

Knowledge Organisers

1st Spring Term

Science

Geography

History

Art/DT

French

PSHE

Computing

RE

Music

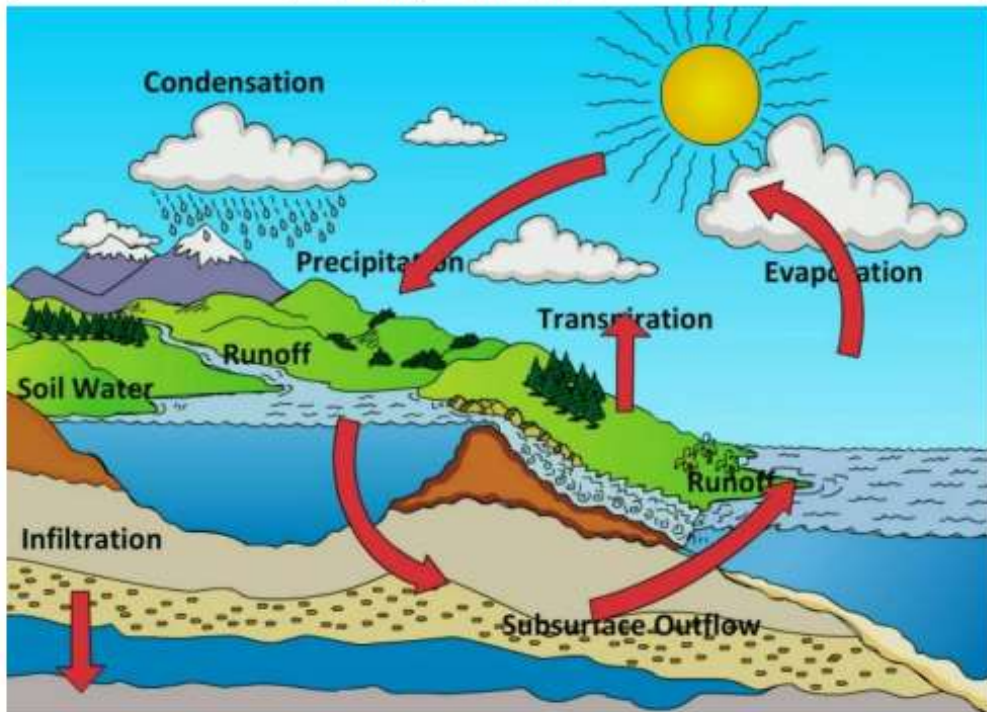
PE

Year 4

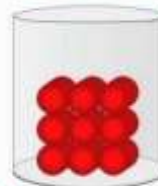
Knowledge Organiser – Science – Year 4 – States of Matter

Vocabulary	
State	states of matter are solids, liquids and gases
Particle	a small portion of matter
Melt	when something becomes a liquid through heating
Cool	bring to a lower temperature
Thermometer	instrument for measuring temperature
Evaporation	process of turning liquid into vapour
Condensation	vapour or gas turns into a liquid
Reversible	When materials can be changed back to how they were before the reaction took place.
Irreversible	This is when materials cannot be changed back to how they were before.

Key Knowledge
I know the properties and behavior of particles in solids and liquids.
I understand that gas is all around us.
I know how heating a substance can change its state.
I understand which changes are reversible and irreversible.
I know that melting means turning a solid into a liquid and cooling it will reverse this.
I understand that puddles disappear when they evaporate and the water vapour condenses into clouds.
I know that water vapour turns into clouds.
I know that water cools and condenses into rain and falls (precipitation).



solid



- rigid
- fixed shape
- fixed volume

cannot be squashed



liquid



- not rigid
- no fixed shape
- fixed volume

cannot be squashed



gas



- not rigid
- no fixed shape
- no fixed volume

can be squashed

Knowledge Organiser- Eastern Europe –Geography- Year 4

Key Vocabulary	Definition
Balkans	South of the Danube are the Balkan countries, along the Balkan Peninsula. These include Croatia, Albania, Bosnia-Herzegovina, Bulgaria, Macedonia, Montenegro, Romania, Serbia, Slovenia and Kosovo.
Baltic Countries	These are located on the Baltic Sea: Latvia, Lithuania, Estonia
Cyrillic	An Alphabet they use in Russia, named after St. Cyril who translated the Bible into the Russian language
human geography	The geographical study of people and their communities, cultures, economies, and interactions with the environment.
physical geography	The geographical study of processes and patterns in the natural environment like the atmosphere, hydrosphere, biosphere, and geosphere.
steppe	Grassland plains without trees apart from those near rivers and lakes.

