Science

*“Science may set limits to knowledge but should not set limits to understanding.”* Bertrand Russell.

In our primary science curriculum at Lady Katherine, we want to inspire curiosity in all children while also enabling children to make connections with previous knowledge. Discovering things for themselves, rather than being told, is a great way to learn in a meaningful way. It’s not always finding out why things work but also learning from why things don’t work. Our children will be encouraged to ask questions, take risks, experiment, reflect, make and learn from mistakes. We are fortunate that our school is in a rural setting with incredible and extensive outside spaces in which children can learn.

*Aims*

* develop scientific knowledge and conceptual understanding through the specific disciplines of biology, chemistry and physics
* develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them
* are equipped with the scientific knowledge required to understand the uses and implications of science, today and for the future.

*Long Term Plan*

Biology Chemistry Physics Sustainability

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| **Year Group** | **Autmn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| **Reception** |  |  |  |  |  |  |
| **Year 1** | The Human Body  Seasonal changes. | Materials  Seasonal changes. | Animals  Planting | Caring for the Planet.  Planting. | Plants.  Planting. | Growing and cooking.  Seasonal changes. |
| **Year 2** | Animals need for survival.  Humans | Materials.  Plastic. | Plants.  Living things and their habitats. | Living things and their habitats.  Plants. | Plants.  Growing Up. | Bulbs and seeds.  Growing Up.  Wildlife. |
| **Year 3** | Skeletons.  Movement.  Nutrition and Diet. | Food Waste.  Rocks. | Fossils.  Soils. | Light. | Plants A.  Forces. | Magnets.  Plants B.  Biodiversity. |
| **Year 4** | Group and classify living things.  Data Collection. | States of Matter. | Sound  Data Collection. | Electricity.  Energy. | Data Collection.  Habitats.  Deforestation. | The Digestive System.  Food Chains. |
| **Year 5** | Forces. | Space.  Global Warming. | Properties of materials. | Animals including humans.  Life Cycles. | Reproduction A  Reversible and irreversible changes. | Plastic pollution  Reproduction B |
| **Year 6** | Living Things and their Habitats. | Electricity.  Renewable energy. | Light.  Light Pollution. | The Circulatory System.  Diet, Drugs and Lifestyle. | Variations.  Adaptations. | Fossils.  Themes Projects. |