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| Year 7 | **Topic: B1 – Cells, Tissues and Organs**  **C1 – Materials and the Earth**  **Period:** Autumn 1 |
| **Overview of topic:**  B1 – Animal and plant cells will be explored in this topic through the use of microscopes. Processes including diffusion will be learnt and then this will come together to ensure that students can describe animals as organisms. Students will then learn about the different systems in organisms such as the respiratory system and the digestive system.  C1 – This topic will begin with learning about the structure of the Earth. Learning about different rock types; metamorphic, igneous and sedimentary will come next. Moving through this topic, students will also learn about important topics such as the greenhouse effect and the carbon cycle. This topic culminates in learning about types of materials and recycling. | |
| **Key** **knowledge:**  B1 – Types of cells and organ systems within an organism. C1 – Types of rocks and the impact on the Earth e.g., greenhouse effect and recycling.  **Key vocabulary:**   |  |  | | --- | --- | | **Tier 2** | **Tier 3** | | **Concentration**  **Plant**  **Animal** | **Magnification**  **Unicellular**  **Organ**  **Digestion**  **Asthma** | | **Composition**  **Cycle**  **Responsible** | **Metamorphic**  **Weathering**  **Irregular**  **Greenhouse**  **Brittle**  **Upcycling** | | **Key skills:**  ***Know how to…***  ***B1 – Use a microscope including making slides and changing the focus of a microscope.***  ***C1 – Interpret data.*** |
| **Co-curricular opportunities: Links to the impact of recycling and material uses on the environment.** | **Key reading skills taught *(clarify, question, summarise, predict)* and key texts: Microscope Methods and Recycling.**  **Wider Reading Opportunities/Links:**  **B1 -** [**http://www.biology4kids.com/files/systems\_main.html**](http://www.biology4kids.com/files/systems_main.html)  **C1 -** [**https://climatekids.nasa.gov/greenhouse-effect/**](https://climatekids.nasa.gov/greenhouse-effect/) |
| **How can I use this information at home?**   * Conversation starters with your children to discuss their learning * Support your child in carrying out independent research around the topic * Visit your local library (or BorrowBox), museums, or other locations to explore the topic * Promote books/other texts that explore this topic (see reading section) * Help your child to learn the key vocabulary | |