## Science KPI Indicators for 2023-24

Here are the KPI's for Science for the 2023-24 academic year. The table indicates the KPI and the milestones that will ensure students make expected progress within their year group.

Working scientifically is woven into all units, across both key stages, ensuring that all students are competent in investigating science.

Year 5:

| KPI | Milestones |
| :---: | :---: |
| Biology |  |
| Plants | Explain how we can grow plants without seeds |
|  | Describe how plants are grown across the year |
| Life Cycles | Identify common features/differences in animal life cycles |
|  | Identify common characteristics of mammals, amphibians, birds and insects |
|  | Provide examples of how humans help endangered species |
| Reproduction | Label the parts of a flowering plant and describe the processes of pollination and fertilisation in plants |
|  | Describe asexual reproduction in plants |
|  | Identify similarities and differences in the process of reproduction in mammals, amphibians, birds and insects |
|  | Identify the main stages in human life cycles and the process of puberty in boys and girls |
| Chemistry |  |
| Materials | Are able to group materials based on their properties |
|  | Provide examples of the properties of solids |
|  | Describe how to test the viscosity of liquids |
|  | Describe the properties of metals and plastics |
| Everyday Materials | Plan and investigate a fair test on plastic carrier bags |
|  | Explain how a cool bag affects temperature of food |
| All Change | Can describe reversible $\&$ irreversible reactions |
|  | Describe how a candle does both reversible \& irreversible reactions |


| Physics |  |
| :---: | :---: |
| Forces | Use a newton meter correctly |
|  | Describe how forces make things change directions and use force arrows correctly |
|  | Plan an investigation using parachutes to include a prediction |
|  | Describe water resistance and upthrust correctly |
|  | Describe how to use levers, pulleys and gears to move objects |
| The Earth and Beyond | Describe how shadows are formed |
|  | Describe how seasons occur throughout the year |
|  | Describe the phases of the moon |
|  | Identify the different planets in the Solar System |

