

# **Knowledge Organisers**

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

**Science**  
**History**  
**Geography**  
**Art**  
**PSHE**  
**French**  
**Computing**  
**R.E.**  
**P.E.**

# **Year 5**

## Knowledge Organiser – Human Body – Science – Y5

### Key Vocabulary:

|                |   |
|----------------|---|
| Circulation    | The circulatory system is the system that moves blood around the body.  |
| Respiration    | The respiratory system is the set of organs that allows a person to breathe and exchange oxygen and carbon dioxide in the body. |
| Muscle         | A band of tissue in the body that has the ability to contract, producing movement in parts of the body.                         |
| Oxygen         | We breathe in oxygen which is then transported around the body by red blood cells. In the human body, the oxygen                |
| Carbon dioxide | Your blood carries carbon dioxide to your lungs which is then breathed out.   |
| Veins          | Veins carry blood back towards the heart.   |
| Arteries       | Arteries carry blood away from the heart.   |
| Capillaries    | Tiny blood vessels that carry blood to the individual cells - they join the arteries to the veins                               |
| Pulse          | The beating of the heart which can be felt by feeling the arteries of the wrist or neck.  |
| Blood vessels  | Arteries, veins and capillaries   |

### Key Knowledge:

|   |
|---|
| I know the main organs in the body.   |
| I understand how the heart functions.   |
| I understand the difference between the circulatory and respiratory systems.    |
| I understand the importance of blood and can explain why we need it.            |
| I understand the function of the lungs and the effects of smoking on the lungs. |

### Diseases caused by Smoking

- Cancer e.g. throat, lungs or mouth cancer
- Emphysema
- Heart disease
- Asthma
- Bronchitis
- Heart failure
- Blockage in the arteries

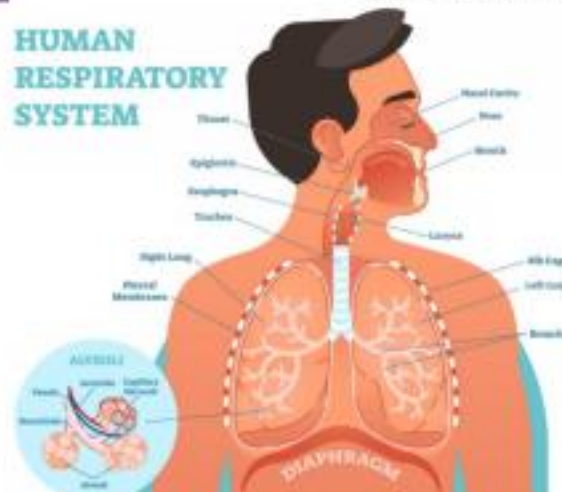


|                            |   |  |
|----------------------------|---|--|
| Liver                      | This organ removes toxins from the blood and makes blood                        |  |
| Lungs                      | This is where oxygen gets into the blood. Carbon dioxide leaves the blood here. |  |
| Small and large intestines | This is where the body absorbs food and water into the blood.                   |  |
| Heart                      | This pumps blood to all parts of the body.                                      |  |
| Brain                      | This control most of the things your body can do.                               |  |
| Kidneys                    | These help the body to get rid of waste and they make urine.                    |  |
| Stomach                    | This mixes food with acid and gastric juices. It starts to break down food.     |  |

