



## JLPS Curriculum overview for : Science

Year group	Main theme/skills/knowledge/context		
R	<p><u>Specific area: The World</u> 30-50months</p> <ul style="list-style-type: none"> <li>Comments and asks questions about aspects of their familiar world such as the place where they live or the natural world.</li> <li>Can talk about some of the things they have observed such as plants, animals, natural and found objects.</li> <li>Developing an understanding of growth, decay and changes over time.</li> <li>Shows care and concern for living things and the environment.</li> </ul> <p>40-60months</p> <ul style="list-style-type: none"> <li>Looks closely at similarities, differences, patterns and change.</li> </ul> <p>Early Learning Goal *Children know about similarities and differences in relation to places, objects, materials and living things. *They talk about the features of their own immediate environment and how environments might vary from one another. *They make observations of animals and plants and explain why some things occur, and talk about changes.</p>		
1	<p>Biology: Plants, Animals and Humans Chemistry: Material and material classification Physics: seasons</p>		
	<p>Seasons</p> <p>Observe weather associated with changes of season Observe changing length of day over seasons</p>	<p>Materials</p> <p>Distinguish between objects &amp; materials Identify &amp; name common materials Describe simple properties of some materials Compare &amp; classify materials</p>	<p>Plants</p> <p>Animals incl humans Identify &amp; name basic plants Identify basic plant parts (roots, leaves, flowers, etc.) Identify, name &amp; compare common animals Identify &amp; name basic human body parts</p>
2	<p>Biology: Living and non living, plants, food chains, diet and exercise Chemistry: Materials Physics:</p>		
	<p>Animals including humans</p> <p>Importance of diet &amp; exercise for humans</p> <p>Materials</p> <p>Identify and compare uses of different materials Compare how things move on different surfaces</p>	<p>All living things and their habitats</p> <p>Differentiate living, dead and non-living Basic needs of animals &amp; offspring Simple food chains &amp; habitats</p>	<p>Plants</p> <p>Observe growing plants (from seeds/bulbs) Healthy plant requirements</p>
3	<p>Biology: Plants and Animals Chemistry: Fossilisation Physics: Light and Forces</p>		
	<p>Light and Shadows Sources of light; shadows &amp; reflections</p> <p>Fossilisation Simple understanding of fossilisation Volcanoes and rocks</p>	<p>Forces Simple forces, including magnetism</p> <p>Plants Plants, incl. parts, lifecycle and requirements for life</p>	<p>Animals incl humans (bones &amp; teeth)</p> <p>Animals: skeletons &amp; nutrition</p>

4	<b>Biology: Classification, digestive system and Food chains</b> <b>Chemistry: Material classification</b> <b>Physics: Electricity and Forces</b>		
	<b>Forces</b>  Explain that unsupported objects fall towards the Earth because of the force of gravity acting between the Earth and the falling object Identify the effects of air resistance, water resistance and friction, that act between moving surfaces Recognise that some mechanisms, including levers, pulleys and gears allow a smaller force to have a greater effect	<b>Animals incl humans</b>  Describe the simple functions of the basic parts of the digestive system in humans Identify the different types of teeth in humans and their simple functions Construct and interpret a variety of food chains  <b>Living Things and their Habitats</b>  Recognise that living things can be grouped in a variety of ways Explore and use classification keys  Recognise that environments can change and that this can sometimes pose dangers to living things	<b>Electricity</b>  Introduction to electricity: simple circuits, switches & conductors  <b>Materials</b>  Classify materials according to a variety of properties eg hardness, transparency, conductivity & response to magnets
5	<b>Biology: Healthy Living / Body Systems</b> <b>Chemistry: States of Matter / Changes of state</b> <b>Physics: Sound and Light</b>		
	<b>Human Body</b>  Healthy lifestyles, diet & exercise Circulatory & digestive systems  <b>Materials</b>  States of matter & the water cycle Understand mixtures & solutions & separation by filtering, sieving & evaporating Know about reversible changes; identify irreversible	<b>Sound</b>  Sound as vibrations, hearing, pitch & volume	<b>Light</b>  Light & Shadows; the eye
6	<b>Biology :Plants , Classification and Evolution</b> <b>Physics :Sun, Earth &amp; Moon and Electricity:</b> <b>Chemistry: Fossilisation, rocks and soils</b>		
	<b>Evolution and inheritance</b>  Evolution, inheritance, fossil record & adaptation Fossilisation Classification of rock types Soils from rocks & organic material  <b>Earth and space</b>  Understand location and interaction of Sun, Earth & Moon	<b>Electricity</b>  Electricity: changing circuits, using symbols	<b>All living things</b>  Life cycles of plants & animals (inc. mammal, insect, bird, amphibian) Describe changes as humans develop & mature Classification, including micro-organisms