Ashtree Primary School and Nursery Unit Progression Plan for Science

Working Scientifically Skills
Considering and Evaluating Evidence

Year Group	Key Skills
Nursery	• Talk about what they see, using a wide vocabulary. • Talks about and identifies the patterns around them.
Reception	• Articulate their ideas and thoughts in well-formed sentences. • Describe events in some detail. • Use talk to work out problems and organise thinking and activities. • Explain how things work and why they might happen. • Continue, copy and create repeating patterns.
Y1	• uses simple observable features to compare 2 objects, materials or living things • **identifies and classifies** with support (decides how to sort and group objects) • with guidance, begins to notice changes (i.e. cause and effect), patterns and relationships (i.e. how one variable affects another) • with support talks about what they have found out and how they found it out • **with support, uses their observations and ideas to suggest answers to questions** • with models and talking frames, uses comparative language to describe changes, patterns and relationships • with support, suggests whether or not what happened was what they expected • with support, suggests different ways they could have done things
Y2	• uses simple observable features to compare up to 3 objects, materials, or living things • **identifies and classifies** (decides how to sort and group objects) • with some support, notices changes (i.e. cause and effect), patterns and relationships (i.e. how one variable affects another) • talks with more confidence about what they have found out and how they found it out • **uses their observations and ideas to suggest answers to questions** • uses comparative language to describe changes, patterns and relationships • suggests whether or not what happened was what they expected • suggests different ways they could have done things
Y3	• uses observable criteria to group, sort and classify in different ways (including simple keys and branching databases) • **with support, identifies differences, similarities or changes related to simple scientific ideas and processes** • with help, looks for changes, patterns, and relationships in their data • with help, **uses results to draw simple conclusions** and answers questions using appropriate level of knowledge and their own experiences • **with support, uses straightforward scientific evidence to answer questions or to support their findings** • uses relevant scientific language to discuss their ideas and communicate their findings using speaking frames and vocabulary lists to support. • with support, uses results to **suggest improvements** to what they have done • with support, **raises further questions** (e.g. arising from the data) • with support, **makes predictions for new values** within or beyond the data collected
Y4	• uses observable and other criteria to group, sort and classify in different ways (including simple keys and branching databases) • **identifies differences, similarities or changes related to simple scientific ideas and processes** • looks for changes, patterns, and relationships in their data • with growing independence, **uses results to draw simple conclusions** and answers questions using appropriate level of knowledge and their own experiences • **uses straightforward scientific evidence to answer questions or to support their findings** • uses relevant scientific language to discuss their ideas and communicate their findings • with developing independence, uses results to **suggest improvements** to what they have done • **raises further questions** (e.g. arising from the data) • **makes predictions for new values** within or beyond the data collected
Y5	• beginning to use and develop keys and other information to identify, classify and describe living things and materials • **with support, can identify conclusions, causal relationships and patterns** • with modelled support, draws valid conclusions, explains and interprets the results **(including the degree of trust)** using scientific knowledge and understanding (e.g. recognises limitations of data) • **beginning to identify scientific evidence that has been used to support or refute ideas** • increasingly uses relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas • with support, makes practical suggestions about how their working method could be improved (e.g. the effect of sample size on reliability) • beginning to use results to identify when further tests and observations might be needed • **beginning to use test results to make predictions and to set up further comparative and fair tests**
Y6	• uses and develops keys and other information to identify, classify and describe living things and materials • **identifies conclusions, causal relationships and patterns** • draws valid conclusions, explains and interprets the results **(including the degree of trust)** using scientific knowledge and understanding (e.g. recognises limitations of data) • **identifies scientific evidence that has been used to support or refute ideas** • uses relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas • makes practical suggestions about how their working method could be improved (e.g. the effect of sample size on reliability) • uses results to identify when further tests and observations might be needed • **uses test results to make predictions and to set up further comparative and fair tests**