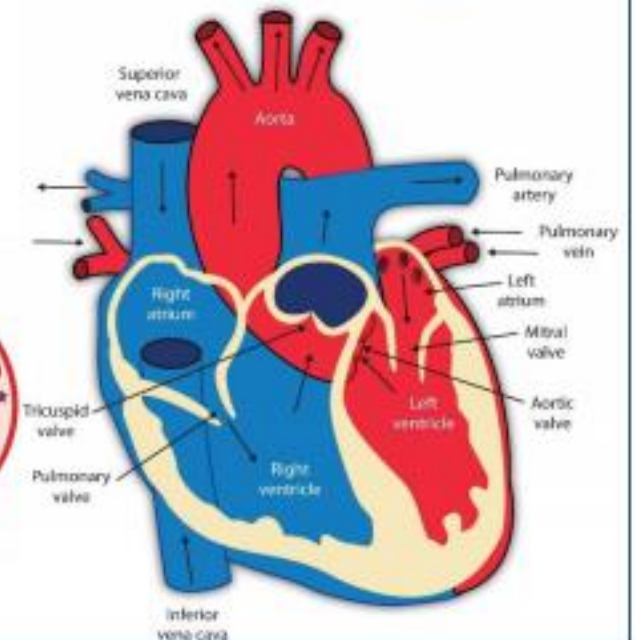
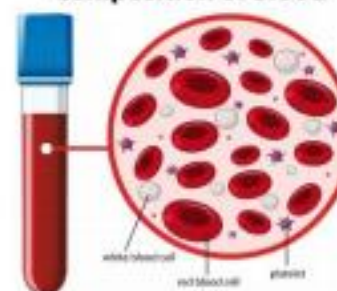
The circulatory system



### HUMAN RESPIRATORY SYSTEM

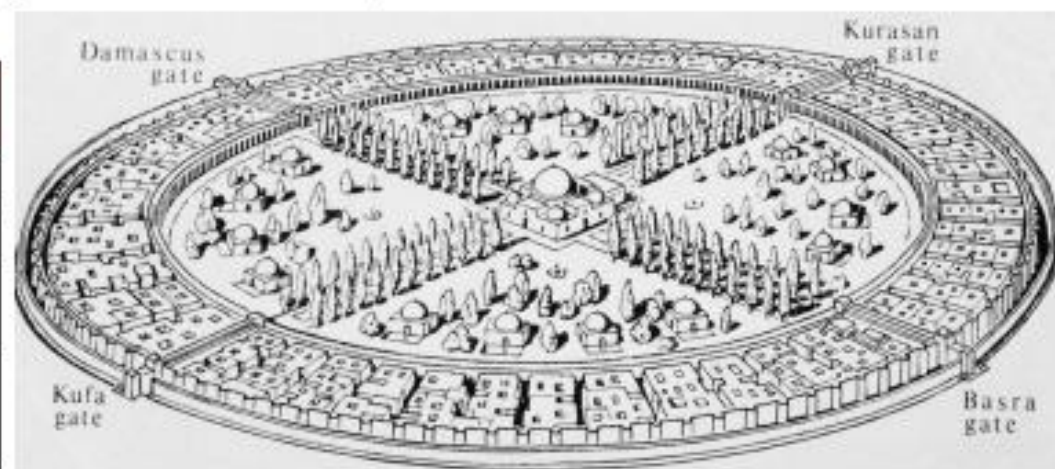


### Composition of Blood



## Knowledge Organiser - Baghdad 900 CE - History – Year 5

| Key Vocabulary         | Definition   |
|------------------------|--|
| <b>Mesopotamia</b>     | In the continent of Asia, between the River Tigris and the River Euphrates, there was a warm and pleasant region called Mesopotamia, meaning 'the place between two rivers'. |
| <b>Cuneiform</b>       | Cuneiform is believed to be one of the oldest writing systems in the world. It was developed in Mesopotamia.   |
| <b>Civilisation</b>    | A civilisation is a nation, or group of people, that share a common culture, common laws, a common economy, and typically a common faith or religion.                        |
| <b>'City of Peace'</b> | Baghdad 900 CE was referred to as the 'City of Peace'.   |
| <b>House of Wisdom</b> | The House of Wisdom was a place in Baghdad where texts were translated and where people came to learn and read. It is remembered as one of the world's greatest libraries.   |
| <b>Mongols</b>         | The Mongols (originally from Mongolia) were a tribe of nomads who rode on horseback across central and northern Asia.  |



| Key People              | What did they do?  |
|-------------------------|--|
| <b>Caliph Al-Mansur</b> | A religious leader who is remembered for founding the city of Baghdad. |
| <b>Al Tabari</b>        | He was an influential scholar, historian and translator/ interpreter.  |
| <b>Hulago Khan</b>      | A Mongolian ruler who invaded Baghdad in 1258 and destroyed the city.  |

### Timeline of Baghdad: 762-1258

**762 CE**

The construction of Baghdad began in 762 CE when Caliph Al-Mansur laid the first brick.

