

# **Knowledge Organisers**

## **1<sup>st</sup> Spring Term**

**Science**

**Geography**

**History**

**Art/DT**

**French**

**PSHE**

**Computing**

**RE**

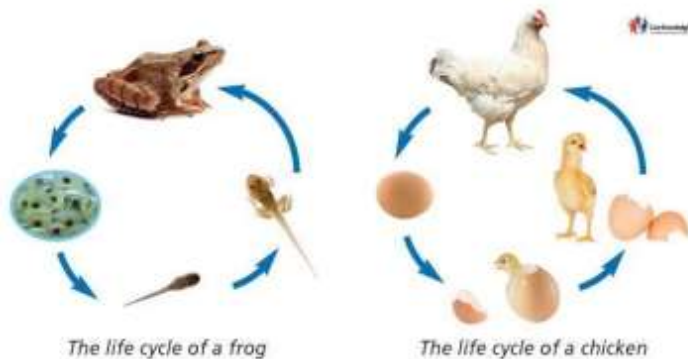
**Music**

**PE**

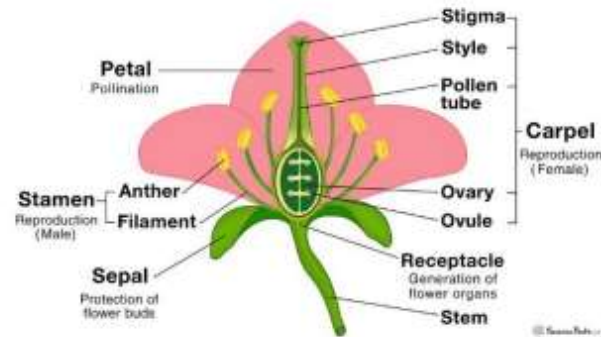
# **Class 3 – Year 5 & 6**

## Knowledge Organiser - Science – Year 5 – Life Cycles and Reproduction

| Key Vocabulary:        |   |
|------------------------|---|
| life cycle             | development of an organism from birth through reproduction to death |
| reproduce              | to make again or make a copy of                                     |
| reproduction           | the process of making a copy of                                     |
| asexual                | non-sexual reproduction   |
| spore                  | seed released by a fungus   |
| cloning                | to make an exact copy of the parent                                 |
| regeneration           | the ability to replace lost cells or even lost body parts           |
| gametes                | male or female germ cell needed for sexual reproduction             |
| internal fertilisation | sperm and egg join inside the body of the female parent             |
| external fertilisation | sperm and egg join outside the bodies of the parents                |
| embryo                 | a developing organism   |
| zygote                 | a fertilised egg  |
| gestation              | the carrying of an embryo inside a female                           |
| monocot                | a flowering plant whose seed only contains one embryonic leaf       |
| stamen                 | the male reproductive organs of a plant                             |
| pistil                 | the female reproductive organs of a plant                           |



### Parts of a Flower



### Key Knowledge:

I know that plants can reproduce asexually.

I know the parts of a flowering plant and understand their function.

I understand seeds are dispersed by animals, humans, water, wind or the explosion of the seed pod.

I know about the life cycle and reproductive system of animals.





## Knowledge Organiser - East Anglia, The Midlands, Yorkshire & Humberside – Geography- Year 5

| Key Vocabulary          | Definition   |
|-------------------------|--|
| <b>Industry</b>         | Activity where raw materials are changed into goods that can be used and traded.             |
| <b>Arable farming</b>   | Farming where crops are planted, tended to and then harvested.                               |
| <b>Pastoral farming</b> | Farming where animals are raised and used for food or other produce such as wool.            |
| <b>Mining</b>           | Where a raw resource is extracted from the earth, for example, coal.                         |
| <b>National Park</b>    | An area protected by laws to ensure land is preserved.                                       |
| <b>Viaduct</b>          | A type of bridge built across a valley to allow transport to cross from one side to another. |
| <b>Valley</b>           | The low-lying land between mountains or hills.   |
| <b>Relief Map</b>       | A map showing the shape and height of land.  |
| <b>Population</b>       | The number of people living in a specific area.  |

### Key Knowledge:

I know East Anglia is a region of the UK that is very flat.




I understand marshland in East Anglia was drained leaving fertile land to grow crops.

I know Birmingham is a large city in the Midlands and I can find out about it.

I know Yorkshire is a large area to the North of England and can describe the features it has.

