**Year 2 Science Curriculum – Spring 1**

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| **Theme: Growing Plants and Animals** | | | | | | | | |
| **Curriculum objectives** | | | **Vocabulary** | | | | | **Links across the curriculum** |
| To notice that animals, including humans, have offspring which grow into adults.  To find out about and describe the basic needs of animals, including humans, for survival (water, food, and air).  To describe the importance for humans of [exercise] eating the right amounts of different types of food, [and hygiene]. | | | **Record** | To draw or write what you observed or measured. | **Additional tier 3 vocabulary**  <https://static.collins.rhapsode.com/Snap_Science/Teaching_Science/Year_2/SNAP23_Y2_M4_growing_ms.pdf> | | | English:  **Big Cat Babies** Jonathan and Angela Scott - Baby and adult mammals: lions, leopards and cheetahs.  **Growing and Changing** Teresa Heapy, Alan Baker - The changes that happen as our bodies grow from babies to children. | |
| **Birth** | When a baby animal comes out of an egg or out of it’s mother. |
| **Healthy** | Well |
| **Hygiene/ hygienic** | Being clean to stay healthy. |
| **Invertebrate** | An animal that has no internal backbone. |
| **Life cycle** | The series of changes in the life of an animal from birth to death. |
| **Prior knowledge:** *What specifically have pupils learned that is relevant to this unit that they are building upon?* | | | | | | **Future knowledge:** *What specifically will pupils learn in the future that is relevant to this unit?* | | |
| Growing up (animals and human) is a Biology topic building on children's learning and experiences in the Early Years Foundation Stage and Year 1.  Children have previously learnt:  About exploration of the natural world around them, making observations and drawing pictures of animals (EYFS framework; ELG The Natural World) about animal (vertebrate) classification and structure (Year 1 Biology – Animals, including humans) about parts of the human body (Year 1 Biology – Animals, including humans). | | | | | | This prepares children for later learning:  About nutrition and about skeletons and muscles in humans and other animals (Year 3 Biology – Animals, including humans). About the human digestive system and teeth (Year 4 Biology – Animals, including humans) and about animal classification (Year 4 Biology – Living things and their habitats). | | |
| **Lesson Sequence** | | **Key Knowledge** | | | | **Key Skills** | | |
| 1. How do animals change as they grow? | | Animals grow and change throughout their lives; this is referred to as a life cycle. There are five vertebrate groups (studied in Year 1) in the animal kingdom – amphibians, birds, reptiles, fish, and mammals – which all have different life cycles to each other but, in the main, are born looking like a small version of the adult of their species, with the exception of amphibians. Insects are one of the many invertebrate groups, and they go through changes to a greater extent, including pupa and chrysalis stages. | | | | **Working scientifically**  **Skills children will learn, use, and develop**   * Identifying and classifying. * Using their observations and ideas to suggest answers to questions.   **Knowledge about science children will learn**  Children will learn about the methods that scientists use to build scientific knowledge about the natural world.  They will learn that scientist’s group and classify things as a way of organising them so the information can be easily communicated to others. They will learn that tables are a helpful way for scientists to record information so that they can use it to answer questions.  They will develop an understanding of the following types of enquiry: identifying and classifying, observing over time. | | |
| 1. What do animals need to survive? | | All animals need food, water, and air for survival. Important needs for young humans are also love, medical care and toys. | | | |
| 1. How can we sort food into groups? | | Food is one of the key needs for survival of all animals. Humans need to eat different types of food each day. This is represented by the Eatwell plate. | | | |
| 1. How can humans stay clean? | | Keeping clean and hygienic is crucial for humans to stay healthy. This includes regular dental, hair, hand, and whole-body hygiene activities. | | | |
| 1. How can humans stay active? | | Young people should have at least 60 minutes of physical activity per day, including all physical activity such as playing at break times, walking to and from school and taking part in PE lessons and other organised sport. Good mental health is supported by regular physical activity and movement. | | | |
| 1. How do humans stay healthy? | | A combination of varied and balanced diet, regular appropriate hygienic activity and at least 60 minutes per day of physical activity will lead to a healthy human at this age. | | | |  | | |
| **Themes and links** | | | | | | | | |
| **Themes (types of enquiry)** | **Where these are covered:** | | | | | | **Links across the Science curriculum** | |
| **Observe and describe** | Lesson 1  Can use simple scientific language to describe observations of change in animal life cycles (Lessons 1–5 if observing live animals in classroom).  Can identify and sequence change in two different vertebrate group animal life cycles.  Lesson 2  Can say that animals need air, water, and food to survive and describe what happens without them.  Can distinguish between ‘needs for survival’ and the kinds of ‘needs’ that help some animals to thrive but that are not essential for life.  Lessons 4 and 6  Can describe the importance of at least four different types of hygienic activity.  Lessons 5 and 6  Can describe the importance of daily physical activity and movement.  Can name some typical physical activity and say why it is important to move. | | | | | | |  |  | | --- | --- | | **EYFS** |  | | **1** | 2: Human body and senses  5: Animals (vertebrates) | | **2** |  | | **3** | 4: Movement and nutrition for the human body | | **4** | 4: Digestion and food chains | | **5** | 4: Plant and animal life cycles | | **6** | 6: Human growth  4: Human circulation  6: Body health | | |
| **Research** | Lesson 1  Can place the life cycle of a human (or other animal) in chronological order.  When prompted, can use a circle to show that the adults might, in turn, go on to produce young. | | | | | |
| **Gathering and Recording data** | Lessons 1 and 2  Can use simple scientific language to describe observations of change in animal life cycles (Lessons 1–5 if observing live animals in classroom).  Can identify and sequence change in two different vertebrate group animal life cycles. | | | | | |
| **Comparative and fair testing** | Lessons 3 and 6  Can describe the importance of the right proportions of different food groups for humans, comparing the appropriate quantities of food from four different food groups. | | | | | |
| **Identifying and classifying** | Lesson 3  Can identify which food group individual food items belong to. | | | | | |  | |