**900 CE**

Baghdad became a hugely significant city by CE 900 and people came from all over the world to visit the city.

**1258 CE**

Mongol forces invaded and destroyed the city. Much of the population was killed.



Scholars at an Abbasid library

Mapman of al-Hariri Illustration by 'Abd al-Wahid, Baghdad 1127

### Key Knowledge:

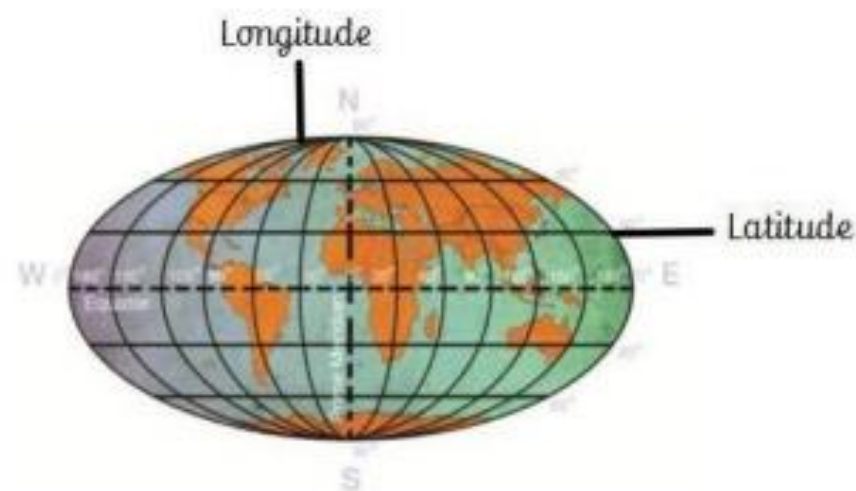
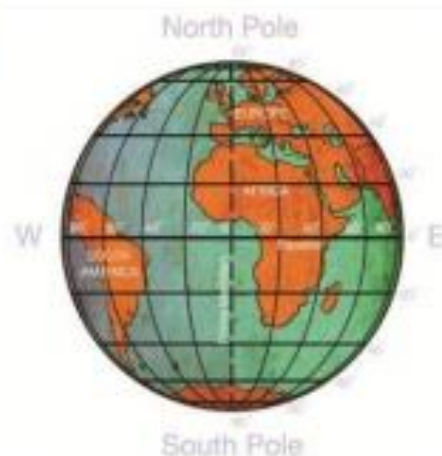
- I understand that an ancient civilisation began in Mesopotamia.
- I know that Baghdad is a city that was built near the Tigris River, in Mesopotamia, a long time ago.
- I understand the layout of Baghdad in 900 CE.
- I understand that many people came to Baghdad from around the world to trade, teach and learn.
- I know that the Mongol attack on Baghdad destroyed the city.



## Knowledge Organiser- Spatial Sense - Geography - Year 5

| Key Vocabulary             | Definition  |
|----------------------------|---|
| <b>Prime meridian line</b> | An imaginary line that divides the earth into two sections to show the EASTERN and western hemispheres. It also used as the basis for world time zones. |
| <b>Longitude</b>           | Imaginary lines parallel to the prime meridian line that help map makers locate places with accuracy. (Vertical lines)                                  |
| <b>Latitude</b>            | Imaginary lines parallel to the equator that help map makers to locate places with accuracy. (Horizontal lines)   |
| <b>Eastern Hemisphere</b>  | A term used to describe places that are east of the meridian line.  |
| <b>Western Hemisphere</b>  | A term used to describe places that are west of the meridian line.  |
| <b>Relief maps</b>         | A map that uses shading and colours to indicate the height of the land.   |

| Key Knowledge:   |
|--|
| I understand that map makers draw imaginary lines to divide the world into sections. |
| I can locate places in the Eastern and Western hemispheres.                          |
| I can use coordinates to locate places on a map.                                     |
| I know how scale is used on a map.   |
| I understand that a relief map shows heights on the map.                             |