Key Knowledge
I know that Eastern Europe covers a large area, with many countries, people, cities and rivers. I know it has a long border with the continent of Asia
I know that the biggest country in Eastern Europe is Russia
I know that there are four seas that surround Eastern Europe. They are: The Caspian Sea, The Black Sea, The Baltic Sea and The Adriatic Sea
I know that the highest mountain range in Europe is in Russia- the Caucasus Mountain and that the highest mountain in this range is Mount Elbrus in Russia
I know that there are some very long rivers in Eastern Europe, including the Volga and the Daube
I know that there is conflict in Eastern European between Russia and the Ukraine.

Russia	
Capital	Moscow
Population	144,463,451
Currency	Russian rouble (₽) (RUB)
Flag	
Major Cities	
Moscow	Russia
St Petersburg	Russia
Dubrovnik	Croatia
Warsaw	Poland

Example of Cyrillic alphabet:

А Б В Г Д Е
Ж З И Й К
Л М Н О П
Р С Т У Ф
Х Ц Ч Ш Щ
Ы Э Ю Я

Eastern Europe is surrounded by four seas:

- Caspian Sea
- Black Sea
- Adriatic Sea
- Baltic Sea

Rivers and Mountains in Eastern Europe:

- Volga River
- Ural River
- Danube River
- Caucasus Mountains
- Mount Elbrus
- Carpathian Mountains

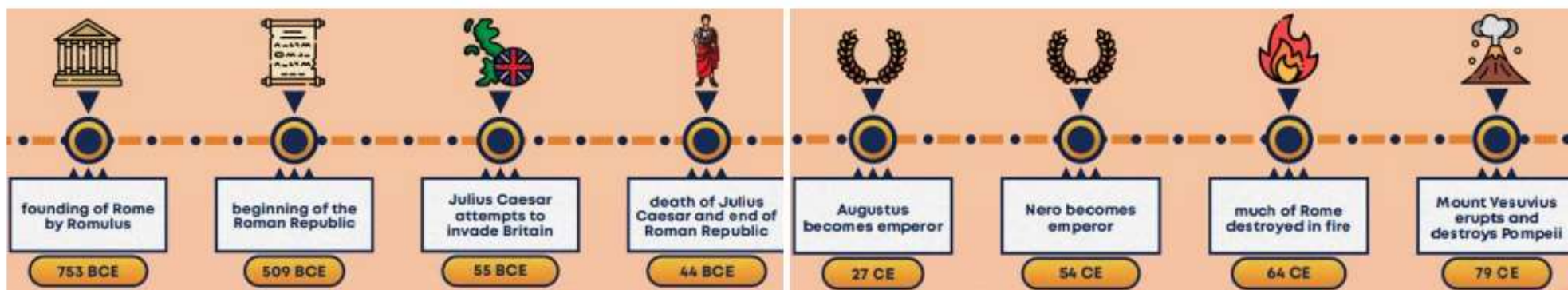
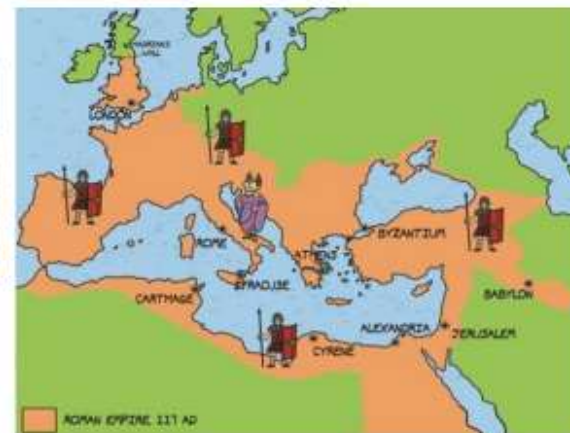