I know The Ribbleshead Viaduct and the Humber Bridge are two ways in which people have changed the landscape in Yorkshire and Humberside.

|                                 |  |
|---------------------------------|--|
| <b>East Anglia</b>              | <ul style="list-style-type: none"> <li>Includes Norfolk, Suffolk and Cambridgeshire</li> <li>The Fens is a region of East Anglia that is often at or below sea level and is home to lots of wildlife</li> <li>Known as 'Britain's bread basket'</li> </ul>   |
| <b>Yorkshire and Humberside</b> | <ul style="list-style-type: none"> <li>Yorkshire is a large area in the north of England</li> <li>North Yorkshire is the largest county in the UK</li> <li>The Ribbleshead Viaduct and the Humber Bridge are two ways in which people have changed the landscape in Yorkshire and Humberside.</li> </ul> |
| <b>The Midlands</b>             | <ul style="list-style-type: none"> <li>The Midlands means 'land in the middle'</li> <li>The biggest city in the Midlands is Birmingham</li> <li>In the past, the Midlands had coal and iron mines</li> </ul>   |

| East Anglia   | Yorkshire and Humberside   | The Midlands  |
|---|--|---|
|  |  |  |

## Knowledge Organiser - The Industrial Revolution - History - Year Five

| Key Vocabulary               | Definition   |
|------------------------------|--|
| <b>Industrial Revolution</b> | A time of great change in Britain between 1750 to 1900   |
| <b>Population</b>            | The number of people living in a particular place  |
| <b>Invention</b>             | Something new which is created, can be an object or an idea  |
| <b>Economy</b>               | The system of how money is used within a particular country  |
| <b>Agriculture</b>           | The process of farming, including both growing and harvesting crops and raising animals, or livestock. |
| <b>Poverty</b>               | The lack of basic human needs such as clean water, nutrition, healthcare, education and shelter        |
| <b>Industry</b>              | The process of making products by using machines and factories   |
| <b>Mass production</b>       | The manufacture of a product in large numbers and at a low cost.                                       |

Pre-industrial Britain



Post-industrial Britain

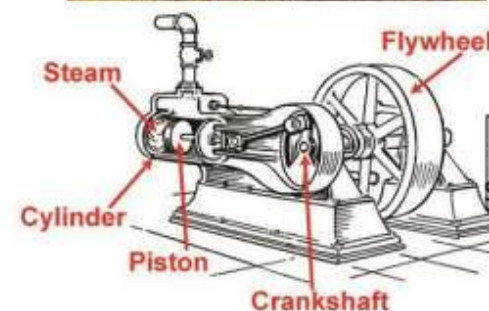


Diagram of a Steam Engine

### Key Knowledge

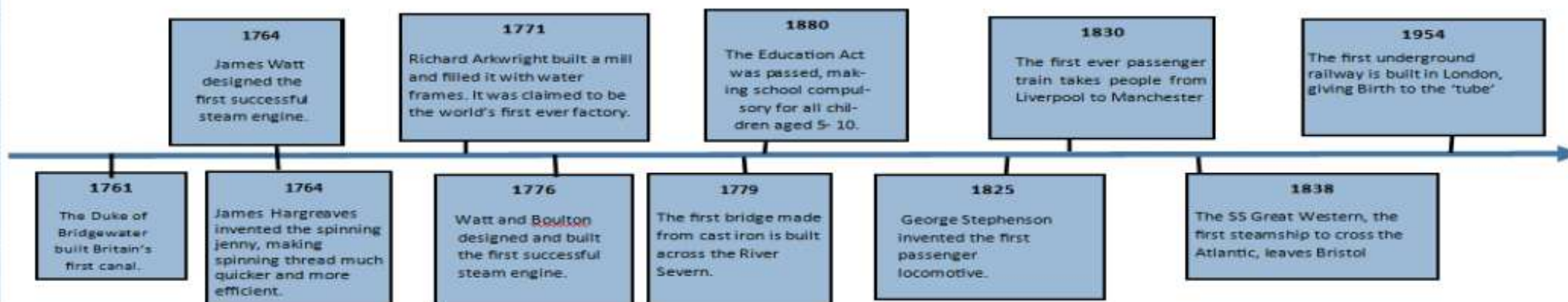
I know the 'Industrial Revolution' describes the change from a society based on hand manufacturing and human or animal power, to a society based on machinery in factories.

I know the steam engine was one of the most important inventions of the industrial revolution.

I understand the how goods were transported in the Industrial Revolution.