## Knowledge Organiser – Islamic Art and Architecture - Visual Arts - Year 5

| Key Vocabulary           | Definition   |
|--------------------------|--|
| Islamic art/architecture | Art or architecture which relates to the religion of Islam or the Islamic world.     |
| mosque                   | A place of worship for Muslims.  |
| minaret                  | A thin tower, usually part of a mosque, from which a person calls Muslims to prayer. |
| dome                     | The hollow, upper half of a sphere, often used in Islamic architecture.              |
| calligraphy              | Decorative handwriting.  |
| geometric patterns       | A pattern made out of geometric shapes such as triangles, squares, circles.          |
| vegetal patterns         | A pattern made out of shapes and lines which represent plants.                       |
| figural                  | Art work showing humans or animals.  |

### Key Knowledge:

|   |
|---|
| I understand what Islamic art and architecture means.                           |
| I understand that Islamic art uses calligraphy, geometric and vegetal patterns. |
| I know common features of Islamic architecture.                                 |
| I understand how the Alhambra shows features of Islamic art and architecture.   |
| I can explore the Islamic art and architecture of the Taj Mahal.                |

### Architecture

The Dome of the Rock (691 - Jerusalem)



The Taj Mahal (1632 – Agra, India)



### The Alhambra – (Granada, Spain)



Court of the Lions, Nasrid Palaces, (1300s)



Plasterwork - Nasrid Palaces (1300s)



Geometric tilework - Nasrid Palaces (1300s).



Plasterwork calligraphy - Nasrid Palaces showing arabic writing which reads, "There is no victor but God."



## Knowledge Organiser – PSHE – Being Me in My World - Year Five

| Vocabulary                |  |
|---------------------------|--|
| Refugee, Asylum, Refugee. | See below  |
| Prejudice                 | Preconceived opinion that is not based on reason or actual experience.                             |
| Citizen                   | Someone who is a citizen of a particular country is legally accepted as belonging to that country. |
| Persecution               | Hostility and ill-treatment, especially because of race or political or religious beliefs.         |
| Collaboration             | The action of working with someone to produce something.   |



| Key knowledge  |
|--|
| I can understand my rights and responsibilities as a British citizen and as a member of my school.                     |
| I can make choices about my own behaviour because I understand how rewards and consequences feel.                      |
| I can understand how a democracy and having a voice benefits the school community and know how to participate in this. |



### REFUGEE

- Forced to leave their country
- Fleeing armed conflict or persecution
- Do not know where they'll end up

### MIGRANT

- Choose to move
- No direct threat of persecution or death
- Mainly to improve their lives
- Finding work

### ENVIRONMENTAL MIGRANT

- Fleeing from natural disaster
- Still enjoys its government's protection

### ASYLUM SEEKER

- Person who left country
- Applied for refugee status
- Awaiting decision on their application
- Not to be confused with refugee

### Reflective Questions

Ask me this...

Should a government help its own citizens before it helps refugees?

Is it the government's responsibility to ensure that every citizen in our country can have their rights met?

What are your responsibilities to yourself or others so that everybody has the chance to learn?