Knowledge Organiser – Life in Ancient Rome – History – Year 4

Key Vocabulary	Definition
Roman Empire	A huge empire controlled by Rome, lasting between 509 BCE and 476 CE.
Republic	A government where the people are in charge, rather than a king.
Mediterranean	The countries that surround the Mediterranean sea. These were once dominated by Rome.
Latin	The language of Rome, spoken across the Roman Empire.
Pompeii	A small town in Southern Italy that was totally destroyed by a volcano in 79 CE.
Aqueduct	A stone trough to carry water across the country into Roman towns.

Key Knowledge

- I know where Ancient Rome originated from
- I understand that Rome started as an absolute monarchy and became a republic
- I know that Pompeii, a wealthy town on the Italian coast, was destroyed by a volcano. Archeologists used the remains to find out about life in Ancient Rome.
- I know about some of the leisure activities that took place in Ancient Rome including baths, the forum, chariot races and gladiator fights
- I know that the Romans spoke in Latin and that this language has influenced many other languages that we speak today

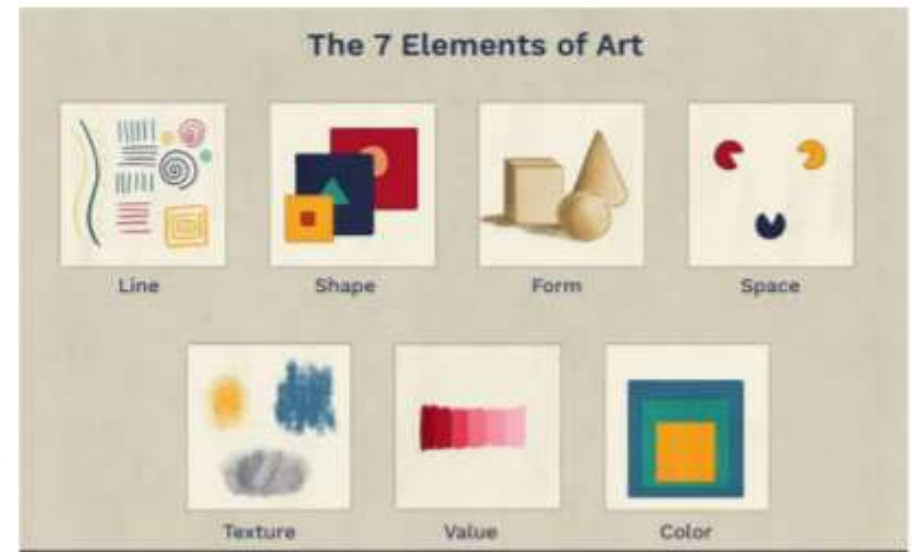


Knowledge Organiser- Design - Visual Arts - Year Four

Key Vocabulary	Definition
design	We use the word 'design' to refer to the way the artist made the elements of a piece of art work together
space	The distance within, around and between things in art.
value	The lightness or darkness of a colour
Two-dimensional	An object with just height and width dimensions
Three-dimensional	An object with three dimensions – height, width and depth
texture	How something feels or how something looks like it feels
collage	Collage is an artwork made up of assorted materials glued to a paper, board, or canvas
form	Elements of shape that make up an artwork

Key Knowledge

I know what collage is.
I can describe 3D sculptures by looking at the shape and form.
I understand how line drawings are created.
I know the difference between 2D and 3D art.



