

<b>Literacy and Numeracy Connections:</b>			
<p>EYLF Outcome 3: <i>Children become strong in their social and emotional wellbeing.</i>                      -Children experience and share personal success in learning and initiate opportunities for new learning in their home languages or Standard Australian English.                      EYLF Outcome 5: <i>Children interact verbally and non-verbally with others for a range of purposes.</i>                      -Children respond verbally to what they see, hear, touch and feel.                      -Children interact with others to explore ideas and concepts, clarify and challenge thinking, negotiate and share new understandings.                      -Children begin to understand how symbols and pattern systems work.                      -Children use symbols in play to represent and make meaning.                      -Children begin to sort, categorise, order and compare collections and events and attributes of objects and materials, in their social and natural worlds.                      -Children draw on their experiences in constructing meaning using symbols.</p>			
<b>SCIENCE AND TECHNOLOGY</b>	<b>Outcomes</b>	<b>How educators promote this learning</b>	<b>Key Questions</b>
	<p>EYLF Outcome 2: <i>Children are connected with and contribute to their world.</i>                      -Children use play to investigate, project and explore new ideas.                      -Children participate with others to solve problems and contribute to group outcomes.                      EYLF Outcome 4: <i>Children are confident and involved learners.</i>                      *Children develop dispositions for learning such as curiosity, cooperation, confidence, creativity, commitment, enthusiasm, persistence, imagination and reflexivity.                      *Children develop a range of skills and processes such as problem solving, inquiry, experimentation, hypothesising, researching and investigating.                      *Children transfer and adapt what they have learned from one context to another.                      *Children resource their own learning through connecting with people, place, technologies and natural and processed materials.</p>	<p>Place the Rainbow Peg Board in front of a light source and allow the children an opportunity for hands-on exploration and learning.</p> <p>Share information and provide children with access to resources such as those listed in the Literacy and Technology Links sections.</p> <p>Encourage the children to ask questions, hypothesise, try out their ideas and reflect on their learning.</p> <p>Provide a range of light sources including natural and artificial for children to experiment with.</p> <p>Recognising that children learn best when information is most relevant to them, place a large sheet of paper on the ground where the pegs are reflecting on to. Ask children to mark the paper where the reflections are at various times of the day to show them how shadows move.</p> <p>Show children you value their learning by documenting their work through such things as photos/videos, project books and observations that they can revisit and share with family and friends.</p> <p>Encourage children to try new ideas, to wonder and use their imagination and to take on challenges.</p> <p>Provide an environment where children can revisit their ideas and extend their skills and knowledge.</p>	<p>Provide the children with time to explore the Rainbow Peg Board allowing them to participate in and gain from learning through making connections and understand concepts.</p> <p>Provide a range of resources through which children can communicate their learning such as paper, pencils, clip boards and paint.</p> <p>Provide the children with an artificial light source such as a desk lamp or torch. What happens when the light is held closer/further away, higher/lower or at various angles?</p> <p>What happens if we block the light? Apply concrete examples and offer children the opportunity to consider where we see this in everyday life.</p> <p>What will happen when the pegs are reflected on to various surfaces? Provide mirrors, a water tray, various coloured and black paper.</p> <p>Encourage children to engage in increasingly sophisticated learning by prompting them to represent their interests e.g. recreate their art work with pegs or recreate the pattern of pegs in art, represent a flag or a symbol meaningful to them.</p>

	<b>Technology Links</b>	<b>Literacy Links</b>	<b>Vocabulary</b>
	<p>To extend learning through incorporating Information Technology the following links could be used:</p> <p>Peep and the Big Wide World: Night Light 8.51mins  <a href="http://www.youtube.com/watch?v=iFK20209oFs-">http://www.youtube.com/watch?v=iFK20209oFs-</a></p> <p>Science video for kids: What is Light Energy? 3.41mins  <a href="https://www.youtube.com/watch?v=LCEglvHFihM">https://www.youtube.com/watch?v=LCEglvHFihM</a></p> <p>Peep and the Big Wide World : Shadows 8.53 mins  <a href="http://www.peepandthebigwideworld.com/resources/exploration/shadows/">http://www.peepandthebigwideworld.com/resources/exploration/shadows/</a></p> <p>Shadow: The Dr Binocs Show 2.48 mins  <a href="https://www.youtube.com/watch?v=IOIGOT88Aqg">https://www.youtube.com/watch?v=IOIGOT88Aqg</a></p>	<p>To extend learning through incorporating literacy the following books could be used:</p> <p>Day Light, Night Light. By Franklyn Branley                      My Shadow. By Robert Louis Stevenson                      The Dark, Dark Night. By M. Christina Butler                      What Makes a Shadow. By Clyde Robert Bulla                      Whose Shadow is This? A look at animal shadows round, long and pointy. By Claire Berge                      What's that Shadow? A photo riddle book. By Christopher L. Harbo</p>	<p>Shadow, shape, long, short, energy, transparent, solid, dark, light, natural, artificial.</p>
<p><b>Further Extensions:</b></p> <ul style="list-style-type: none"> <li>*Extend on children's emerging fine motor skills by encouraging them to hold the pegs in increasingly challenging ways i.e. moving from palmer grasp to pincer grasp to isolating one finger to push the peg in with.</li> <li>*Encourage children to practice crossing their midline by asking them to use just one hand to place pegs on both sides of the board.</li> <li>*Further build on literacy and numeracy skills by placing cards with symbols such as shapes, musical notations, letters or numbers for the children to represent with the pegs.</li> <li>*Intentionally scaffold children's understanding of pattern systems and coding by providing examples for them to follow or encourage them to build their own. Include culturally constructed symbols systems.</li> <li>*Provide the children with torches, coloured cellophane squares and elastic bands. Ask them to predict what will happen when the colours are shone through the pegs on the board.</li> <li>*Transfer the children's new understanding of light and shadow to awareness of sun safety including discussions and concrete learning of natural (trees, clouds) and artificial (hats, shade cloth) sources of shadow or shade.</li> </ul>			