# Knowledge Organiser Year 5 French Unit 1: Salut Gustave!

| Key Language                        | English                             |
|-------------------------------------|-------------------------------------|
| Bonjour/Salut!                      | Hello/Hi!                           |
| Comment t'appelles-tu?              | What's your name?                   |
| Je m'appelle .....                  | My name is....                      |
| Ça va?                              | How are you?                        |
| Oui, ça va bien.                    | I'm fine                            |
| Non, ça ne va pas.                  | I'm not doing well                  |
| Comme ça comme ça                   | so-so                               |
| Tu es français(e)/britannique?      | Are you French/British?             |
| Oui/Non je suis ...                 | Yes/No I am .....                   |
| Quel âge as-tu?                     | How old are you?                    |
| J'ai dix ans                        | I'm 10 yrs old                      |
| Tu as des frères ou des soeurs?     | Have you any brothers and sisters?  |
| J'ai un(e)/deux frère(s)/soeur(s)   | I have one/two brother(s)/sister(s) |
| Je n'ai pas de frères ou de soeurs. | I have no brothers or sisters       |
| Il/Elle a.....                      | He/She has...                       |
| Il /Elle n'a pas de .....           | He/she hasn't ....                  |
| Il/Elle est .....                   | He/She is .....                     |
| Il/Elle n'est pas .....             | He/She isn't                        |
| beau / belle                        | good-looking/beautiful              |
| sympa                               | kind                                |
| intelligent(e)                      | intelligent                         |
| timide                              | shy                                 |
| sévère                              | strict                              |
| grand(e)/petit(e)                   | big/small                           |



Salut! Je m'appelle Ron.  
J'ai treize ans.  
J'ai cinq frères et une soeur.

Ma soeur s'appelle Ginny,  
Elle a dix ans. Elle a un livre. Elle est belle.



## KEY QUESTIONS

|                                 |                                      |
|---------------------------------|--------------------------------------|
| Ça va?                          | How are you?                         |
| Comment t'appelles-tu?          | What's your name?                    |
| Quel âge as-tu?                 | How old are you?                     |
| Tu as des frères ou des soeurs? | Do you have any brothers or sisters? |
| Tu es de quelle nationalité?    | What is your nationality?            |
| Il/Elle est comment?            | What is he/she like?                 |

## Knowledge Organiser- Computing Systems and Sharing Information – Computing – Year 5

| Key Vocabulary       | Definition  |
|----------------------|---|
| <b>System</b>        | Computer systems are a combination of both hardware and software working together. Hardware is the physical components of a computer and software is the programs that run on a computer.   |
| <b>Input</b>         | An input is data or message that a device receives  |
| <b>Process</b>       | A process is what a device does with the message or data it receives.   |
| <b>Output</b>        | The output is the data that the device sends out after acting on the input.   |
| <b>IP Address</b>    | An IP address (short for Internet Protocol address) is a label which is used to identify one or more devices on a computer network, such as the internet. It can be compared to a postal address. An IP address is a long number written in binary. |
| <b>Collaboration</b> | Working together with multiple people on a project with a shared end goal.  |
| <b>Algorithm</b>     | A set of instructions, written in chronological order, that are used to get a task done.  |
| <b>Packet</b>        | 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.   |

| Key Knowledge:  |
|---|
| To understand that computer systems are based on inputs, processes and outputs.           |
| To recognise that packets are a digital protocol for communicating.                       |
| To know that the internet is an international network of computers connected together.    |
| To understand that online drives allow projects to be shared and accessed by many people. |
| To recognise that connections between computers allow us to work together.                |
| To know that computers can be part of a system in an electronic device.                   |

**Systems**

- Systems are a set of things that work together to create a whole outcome.
- Computer systems are made up of inputs (something that sends a message to the device), processes (the way the device acts on the message) and outputs (something that is sent out by the device).

**Working Together**

- The internet can be used to help people collaborate on projects online, even when they are miles apart.
- Collaboration means working together on something to reach a shared goal.
- Shared 'cloud' functions and online drives can be used to store projects that multiple people can access at one time.

**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'.

The Internet is an international network of computers connected together.

Websites are stored on **servers**.

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**I.P. addresses** identify each location to send data between.

**Routers** send out **WiFi** Internet signals so data can be **downloaded** onto computers.

Data travels along **fibre-optic cables**.

