Event Fact Sheet

# National Science Week

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| **Date:** | 12th – 20th August 2023 |
| **Duration:** | Full Week |

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| **What is the special event?** | National Science Week is Australia's annual celebration of science and technology. Established in 1997, National Science Week provides an opportunity to acknowledge the contributions of Australian scientists to the world of knowledge and it aims to encourage an interest in science and children's fascination with the world we live in.<br><br>**This year's theme is Innovation: Powering Future Industries.** |

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| **Why is it important to Keiki Early Learning?** | Children are naturally inquisitive, full of questions about the world around them and the drive to investigate how things work. It follows, therefore, that we should take advantage of this innate curiosity and start channelling their enthusiasm for scientific discovery as early as possible.<br>Science is not only experiments and fancy equipment. Science is all around us in our everyday lives – mixing paint colours, watching our shadows on the ground, making music, observing the weather.<br><br>Learning about science in an early childhood setting provides children with opportunities to develop and practice many different skills and attributes. These include communication skills, collaborative skills, team working and perseverance, as well as analytical, reasoning and problem-solving skills. |

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| **What are our expectations?** | Have fun! Listen to the children's questions and investigate them. Conduct experiments. Learn together.<br>What are the steps?<br>1. Investigate<br>2. Explore<br>3. Create and test hypotheses<br>4. Construct and deconstruct ideas<br>5. Engage in the world around us<br><br>You do not need to focus on the theme. Looking at and encouraging wonder in anything to do with science is a win. |

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| **Activity Ideas** | Here are some ideas to get you started. You may wish to use some of these or create your own. Take input from educators, children and families and choose activities that have meaning for your service.<br><br>All STEM-related activities are great for investigating how things work.<br>• Create an inquiry question, for example "Which falls faster – a feather or a ball?". Record the children's ideas, test, ask questions and then follow the inquisitiveness of the children.<br>• Explore cause and effect<br><br>Activities that include giving, receiving or creating directions provide a foundational understanding of how technology works.<br>• Play follow the leader<br>• Follow a recipe and cook something delicious<br>• Follow instructions to make playdough, coloured sand, volcanoes, lava lamps, origami, or pom poms |

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| | • Play sequencing games where children have to follow instructions or give instructions. For example, challenge the children to give you step by step instructions on how to get from one place to another, or how to draw a person.<br>• Book an Incursion Kids Science Activities \| Einsteins Australia<br><br>There are some ideas in this year's teacher booklet, which may be especially useful for OSHC services<br>https://www.scienceweek.net.au/wp-content/uploads/2023/06/Innovation_Resource_Book_Web.pdf<br>There are some ideas in this general Science Week publication for Early Childhood<br>https://www.scienceweek.net.au/wp-content/uploads/2020/03/Science_Week_Early_Childhood_ideas_WEB.pdf |

## LINKING THIS EVENT TO RESOURCES AND DATA

To support educators, educational leaders and early childhood teachers we link each event with important and valuable resources that support and inform our decision making at Keiki.

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| **How can we link this event to our Philosophy?** | ***Core Value: Our Community***<br>We believe the quality of each child's environment influences how they grow and develop and acknowledge families as children's first and most influential educators.<br>By creating an inclusive environment our curriculum is enriched and each child's sense of belonging and development is enhanced, helping to create a strong foundation for lifelong learning.<br>***Core Value: The Whole Child***<br>We believe every child is born full of potential with an innate desire to learn and explore their world.<br>Our highly experienced teams provide beautiful, thoughtful environments where children are invited and encouraged to make their own choices, to explore the arts, enjoy physical play, practice mindfulness and develop meaningful, positive relationships with others.<br>We understand that every child learns at their own pace, so we facilitate children to direct their own learning with a focus on their particular interests, theories, ideas and needs. We follow the individual 'meander' of the child in their learning journey, observing and sharing the joys of wonder and discovery.<br>***Core Value: Earth to Sky***<br>Free flow play and learning environments provide children with open access to beautiful outdoor garden areas and natural play resources.<br>We encourage children to love and appreciate their world by being part of the environment and connecting with nature in their own way. Our role is to encourage children's wonder and investigation of nature, modelling protection and care of the environment through conversations, projects and taking real action. |

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| **How does this event link to the AEDC Data?** | ***Physical Health and Wellbeing***<br>**Area** / **At Risk** / **Vulnerable**<br>Stirling / 8.9% / 8.4%<br>Joondalup / 8.1% / 5.4%<br>Wanneroo / 11.9% / 8.2%<br>This event provides an opportunity for children to use their fine and gross motor skills.<br>***Social Competence***<br>**Area** / **At Risk** / **Vulnerable**<br>Stirling / 12.8% / 6%<br>Joondalup / 9.6% / 4.4%<br>Wanneroo / 13.5% / 7.5%<br>This event is an opportunity to facilitate group experiences. Science education activities provide children with opportunities to develop and practice communication skills, collaborative skills, team working and perseverance, as well as analytical, reasoning and problem-solving skills.<br>***Emotional Maturity*** |

| Area | At Risk | Vulnerable |
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| Stirling | 13.3% | 6.7% |
| Joondalup | 10.7% | 4.6% |
| Wanneroo | 14.1% | 7.2% |

This is a perfect time to role model emotions and reactions to different results of science experiences. Name the emotions and how it feels.

***Language and Cognitive Skills***

| Area | At Risk | Vulnerable |
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| Stirling | 9.3% | 5.6% |
| Joondalup | 6.9% | 3.1% |
| Wanneroo | 11.8% | 6.6% |

Encourage them to extend and embed their learning through related literacy, numeracy and creative activities.

***Communication and General Knowledge***

| Area | At Risk | Vulnerable |
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| Stirling | 11.4% | 6.8% |
| Joondalup | 9.6% | 3.5% |
| Wanneroo | 13.8% | 7.9% |

Science education activities provide children with opportunities to develop and practice many different skills and attributes. These include communication skills, collaborative skills, team working and perseverance, as well as analytical, reasoning and problem-solving skills. Help them expand their vocabulary by using scientific terms that are appropriate for their age group.

**How does this link to the ECA Code of Ethics?**

In relation to children, I will:

- Create and maintain safe, healthy, inclusive environments that support children's agency and enhance their learning
- Provide a meaningful curriculum to enrich children's learning, balancing child and educator initiated experiences
- Collaborate with children as global citizens in learning about our shared responsibilities to the environment and humanity
- Respect children as capable learners by including their perspectives in teaching, learning and assessing

**How does this event link to the UN Rights of the Child?**

Articles:
12. Children have the right to say what they think should happen when adults are making decisions that affect them and to have their opinions taken into account.
24. Children have the right to good quality health care, clean water, nutritious food and a clean environment so they will stay healthy. Richer countries should help poorer countries achieve this.

Please talk to the children about the Rights of the Child. Do you have it displayed in your service for the children?

**How can we link this event to Aboriginal and Torres Strait Islander culture?**

Aboriginal and Torres Strait Islander Peoples have long-standing scientific knowledge, which has been transmitted from one generation to the next. They have developed knowledge about the world through observation, using all the senses; through prediction and hypothesis; through testing (trial and error); and through making generalisations within specific contexts. Aboriginal and Torres Strait Islander people have particular ways of knowing the world through a strong connection to country and spirituality.

You can link this traditional knowledge to your science learning by

- ensuring respect for nature and using natural resources
- investigating ways in which nature provides for us and what technology already exists in nature, for example bees pollinating plants
- participating in activities that use senses to make observations.