I know industrial revolution caused cities to grow rapidly and that this was called urbanisation

I understand Victorian children played a role and had dangerous jobs during the industrial revolution.





## Knowledge Organiser – Chinese Art - Visual Arts - Year Five

| Key Vocabulary | Definition  |
|----------------|---|
| dynasty        | A line of rulers of a country from the same family. Parts of modern-day China were ruled by different dynasties for thousands of years. |
| Ming dynasty   | Chinese dynasty from 1368-1644 C.E.   |
| calligraphy    | Decorative handwriting  |
| character      | Chinese writing symbols   |
| rice paper     | Thin paper used for Chinese painting.   |
| scroll         | A roll of paper or silk for writing or painting on. When rolled up, stored in a box.  |
| hand scroll    | A long, narrow, horizontal scroll, viewed by being held by the viewer, maybe on a table.  |
| hanging scroll | A scroll displayed vertically on a wall for a short period of time.   |
| ink stick      | A solid stick of ink.   |
| ink stone      | A stone for grinding ink on.  |
| ceramic        | Fired clay.   |
| porcelain      | A white translucent ceramic.  |
| Ming ware      | Ming dynasty ceramics.  |
| cobalt blue    | A deep blue pigment   |

### Key Knowledge

|  |
|--|
| I understand which materials are used to make Chinese calligraphy and paintings.             |
| I know Chinese paintings often use only black ink and are usually of things found in nature. |
| I know calligraphy is a very important form of Chinese art.                                  |
| I understand the influence of Chinese porcelain in Europe.                                   |

### Ming Ware



Early 15<sup>th</sup> century,  
Porcelain with cobalt blue



Late 17<sup>th</sup> century  
Porcelain with cobalt blue, for  
European market

### Paintings and Calligraphy



Finches and  
Bamboo Early 12<sup>th</sup>  
century  
Handscroll - ink and colour on silk



Fisherman (with poem)  
c.1350  
Handscroll - ink on paper



Summer Mountains  
c.1050  
Handscroll ink and colour on silk

# Knowledge Organiser Year 6 French Unit 8: Les vêtements

| Key Language                | English                        |
|-----------------------------|--------------------------------|
| un t-shirt                  | <i>a t-shirt</i>               |
| un pantalon                 | <i>some trousers</i>           |
| un chapeau                  | <i>a hat</i>                   |
| une veste                   | <i>a jacket</i>                |
| une jupe                    | <i>a skirt</i>                 |
| une chemise                 | <i>a shirt</i>                 |
| des chaussures              | <i>some shoes</i>              |
| des lunettes de soleil      | <i>some sunglasses</i>         |
| Qu'est-ce que tu veux?      | <i>What do you want?</i>       |
| Je voudrais .....           | <i>I would like ....</i>       |
| C'est comment?              | <i>what is it like?</i>        |
| c'est moche/ C'est beau     | <i>It's looks rubbish/fine</i> |
| C'est trop grand            | <i>It's too big</i>            |
| C'est trop petit            | <i>It's too small</i>          |
| C'est trop cher             | <i>It's too expensive</i>      |
| et/ mais                    | <i>and/ but</i>                |
| je porte                    | <i>I'm wearing</i>             |
| rose/ orange/ marron        | <i>pink/orange/brown</i>       |
| rouge(s) /jaune(s)          | <i>red/yellow</i>              |
| vert(e)(s)/ bleu(e)(s)      | <i>green/blue</i>              |
| noir(e)(s)/ blanc(he)(s)    | <i>black/white</i>             |
| soixante (etc)              | <i>60 etc</i>                  |
| soixante-dix (etc)          | <i>70 etc</i>                  |
| quatre vingts (etc)         | <i>80 etc</i>                  |
| C'est combien?              | <i>How much is it?</i>         |
| Ça coute soixante-six euros | <i>It's 66 euros.</i>          |



Qu'est-ce que tu veux?  
C'est combien?

Je voudrais un pantalon  
blanc, mais c'est trop cher.

## KEY QUESTIONS

Qu'est-ce que tu veux?

What do you want?

Qu'est-ce que tu portes?

What are you wearing?

C'est comment?

What is it like?

C'est combien?

