Hungary who was assassinated) 	David Lloyd George (PM 1916-1922) 
Kaiser Wilhelm II (The last German Emperor) 	Herbert Henry Asquith (PM 1908-1916) 
Zeppelins	Submarine
	

Knowledge Organiser- Spatial Sense – Geography - Year 6

Key Vocabulary	Definition
Longitude	Imaginary lines parallel to the prime meridian line that help map makers locate places with accuracy. (Vertical lines)
Latitude	Imaginary lines parallel to the equator that help map makers to locate places with accuracy. (Horizontal lines)
Axis	An imaginary line around which the Earth rotates.
The Poles	The two locations on the surface of the Earth that are at the Northern and Southern ends of the axis of rotation.
Tropic of Cancer	The line of latitude 23° north of the equator.
Tropic of Capricorn	The line of latitude 23° south of the equator.
Prime Meridian	The line of longitude at 0°.
Time Zone	A range of longitude that shares a common time.
Map Projection	A method that represents the Earth on a flat surface.

Key Knowledge
I understand that the lines of longitude and latitude divide the world into sections.
I understand that lines of latitude tell us about the climate as further from the equator the colder a region is.
I understand that the world is divided into 24 time zones.
I understand that map projection is a method that involves representing our spherical Earth on a flat piece of paper.
I know that maps can help us to understand data and information about places, people and the environment.



proicere
 throw
 forth

projectio
 projection
 mid 16th century

ENGLISH
 project



Knowledge Organiser – William Morris (Visual Arts - Year Six)

Key Vocabulary:

designer	A person who plans the look of something before it is made.
decorative arts	The arts concerned with the production of objects which are both useful and beautiful. This is different to the "fine arts" which are usually viewed as painting, drawing, sculpture and photography.
Arts and Crafts movement	A trend in the decorative and fine arts which began in Britain in about 1880 where designers, craftsmen, artists and architects placed value on how things were made, using traditional craftsmanship, in small workshops. This was a reaction against mass industrialization in factories of the Victorian period.
stylized	To design something according to a particular style, rather than in accordance with nature or reality.
medieval	The period in European history from about 600 C.E. to 1500 C.E. Also known as the middle ages or dark ages. William Morris, the Pre-Raphaelites and the Arts and Crafts movement were interested in the designs and art from this time.
textiles	A cloth or fabric produced by, for example weaving or knitting.
woodblock printing	A print made from a design cut in a block of wood, and then printed onto paper or fabric.
block printing	To print from a hand-cut wooden block. Multiple separate blocks can be used to print onto the same design. This is how Morris' wallpaper designs were printed.
reduction printing	A multicoloured print where the separate colours are printed from the same block, which is reduced each time the block is used to print.
printing press	A machine that can print books, newspapers or magazines. Morris started his own press company in Hammersmith, called the Kelmscott Press.

Key Knowledge:

I understand William Morris was a Victorian designer.
I understand how William Morris' wallpapers were printed.
I can create my own wallpaper design inspired by William Morris.
I can create my own printing tile and use it to print my design in different layers.
I understand that William Morris was a writer and created his own printing press and that he was a key figure in the Arts and Crafts movement.



Photographs:

'Have nothing in your houses that you do not know to be useful or believe to be beautiful.'
William Morris



The Morris Room at the Victoria and Albert Museum, London.



Designs:



Honeysuckle furnishing fabric 1876



Pink and Rose Wallpaper 1890



Strawberry Thief wallpaper 1883

Knowledge Organiser – PSHE – Being Me in My World - Year Six



Vocabulary	
Maslow's hierarchy of human needs	The most fundamental needs at the bottom and the need for self-actualization and self-transcendence at the top.
Empathy	The ability to understand and share the feelings of another.
Collaboration	The action of working with someone to produce something.
Legal	Relating to the law. 'A legal requirement'.
Illegal	Contrary to or forbidden by law, especially criminal law.
Lawful	Conforming to, permitted by, or recognised by law or rules.
Democracy	Rule by the people.



Key Knowledge
I know that there are universal rights for all children but for many children these rights are not met.
I can make choices about my own behaviour because I understand how rewards and consequences feel and I understand how these relate to my rights and responsibilities.
I can understand how democracy and having a voice benefits the school community.

Reflective Questions
Ask me this...
What is your ambition for when you leave school?
How do you feel about some of your needs being met and some of them not yet being met? Do you have a choice in how you respond to this?
Which are the six most important rights you would like us to all share at our school?



Latin Knowledge Organiser - Unit 7: The Military Machine



Key Vocabulary

Latin	English
quid est?	What is it?
galea	helmet
gladius	sword
pilum	javelin
scūtum	shield
cavē	be careful!
lōrica	breastplate
siste!	stop!
pugiō	dagger
relinque!	leave it!
periculōsus	dangerous
ecce!	look!
mīlēs	soldiers
audite!	listen!
sūmite!	pick up!
portāte!	carry!

Key Knowledge

- To learn imperative verbs (singular and plural)
- To translate simple sentences with imperative verbs
- To compare and contrast traditional tales from different cultures.



Grammar

Words we use to give commands called imperative verbs, e.g. Stop! Leave it!

Verbs can be changed from singular to plural form'. For example, veni becomes venite - Come! (said to one person, or said to many people)

Unit Motto

per aspera ad astra =
Through hardship to the stars.



