## Science - Year 1 and Year 2

Below are the science units that children will study across Year 1 and Year 2 at The Rydal Academy. They are split into half terms or terms depending on the length of the unit. There is a brief explanation of each focus area and suggestions for activities that you can do with your child at home to support their learning.

|          | Year 1                                                                                                                                                                                                                                                                                                                                                                                                   | Year 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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|          | Seasonal changes                                                                                                                                                                                                                                                                                                                                                                                         | Animals, including humans – Diet and Health, My Body                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Autumn 1 | Children will learn about different types of weather and how they happen. We will visit <b>South Park</b> to spot the signs of spring.  The link below shows a range of clips throughout the year. Watch the video and talk about what you see. Can you identify the seasons from the clips shown? <a href="https://www.youtube.com/watch?v=VYpGBtR8Lbs">https://www.youtube.com/watch?v=VYpGBtR8Lbs</a> | Children will learn how to maintain a healthy body and lifestyle. We will learn the importance of a balanced diet, exercise and taking care of our bodies. Then we will learn the functions of various systems in the body - the digestive system, the nervous system and the circulatory system. We hope to have a <b>visitor</b> come in to talk about the importance of staying healthy.  The link below has short clip showing what humans need to stay healthy. Can you watch it together and discuss what else you could do to be even healthier? <a href="https://www.bbc.co.uk/bitesize/clips/zgtr82p">https://www.bbc.co.uk/bitesize/clips/zgtr82p</a> |
|          | Animals, including humans - About Me                                                                                                                                                                                                                                                                                                                                                                     | Plants – Growth and Care                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Autumn 2 | Children will learn about themselves and their body. We will learn about senses and the basic parts of the human body.                                                                                                                                                                                                                                                                                   | Children will understand why plants grow as they do. We will also plants bulbs which we will observe later in the year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|          | Can you talk about different body parts and discuss what each sense does?                                                                                                                                                                                                                                                                                                                                | Can you watch the clip before and discuss what a plant needs to grow? If you can, grow some seeds at home! <a href="https://www.bbc.co.uk/bitesize/clips/zcn9j6f">https://www.bbc.co.uk/bitesize/clips/zcn9j6f</a>                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Spring 1 | Uses of Everyday Materials Children will find out how different materials are used. We will learn about natural and man-made materials, and complete tests to find out if a material is suitable for a task.  Exploring Everyday Materials We will learn about the properties of materials we use by carrying out tests and examining different materials.                                               | Children will learn about key material innovators such as John McAdam, John Dunlop and Charles Macintosh.  We will create models by choosing the most suitable materials.  Can you ask us who the material innovators are and what they created? Can you find any materials at home to                                                                                                                                                                                                                                                                                                                                                                          |
| Spring 2 | Can you find different materials at home to discuss? E.g. plastic, fabric, paper, metal.  What properties can you identify? Is it soft or hard? Is it flexible or rigid? Is it transparent?                                                                                                                                                                                                              | create a model (e.g. bridge, tower, vehicle)?  Living things and their habitats  Children will discover more about natural habitats and the organisms that live within them. We will explore different habitats and understand how living things are suited to their habitat.                                                                                                                                                                                                                                                                                                                                                                                   |
| Summer 1 | Introduction to Plant Children will learn about the basic parts of a plant, understand what a plant needs to grow and see how they change over time.                                                                                                                                                                                                                                                     | The link below is for a game where you can create different food chains. Can you play together at home? Or could you draw some different animal food chains?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Sun      | Can you grow any plants at home? Can you discuss what a plant needs to grow?  Also, look out for deciduous and evergreen trees on your journey to school!                                                                                                                                                                                                                                                | http://www.sheppardsoftware.com/content/animals/kidscorner/games/foodchaingame.htm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Summer 2 | Animals, including humans – About Animal                                                                                                                                                                                                                                                                                                                                                                 | Animals, including humans – growth                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|          | Children will explore what animals need to grow and how they need to be cared for differently. We will identify fish, amphibians, reptiles, birds and mammals. We will also identify carnivores, herbivores and omnivores. We will also have an <b>Animal Encounter</b> visitor!                                                                                                                         | Children will learn about how humans grow and compare this life cycle to other animals (dragonfly and newts). We will also look at how babies grow into adults.  Can you look at photos and discuss the families within your family? The clip below highlights some of the                                                                                                                                                                                                                                                                                                                                                                                      |
|          | The link below has short clips about different animal types. Can you watch them and think of any animals that fit into each category? <a href="https://www.bbc.co.uk/bitesize/topics/z6882hv">https://www.bbc.co.uk/bitesize/topics/z6882hv</a>                                                                                                                                                          | can you look at photos and discuss the families within your family? The clip below highlights some of the changes that you could discuss. <a href="https://www.bbc.co.uk/bitesize/clips/z4tmhyc">https://www.bbc.co.uk/bitesize/clips/z4tmhyc</a>                                                                                                                                                                                                                                                                                                                                                                                                               |