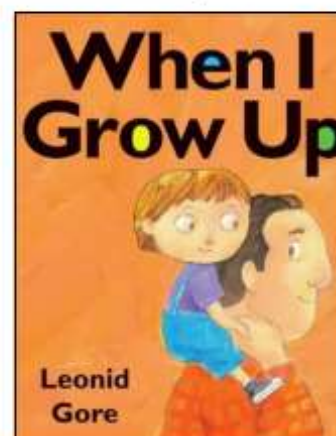
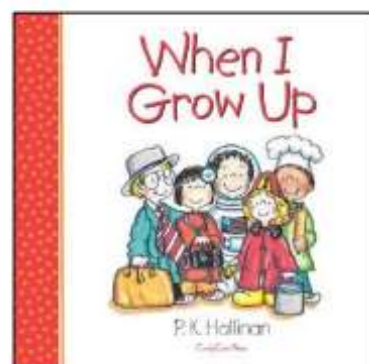
How much is it?



## Knowledge Organiser – PSHE – Dreams and Goals - Year Five

### Vocabulary

|                      |  |
|----------------------|--|
| <b>Determination</b> | The effort required to do something and keep doing it until the end, even if it is hard.       |
| <b>Perseverance</b>  | The continued effort to do or achieve something despite difficulties, failure, or opposition.  |
| <b>Motivation</b>    | Enthusiasm for doing something.  |
| <b>Fears</b>         | To be afraid of someone or something.  |
| <b>Hopes</b>         | To want something to happen.   |
| <b>Profession</b>    | People who do a particular type of work, considered a group.                                   |
| <b>Contribution</b>  | To achieve something together with other people.   |
| <b>Society</b>       | All the people in a country, or in several similar countries, can be referred to as a society. |
| <b>Culture</b>       | The way of life of a particular group of people.   |



### Key Knowledge

I know about a range of jobs carried out by people I know and have explored how much people earn in different jobs.

I can identify a job I would like to do when I grow up and understand what motivates me and what I need to do to achieve it.

I can describe the dreams and goals of young people in a culture different to mine.



### Reflective questions

Ask me this...

How does it feel to communicate in different ways?

How does it feel to be part of team working towards a shared goal?

What skills do we need to develop to help us build our future?




## Knowledge Organiser - Data and Information – Flat-file Databases– Computing – Year 5

| Key Vocabulary     | Definition  |
|--------------------|---|
| <b>Information</b> | Information is the processed data on which decisions and actions are based.   |
| <b>Data</b>        | <b>Computer data</b> is information processed or stored by a <b>computer</b> . This information may be in the form of text documents, images, audio clips, software programs, or other types of <b>data</b> . |
| <b>Database</b>    | A <b>database</b> is an organised collection of structured information, or data, typically stored electronically in a <b>computer</b> system.   |
| <b>Criteria</b>    | Categories used to find specific data.  |
| <b>Record</b>      | Data that is stored. Also a term used to describe the process of storing and keeping data.  |
| <b>Field</b>       | A specific area within a data set.  |
| <b>Compare</b>     | To find differences or changes between two or more data sets.   |
| <b>Filter</b>      | A software within a computer that reads data in order to then place them in different criteria.   |

| Key Knowledge:  |
|---|
| To navigate a flat-file database.                                     |
| To explain that a computer program can be used to organise data       |
| To explain that tools can be used to select data to answer questions. |
| To explain that we present information to communicate a message       |
| To outline how 'AND' and 'OR' can be used to refine data selection    |

**Overview**

**Flat-File Databases**



-Data is raw numbers and figures. Information is what we can understand from analysing data.

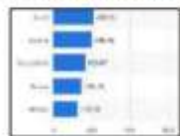
-There are lots of different ways that we can collect, log and interpret data, including by using databases.


-Databases organise data so that it can be easily added to, amended, stored and accessed. Computer databases can allow large amounts of data to be sorted, filtered and edited more easily.

**Presenting Data**

-Data can be shown visually, by using graphs and charts. This allows users to quickly and easily find answers to the questions that they need. It helps the user to easily see trends and to sequence information.

-Charts and graphs can be created by selecting the charts icon and selecting which fields to display in the x-axis and y-axis.






**Types of Databases**

**Database:** A database is a collection of organised data that is easily stored and used. Databases often structure data in logical ways (e.g. in columns, rows and tables) so that it can be accessed by those who need it easily. Databases are made up of individual records, which contain information in different fields (categories).

**-Paper Databases:** Paper databases require the creator to manually write in individual records, and to sort the records in an appropriate order. Paper records can still be useful in small databases, particularly where information is not changing and does not need to be amended frequently. However, most large databases are now stored on computers.

**-Computer Databases:** Many computer programs allow us to create databases, e.g. *12data* or *Microsoft Excel*. Computer databases have become more popular than paper databases, as data can be easily and quickly added or removed, sorted, filtered, edited, or viewed at any time.