Knowledge Organiser- Computing Systems and Networks – Communication & Collaboration - Year 6

Key Vocabulary	Definition
Protocol	a set of rules governing the exchange or transmission of data between devices.
data	Facts and statistics collected for reference or analysis
Internet protocol address	a unique string of characters that identifies each computer using the Internet Protocol to communicate over a network.
Domain Name Server (DNS)	the part of a network address that identifies it as belonging to a particular domain.
Packet	Information sent from device to device in small chunks. Each packet includes information about where the data is going to go, where it is from and how to interpret it.
Data Payload	The information or message in transmitted data
Chat	The online exchange of messages
Slide deck	A program that searches the web to create an index of data
Collaboration	Working together
Internet	a global computer network providing a variety of information and communication facilities
Private	Conversation or activity only involving a particular person(s)
Public	Open to or shared by all people

Key Knowledge

To know the importance of internet addresses

To recognise how data is transferred across the internet

To understand how sharing information online can help people to work together

To be able to evaluate different ways of working together online

To be able to name and evaluate different methods of online communication

Transferring Information

Protocols and Packets:

- Protocols are an agreed way of doing something.
- In computing, protocols exist within the way that computers communicate with each other.
- The information they send digitally are called 'Packets'.



Online Communication

-Communication is when we share information with one another. We can communicate in lots of different ways on the internet, e.g. messaging services, emails, social media, video calling and gaming platforms.

-Public communication is visible to all, whilst private communication is restricted to only some people.

-Some communications are one-way (e.g. Youtube) whilst others are two-way (e.g. Skype).

-Some communications are to one person, whilst others are to many.

-We should consider which type of communication is most appropriate to our needs, safety and privacy.



R.E. Year 6 Autumn 1 Knowledge Organiser
Enquiry: What is the best way for a Muslim to show commitment to God?

Key vocabulary	Definition
Islam	Religious faith of Muslims- founded by the prophet Muhammad
Muslim	A follower of Islam
Allah	God
5 pillars of Islam	The framework of the Muslim life. They are the testimony of faith, prayer, giving zakat (support of the needy), fasting during the month of Ramadan, and the pilgrimage to Makkah once in a lifetime for those who are able. The framework of the Muslim life.
Shahadah	Islamic profession of faith, "There is no god but Allah, and Muhammad is his messenger": the first of the Pillars of Islam.
Salat	Prayers, said five times a day: the second of the Pillars of Islam.
Zakat	Giving charity to the needy
Sawm	Fasting (giving up food) during Ramadan
Commitment	Doing something on a regular basis and by demonstrating loyalty, hard work and belief. Making a promise or pledge to someone or something



Key Knowledge
I know what "commitment" means.
The 5 Pillars of Islamic faith are: Prayer, Fasting, Almsgiving, Pilgrimage and Faith.
I know the third Pillar is about giving money to Charity and this shows commitment.
I know that fasting and going on a pilgrimage shows commitment
I can explain how I will show commitment to important people and things in my life.

THE FIVE PILLARS OF ISLAM

These are the duties of Islam, the religion of Muslims.

Shahadah
(Faith)

To believe in no God but Allah and that Muhammad is his prophet and the messenger of Allah.

Salah
(Prayer)

To pray five times each day:
Fajr - Before Sunrise
Dhuhr - Early Afternoon
Asr - Late Afternoon
Maghrib - After Sunset
Isha - Night

Sawm
(Fasting)

To give up food and drink during daylight hours in the month of Ramadan.





Zakah
(Almsgiving)

To give a share of personal wealth to help people in need and support the Muslim community.

Hajj
(Pilgrimage)

To perform a pilgrimage to Makkah at least once in a lifetime.



Key Vocabulary	Definition
Time signature	The rhythm following a clef
Key signature	The key of a piece of music depends on the flats and sharps in the music.
Minim	
Crotchet	
Quaver	
Semi-quaver	
DAW	Digital Audio Workstation
Live sound	Live music, played at present
Digital sound	Recorded sound

Songs covered

- Fanfare For The Common Man
- Do What You Want To
- It's All About Love
- Let's Write A Song
- Sunshine On A Rainy Day

Key Signature: C major — there are no sharps or flats in the key signature



Key Signature: G major — there is one sharp in the key signature



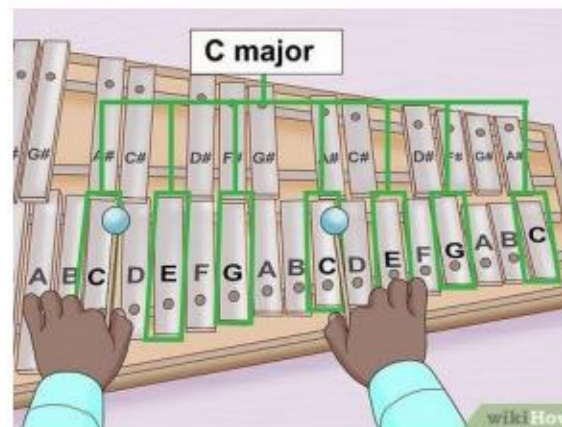
Key Signature: D major — there are two sharps in the key signature



Recorder NOTES Chart 1



2/4 Time Signature



Key Vocabulary	Definition
Cooperate	To work together towards the same goal.
Map	A pictorial representation of an area.
Route	A way of getting from one point to another.
Orienteering	A sport in which people run through a series of waypoints (controls) to guide then










Skill Development

Keep the map set (or orientated) so that you know where you are on the map and which direction you need to travel. When turning, make sure the map does not turn, and stays 'set'.

To communicate and co-operate effectively with others

To follow a set route on a map

To record clues and decipher a code.

Skills	
Legend	 <p>  Open land  Out of bounds  Forest, light trees/bushes: slow running  Forest, thick trees/bushes: walk  Hedge  Flowerbed  Wall </p>
Problem solving	
Map reading	