Our Lady's Catholic Primary School - Knowledge Organiser

Science **Vocabulary &**

- **Explanation** Artery - Carry blood from the heart to other parts of the body
- **Blood vessels** Blood vessels are the channels through which blood is distributed to body tissues.
- Capillaries Capillaries help to connect your arteries and veins in addition to facilitating the exchange of certain elements between your blood and tissues
- Circulatory systems The circulatory system delivers oxygen and nutrients to cells and takes away wastes. The heart pumps oxygenated and deoxygenated blood on different sides
- Digestive systems The digestive system is the group of organs that break down food in order to absorb its nutrients.
- **Drug** A drug is any substance that has an effect on your body when it enters your system.
- Fair test An investigation where one variable (the independent variable) is changed and all other conditions (controlled variables) are kept the same
- **Pulse** The number of times your heart beats in one minute
- Vein Carry blood from the capillaries toward the heart.

What I should already know

- Blood is the red liquid that is sent around the body by the heart
- Our heart pumps blood around our bodies.
- Drinking water, eating healthy food and doing regular exercise will help the health of our bodies
- Drinking too much alcohol and smoking cigarettes damage our bodies
- There are a number of different systems in the body - you learnt about these in Year 3/4.

Images / Diagrams

Light





Key facts & Information

- Nutrients are broken down by stomach acids break food down into a substance called chyme. This passes through to the duodenum where bile and enzymes break up larger molecules into their smaller parts
- Eating protein helps the body to grow and repair itself.
- Vitamins help the body to stay healthy. For example Vitamin C helps wounds to heal.
- Minerals keep the body healthy. For example: calcium keeps our teeth strong and iron is needed to help circulate oxygen around the body.
- Fibre helps keep food moving through the colon and intestines.
- Fats gives the body energy, stores energy and helps insulate against the cold
- Carbohydrates gives the body energy so we can be active.
- A healthy diet involves eating the right types of nutrients in the right amounts.
- An unhealthy diet is one which is not balanced too much of some nutrient groups are eaten and not enough of the others.
- There are numerous advantages to exercising regularly that will impact positively on your health.
- You can measure your heartbeat by measuring your pulse. Your pulse is also known as your heart rate.
- Not all drugs are harmful to our bodies, medicine and tea or coffee are classified as drugs.

Scientific Investigation

We will analyse the impact of different intensity exercise on our heart rates. We will collect the information and present the data in the form of a graph.



Year 6

Significant Scientists

Marie Maynard Daly

Daly made huge advances in our understanding of how the heart and circulatory system are affected by sugar and cholesterol in our diets

