

STEM Years Prep - 10

Year 1 Curriculum Physical Sciences, Science Inquiry Skills, Science as a Human endeavour

Outcome	Concept	Activity	Worksheets	Resources Required
<p>SU Year 1 Light and sound are produced by a range of sources and can be sensed in different ways</p> <p>SHE Science involves asking questions about, and describing changes in, objects and events.</p> <p>People use science in their daily lives</p> <p>SIS Respond to and pose questions, and make predictions about familiar objects and events</p> <p>Participate in different types of guided investigations to explore and answer questions</p> <p>Use informal measurements in the collection and recording of observations, with the assistance of digital technologies as appropriate</p> <p>Use a range of methods to sort information</p> <p>Through discussion, compare observations with predictions</p> <p>Compare observations with those of others</p> <p>Represent and communicate observations and ideas in a variety of way.</p>	<p>Year 1 Light is produced naturally (sun) and artificially (torch). Light and sound can come in different forms (colours and pitch) Sound is produced by vibrations (percussion, strings and wind) Light brightness can be changed using materials that absorb light (opaque or filters) Sound loudness can also be changed using materials (mufflers)</p> <p>Light and sound travel through things. Some objects are transparent to light. Many objects stop sound and light. Light and sound can be measured and sensed by our bodies (seeing and hearing)</p>	<p>Investigate ways to change sounds and light</p> <p>Investigate materials for conducting sound and light.</p> <p>Distinguish loudness of sound and brightness of light</p> <p>Quiet Area Project Make a silent, dark area for children who find it hard to sleep.</p>	<p><i>1.1 Changing light</i> <i>1.2 Changing Sound</i></p> <p><i>1.3 Stopping light</i> <i>1.4 Stopping sounds</i></p> <p><i>1.5P Sleeping Cubby Project</i></p>	<p>Small 2 volt torch Small whistle or other wind instrument Squares of coloured cellophane (red, blue and yellow) White card or paper Different size sound instruments Digital light and sound meter or sensor (optional) Small 2 volt torch Small whistle or other wind instrument Various materials (paper, cardboard, plastic (clear and opaque), cotton and synthetic fabrics)</p> <p>Construction materials Furniture. Digital light and sound meter or sensor (optional)</p>

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<p>Design Technology: 2.4 Explore the characteristics and properties of materials and components that are used to produce designed solutions</p> <p>2.7 Use materials, components, tools, equipment and techniques to safely make designed solutions</p> <p>Digital technology</p> <p>2.1 Identify and use digital systems (hardware and software components) for a purpose</p> <p>Maths</p> <p>Measure and compare the lengths and capacities of pairs of objects using uniform informal units</p> <p>Recognise and classify familiar two-dimensional shapes and three-dimensional objects using obvious features</p>	<p>Materials can absorb, transmit or reflect light</p> <p>Materials can absorb, transmit and reflect sound</p> <p>Make a silent, dark area in the classroom</p> <p>Measuring light brightness with a light meter</p> <p>Measuring sound loudness with a sound meter</p> <p>Measuring the distance across light circles with a ruler.</p> <p>Measuring distance from a whistle with steps</p> <p>Recognising light circles and change in size.</p> <p>Recognising shapes for cubbys</p>	<p>Changing and stopping light</p> <p>Changing and stopping sound</p> <p>Sleeping Cubby project</p>		<p>Light and sound level meters. (Instruments or an App for phones and tablets)</p>