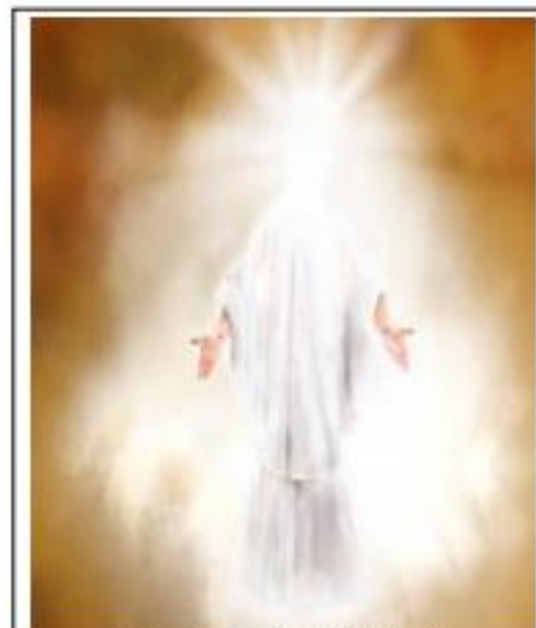
**broadband exchange**



## R.E. Year 5 Autumn 1 Islam Knowledge Organiser

### Enquiry: Why is Muhammad (PBUH) Important to Muslims?

| Key vocabulary                      | Definition   |
|-------------------------------------|--|
| <b>Muhammad (Peace Be Upon Him)</b> | The prophet who brought the word of God to the Muslim Holy book.                                   |
| <b>Islam</b>                        | The name of the religion of Muslims.   |
| <b>Qur'an/Quran/Koran</b>           | The name of the Muslim Holy book.  |
| <b>The angel Gabriel/Jibreel</b>    | The name of the angel who brought the word of God to Muhammad (PBUH).                              |
| <b>revelation</b>                   | A revealing of facts – in holy books it means when God revealed his thoughts and ideas to a human. |
| <b>prophet</b>                      | A man or woman who shares the word of God.   |



**The Angel Gabriel / Jibreel**



What makes an ordinary person become a very important religious leader?  
 How did Muhammad (PBUH) change Arabia and then the world?  
 Why is the Qur'an so important for Muslims?  
 How do the teachings of Muhammad (PBUH) influence



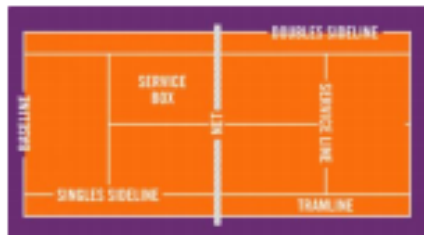
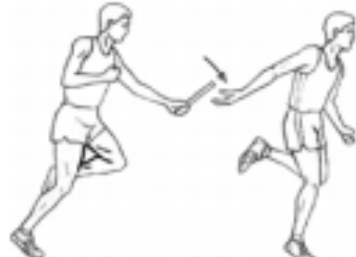


**Mecca**

#### Key Knowledge

- I know how some people become important in religions
- I know Muhammad (PBUH) is the Islamic religious leader
- I know how Muhammad (PBUH) became a religious leader
- I can explain how Muslims worship
- I know that religions can influence how people live

| Key Vocabulary      | Definition   |
|---------------------|--|
| <b>Volley</b>       | When a player hits the ball before it bounces on the floor.                          |
| <b>Ace</b>          | A serve that is a winner without the receiving player being able to return the ball. |
| <b>Service line</b> | The line that the ball must bounce before when serving.                              |
| <b>Down-sweep</b>   | In relay when the performer passes the baton in a downward direction.                |
| <b>Up-sweep</b>     | In relay when the performer passes the baton in an upward direction.                 |
| <b>Flight</b>       | The time the performer spends in the air in jumping events.                          |

| Skill development  |  |
|--|--|
| TENNIS   | ATHLETICS  |
| Develop a range of skills and be able to use them under pressure.                      | Be able to choose the best pace for a running event.                   |
| Be able to work cooperatively with others to manage our game.                          | Be able to perform a range of jumps showing some technique.            |
| Understand the need for tactics and identify when to use them in different situations. | Be able to show control at take-off and landing in jumping activities. |
| Understand the rules of the game and be able to apply them honestly.                   | Take on the role of coach, official and timer when working in a group. |

| Skills                    |   |
|---------------------------|---|
| <b>Lines of the court</b> |    |
| <b>Down-sweep</b>         |    |
| <b>Up-sweep</b>           |   |
| <b>Flight</b>             |  |