Oval circle
by Barbara Hepworth



Tawny Owl
by Alice Lee



Foxy and Frankie
by Ben Nicholson



Bird and Children
By Paul Klee



The fall of Icarus
by Henri Matisse



The Three Musicians
by Pablo Picasso

Knowledge Organiser Year 4 French Unit 9: Les fêtes

Key Language	English
Le Nouvel An	<i>the New Year</i>
la Fête des Rois	<i>Epiphany</i>
La Saint-Valentin	<i>St Valentine's Day</i>
Pâques	<i>Easter</i>
La Fête Nationale	<i>Bastille Day</i>
Noël	<i>Christmas</i>
C'est le premier janvier	<i>it's on January 1st</i>
Mon anniversaire	<i>My birthday</i>
Qu'est-ce que tu veux?	<i>What do you want?</i>
Je voudrais ...	<i>I would like</i>
un cadeau	<i>a present</i>
un vélo	<i>a bike</i>
un jeu	<i>a game</i>
un livre	<i>a book</i>
un ballon	<i>a ball</i>
un Père Noël en chocolat	<i>a chocolate Santa</i>
un oeuf de Pâques	<i>an Easter egg</i>
trente, trente et un, trente-deux etc	<i>30, 31, 32 etc</i>
quarante, quarante et un, quarante-deux etc	<i>40, 41, 42 etc</i>
cinquante, cinquante et un, cinquante-deux etc	<i>50, 51, 52 etc</i>
soixante, soixante et un, soixante-deux	<i>60, 61, 62 etc</i>



Le Nouvel An,
c'est le premier janvier.

Mon anniversaire,
c'est le sept octobre.



La Fête des Rois,
c'est le six janvier.

KEY QUESTIONS

C'est quand ton anniversaire?

When is your birthday?

Qu'est-ce que tu veux comme cadeau?

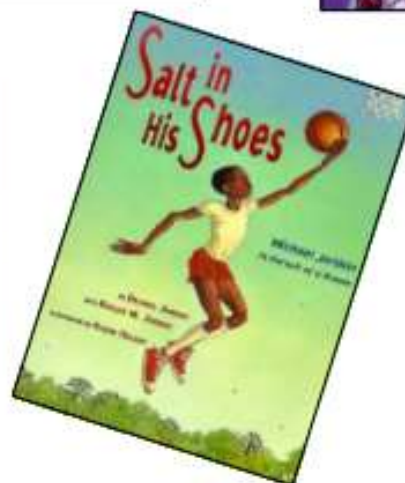
What present do you want?

Knowledge Organiser – PSHE – Dreams and Goals - Year Four



Vocabulary	
Determination	The effort required to do something and keep doing it until the end, even if it is hard.
Perseverance	The continued effort to do or achieve something despite difficulties, failure, or opposition.
Cooperation	To act or work together with another or others for a common purpose.
Fears	To be afraid of someone or something.
Hopes	To want something to happen.
Dream	Something that you hope for very much, although it is not likely to happen.
Goals	An aim or purpose.
Resilience	To be able to recover quickly from difficulties; toughness.
Commitment	To be dedicated to a cause or activity.

Key Knowledge
I understand that sometimes hopes and dreams do not come true and that this can hurt.
I know how to make a new plan and set new goals even if I have been disappointed.
I know how to work out the steps to take to achieve a goal, and can do this successfully as part of a group.



Reflective questions
Ask me this...
What dreams or hopes do you have for the future?
How will you know when you have achieved your goal?
What can help when you feel hurt or disappointed?

Knowledge Organiser- Data Logging – Computing – Year 4

Key Vocabulary	Definition
Data	A collection of numbers that can be analysed.
Input Device	The information put into a computer or device
Sensor	A device which detects, measures and/or records information
Data point	A point where data is recorded
Interval	A space or gap between two things.
Import	Transfer data into a file or document
Export	Transfer data in a format that can be used by other programs.
analyse	Discover or reveal something




Key Knowledge:
To be able to explain that data gathered over time can be used to answer questions
To be able to use a digital device to collect data automatically
To be able to explain that a data logger collects 'data points' from sensors over time.
To be able to use data collected over a long duration to find information
To identify the data needed to answer questions
To use collected data to answer questions

Data Recording

-One way for us to record data is by writing it down. Some data loggers can also record data themselves, which we can download later. Computers can also help us to record data, e.g. by connecting our data loggers to computers and opening data logging software.

-An advantage of this is that computers can record data automatically, meaning that someone does not need to sit waiting for a long period of time. Data loggers can be set to measure at different intervals (points in time).

