**Year 5/6 Summer 1 Science**

**Animals including humans**

|  |
| --- |
| Prior Learning  |
| This unit recaps the children’s learning from year 4 about how animals survive and stay healthy and helps children to learn more about how different organ systems work. This unit teaches the importance of diet, exercise and lifestyle in the way that bodies function. In this unit, they learn about the three main parts of the circulatory system and the job of the heart. They also learn about what blood is comprised of and how it is transported around the body. Children carry out an investigation to explore how heart rate is affected by exercise. They discuss how to plan a fair test and measure and record accurately. Children learn the importance of exercise and conduct a survey to find the most popular exercise in their class. They then apply their understanding by discussing different people's lifestyles and how this can affect their bodies. Finally, children will learn about drugs and alcohol and how they can have an impact on our bodies, specifically in relation to the circulatory system. |
| Key vocabulary for this unit |
| Circulatory system, heart, blood vessels, oxygenated blood, deoxygenated blood, drugs, alcohol, nutrients  |
| Learning Sequence |
| **The heart** | Identify and name the main parts of the human circulatory system, and describe the function of the heart, blood vessels and blood.  |
| **Blood**  | Blood Identify and name the main parts of the human circulatory system and describe the functions of the heart, blood vessels and blood. Describe the ways in which nutrients and water are transported within animals, including humans. |
| **Investigating heart rate**  | Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. To plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary; record data and results of increasing complexity using classification keys, tables, scatter graphs, bar and line graphs; report findings from enquiries, including conclusions and degree of trust in results, in written forms by reporting and presenting the findings of their enquiry. |
| **The benefits of exercise** | Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. |
| **Diet and exercise** | Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. |
| **Drugs and alcohol**  | Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. |
| Assessment milestones |
| **Working scientifically:*** To be able to plan a scientific enquiry.
* To be able to record, report and present results appropriately.
 | **Scientific knowledge:** * To know the three main parts of the circulatory system and describe the job of the heart.
* To describe the important jobs of the blood vessels and blood.
* To be able to describe the importance of exercise and how it affects the heart.
* To understand that regular exercise is important for a healthy body.
* To be able to explain how diet and exercise affect the body.
* To be able to recognise the impact of drugs and alcohol on the way bodies function.
 |