# Science - Chemistry Long Term Plan.

**Science - Whole School Overview** Planning is progressive with learning revisited from Nursery up to Year 2 to ensure children have deeper understanding of a concept. Knowledge and understanding of Chemistry is progressively built upon across the school and through the academic year, gradually extending the breadth of content. Although science is taught weekly in discrete lessons, children have the opportunity to explore scientific concepts throughout the year in our indoor and outdoor provision. Learning is moved from short term to long term memory as the key concepts are revisited throughout the children's time at Uplands. Our school uses the objectives from The National Curriculum as a basis for planning Science alongside the Chris Quigley Essentials Curriculum

| | Nursery | Reception | Year 1 | Year 2 |
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| Term 1 | Explore materials with different properties<br>Explore textures, sounds smells and tastes.<br>Sensory play<br><br>Explore and notice the differences and change between materials<br>Cooking – making toast Making jelly<br>Melting chocolate | Explore and talk about materials with different properties<br>Foster curiosity and explore textures, sounds smells and tastes.<br>Develop language to discuss what they see, feel, smell and hear.<br><br>Observe and talk about the differences and change between materials<br>Change materials from one state to another.<br>Children to observe and make comment | Everyday materials<br>Distinguish between an object and the material<br>Identify and name a range of everyday materials including wood, plastic, glass, metal, water and rock.<br>Explore and experiment with a wide variety of materials including for example: brick, paper, fabrics, elastic, foil.<br><br>Working Scientifically<br>Chn to perform simple tests to explore materials | Everyday materials<br>Identify and compare the suitability of a variety of everyday materials<br><br>Working Scientifically<br>Observing closely and comparing<br>Identifying and classifying<br>Recording observations |
| Term 2 | Explore materials with different properties<br>Explore collections of materials with similar properties<br><br>Explore and notice the differences and change between materials<br>Cooking – Pancakes Making warm drinks<br>Play dough station Melting and freezing ice | Explore and talk about materials with different properties<br>Explore collections of materials with similar and/or different properties Talk and describe what they see<br><br>Notice and talk about the differences and change between materials<br>Change state of material | Everyday materials<br>Describe the simple physical properties of a variety of everyday materials on the basis of their simple physical properties<br><br>Compare and group together a variety of everyday materials on the basis of their simple physical properties . | Everyday materials:<br>Suitability of materials<br>Materials used for more than one thing<br>Different materials used for same thing<br><br>Observing closely and comparing<br>Identifying and classifying<br>Recording observations |
| Term 3 | Explore materials with different properties<br>Explore collections of materials with similar and/or different properties<br><br>Explore and notice the differences and change between materials<br>Rice crispy cakes<br>Making warm drinks<br>Play dough station<br>Melting and freezing ice | Explore and talk about materials with different properties<br>Talk about what they see – continue to develop and deepen children's language skills so they can talk about and discuss their findings<br>Explore and notice the differences and change between materials<br>Change state of material<br>Cooking Heating Freezing Cooling<br>Discuss using correct vocab | Everyday materials<br>Compare and group together a variety of everyday materials on the basis of their simple physical properties | Everyday materials:<br>Discuss how the shapes of solid objects can be changed by squashing, bending, twisting and stretching<br>Explain the properties of materials that make them suitable or unsuitable for particular purposes.<br>Consider unusual and creative uses for everyday materials.<br>Using their observations and ideas to suggest answers to questions<br>Perform simple tests |