**Using a Computer Database**

-Computer databases often contain large amounts of data. We can find the data that we need by using the 'search', 'filter' and 'sort' functions. Search functions allow us to type in the exact word/s that we are looking for. This can be useful if we are looking for a particular record.

-If we are looking for records that share certain information we can filter out data by different fields. For example, we filter in the 'age' field for all students aged 23. The database will then present only the students aged 23.

-We can also sort records by the data in particular fields. e.g. we may sort by the students' ages, from youngest to oldest. The youngest student will then appear at the top.







## R.E. Year 5 Spring 1 Sikhism Knowledge Organiser

### Enquiry: How far would a Sikh go for his/her religion?

| Key vocabulary                                     | Definition  |
|--|---|
| <b>Kalsa</b>                                       | The Sikh community who follow the rules of the five 'Ks'.   |
| <b>Guru Nanak</b>                                  | The founder of Sikhism (the person who started Sikhism).  |
| <b>Guru</b>  | Teacher   |
| <b>The Langar</b>                                  | The food served by volunteers at the Gurdwara.  |
| <b>The Golden Temple</b><br><b>Harmandir Sahib</b> | Harmandir Sahib is the real Sikh name for The Golden Temple. It means <i>house of God</i> . It is located in the city of <b>Amritsar, Punjab, India</b> |
| <b>Gurdwara</b>                                    | Sikh temple   |





| Key Knowledge   |
|---|
| I know what a commitment is.  |
| I know the 5 key beliefs of Sikhism are: God is in everything, Sikhs should serve others, everyone is equal, share what you have, give to charity.                    |
| I know that Sikhs are willing to sacrifice their time, effort, money, energy and even life for the well-being of others.  |
| I know that Sikhs believe it is a good thing to treat people equally and share with people. Sikhs see the Langar as an opportunity to give, more than as a sacrifice. |
| I know that there are different levels of commitment and I can explain how committed I am to various interests.   |




**The Golden Temple in India**



**The Langar – a community kitchen  
giving free meals to visitors**

| 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            |  |
| Dotted crotchet     |  |
| Quaver              |  |
| Articulation change | From spikey to flowy, to staccato to legato etc.                                  |
| Melodic change      | Levels of sound in music (soft to loud)   |
| Timbre change       | From soft to harsh  |
| Funk                | A mixture of soul, jazz, rhythm and blues   |

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

How many beats per measure


What note gets one beat

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

**Key Signature: D minor** — there is one flat in the key signature



**Key Signature: A major** — there are three sharps in the key signature



### Songs covered

- You can see it through
- The octopus side
- Connect


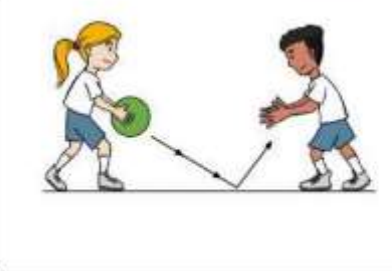
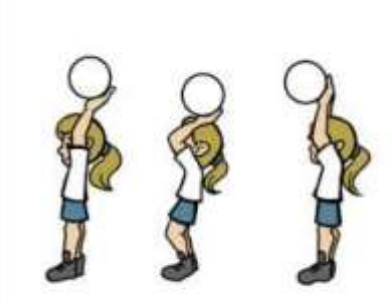




| Key Vocabulary   | Definition  |
|------------------|---|
| <b>Footwork</b>  | The first foot to touch the ground when receiving a ball is the landing foot. The landing foot must remain on the ground, the other foot may be moved in any direction, pivoting on the landing foot. |
| <b>Held ball</b> | A player has 4 seconds to shoot or pass.  |
| <b>Rebound</b>   | A player attempts to shoot but the ball hits the ring and comes back into play..  |
| <b>Free pass</b> | Awarded to a team when the opposition commits a foul.   |
| <b>Intercept</b> | To cut out a pass to gain possession.   |

### Skill Development

To develop passing and moving to maintain possession.  
 To use a variety of attacking skills to lose a defender.  
 To move into and create space to support a teammate.  
 To use defending skills to gain possession.  
 To develop accuracy when shooting under pressure.  
 To apply skills, tactics and principles in a game situation.

| Skills          |  |
|-----------------|--|
| <b>Pivot</b>    |   |
| <b>Passing</b>  |   |
| <b>Shooting</b> |  |