-Data logger software can also be used to show different charts and graphs. This can save the user a lot of time!

Data Collection

Asking Questions: Data gathered over time can be used to answer important questions. For example, the class register can be used to answer questions about children's attendance. Before collecting data, we need to carefully consider which questions we are trying to answer.



-Sensors: Our senses (sight, hearing, smell, taste, touch) detect things in our environment. Computers have input device sensors which help them to sense things.

- Some examples are:
- Microphones (sound)
 - Camera (light)
 - Touchscreen (touch)



- Data Loggers: Data loggers have sensors built into them. They can be used to detect and record data.



- Data loggers often contain:
- A heat sensor (to record the temperature)
 - A light sensor (to record brightness)
 - A sound sensor (to record the noise).

Analysing Data	Answering Questions
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-When scientists collect data, they usually store it so that it can be analysed at any time. The data can also be shared so that other scientists can use it.

-Tables and graphs can be used to present the data in a useful way for reading and understanding it. It is important to be able to see trends as clearly as possible.



-Remember that data should be collected for a reason: to answer questions.

-It is very important to ensure that the testing that you do is fair and reliable, otherwise the data that you get back may not give you the accurate answers that you need.

-It is important to interpret your data carefully. You can then write a report detailing what your conclusions are.

R.E. Year 4 Spring 1 Knowledge Organiser

Enquiry: Could the Buddha's teachings make the world a better place?





Key vocabulary	Definition
Buddhism	Buddhism is the world's fourth-largest religion with over 520 million followers, or over 7% of the global population, known as Buddhists.
Buddha	Awakened or enlightened one.
Bodhi	Tree under which Buddha reached enlightenment: known as the tree of wisdom.
8 Fold Path	The 8 fold path is Right Understanding, Right Intent, Right Speech, Right Action, Right Livelihood, Right Effort, Right Mindfulness and Right Concentration.
Enlightenment	To find the truth about life
Siddhatta	Was a monk, philosopher, teacher and religious leader on whose teachings Buddhism was founded.

Key Knowledge
I know what makes our world wonderful.
I can talk about changes that have happened in my life and can explain how it makes me feel.
I know that the Buddha says people must accept change and that if you treat others with kindness, they will be happy.
I know that the Buddha told people to live a good life without being selfish or greedy and that it would make the world a better place.
I can explain what I would do to try and make the world a better place.



The Buddha taught us to accept that everything changes.


If we are kind and loving to others, this will make others happy.

Key Vocabulary	Definition
Key signature	The key of a piece of music depends on the flats and sharps in the music.
Minim	
Crotchet	
Dotted crotchet	
Quaver	
Melody	A succession of musical tones
Dynamics	Levels of sound in music (soft to loud)
Disco	A genre of dance music
Folk	Music that originates from traditional cultures
Orchestral	Music created by an ensemble of instruments
Home note	Where the music feels like it finishes
Tonic	The key note of the music

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



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

How many beats per measure

What note gets one beat

Time Signature: 3/4 — there are three crotchet beats in a bar

Time Signature: 4/4 — there are four crotchet beats in a bar

Songs covered


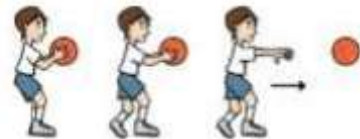
- Bringing us together
- Old Joe Clark
- Dance with me



Key Vocabulary	Definition
Dribble	Moving with the ball by bouncing it with one hand.
Double Dribble	THIS IS NOT ALLOWED! – Dribbling the ball with 2 hands at once. Possession is given back to the opposing team.
Travelling	THIS IS NOT ALLOWED! – Moving with the ball without dribbling it. Possession is given back to the opposing team.
Chest pass	When someone passes the ball from chest height with no bounce.
Bounce pass	When someone passes a ball with a bounce.

Skill Development

- To develop the attacking skills of dribbling.
- To protect the ball when dribbling against an opponent.
- To develop passing skills.
- To use defending skills to delay an opponent.
- To develop a shooting technique.
- To apply rules and tactics in game situations.

Skills	
Dribbling	
Passing	
Shooting	