







Inspiring ideas for National Science Week **EARLY CHILDHOOD** ACTIVITIES

AN ANNUAL NATIONAL WEEK OF SCIENCE

National Science Week is Australia's annual celebration of science and technology, running each year in August. We've put together this pack of scienceinspired ideas, instructions and activities to help early childhood educators, carers and organisations plan an exciting and engaging week of events.

This celebration of science is an opportunity to acknowledge the contributions of Australian scientists to the world of knowledge. It also aims to encourage a wider interest in science pursuits, and to encourage young people to be fascinated by the world.

National Science Week is supported by the Australian Government in a variety of ways, including through the \$500 000 National Science Week Grants Program. Other partners include CSIRO, the ABC and the Australian Science Teachers Association (ASTA).

CORNUCOPIA OF EVENTS

Over one million people participate in more than 1000 events across the country. Each year these activities – from large public events to small private ones – stimulate participation from children and adults, and from science professionals to science novices.

Events are held by universities and research institutions. museums and science centres. libraries and schools. These, as well as pre-schools, early learning centres, playgroups, childcare providers, toy libraries and similar organisations, play an important role in educating and inspiring the early childhood age group: 75 per cent of brain development occurs during the first five years of life. Children explore their world, ask lots of questions, and experiment to understand everything around them. These informal and fun learning activities nurture imagination and introduce the processes of observation, prediction, testing and refining used by scientists.

Register your events on the National Science Week website at https://www. scienceweek.net.au/ event-holder-registration



SCIENCE FOR YOUNG CHILDREN

This pack aims to support formal and informal early childhood centres and groups that haven't participated in National Science Week before. Some early childhood education providers are already engaged in National Science Week activities, so we hope this pack provides further inspiration and encouragement to stay involved.

The following pages include a list of event and activity ideas, stories of successful events run previously, stepby-step science activities that are easy to do with an early childhood agegroup, helpful tips, and suggestions on where to find inspiration and ideas. They can be run during National Science Week, or any time of the year.

It doesn't matter if you're running a public event or a closed private activity, please show how you're part of the bigger picture by registering your endeavour on the National Science Week website. This will give a snapshot of how early childhood centres and groups are participating each year, and how National Science Week can provide support.



Natural Engagement

Research shows that children naturally engage with scientific concepts and processes in their play and as they explore their world. Early childhood educators can recognise, celebrate and build on these moments. The Early Years Learning Framework (EYLF) suggests educators draw on a 'repertoire of pedagogic practices', including learning through play, creating learning environments that positively impact learning, and through intentional teaching. The early childhood activities and ideas presented in this pack are ways for you to consider engaging in National Science Week through each of these pedagogic approaches, adopting and revising as appropriate for the children in your context. *Dr Kate Highfield, Early Childhood Australia*

INSPIRING IDEAS

- Invite parents who are scientists or who work in science-related fields to share their knowledge with children. Encourage the parents to bring along safe objects for the children to look at and hold, or pictures of their work.
- Have a science dress up day, providing families with ideas related to the children's current interests. For example, dressing as an animal that comes from an egg (butterfly, spider, bird, dinosaur, fish); or wearing shapes or colours related to the weather (rainbows, clouds, rain, sunlight).
- Invite children to do a simple science activity at home with their families. For example, mix vinegar and sodium bicarbonate from the kitchen cupboard, or look at the phases of the Moon.
- Decorate your space with sciencerelated images and invite children to add colour to printouts of the National Science Week colouring sheets: http://bit.ly/sciwkcolour
- Explore objects and hands-on activities related to Indigenous science and technology, such as animal tracks, the seasons, and fish traps. The IndigiSTEM Activities Workbook and IndigiSTEM Educator Notes include 20 STEM activities that incorporate Indigenous perspectives: https://www. rileycallieresources.com.au
- Invite families to assist their children to do a nature scavenger hunt, similar to this activity organised by Sydney Creative Play: https://bit.ly/2Dsdi34
- · Include science-related books in





daily reading and book displays. Seek advice from the Children's Librarian at a local library or look at the Early Learning STEM Australia (ELSA) booklist for ideas: https://bit.ly/2W076q9

- Book an incursion to present a hands-on workshop. Search online or find providers listed on the STARPortal: https:// starportal.edu.au
- Book a Museum in a Box, with real museum specimens, casts, artefacts, dioramas, images, DVDs, CDs, books and resources from the Australian Museum: https:// australianmuseum.net.au/ learn/teachers/museum-box
- Run a Little Bang Discovery Club, or collaborate with a local library: https://bit.ly/2W06TTV
- Organise science-related professional development for your educators to inspire them to incorporate science into their programming during National Science Week and throughout the year, for example: https:// littlescientists.org.au
- Apply for a grant of up to \$500 from the Australia Science Teachers Association in Term 1 to help fund your National Science Week event (preschools and schools only): https://asta.edu.au/ programs/natscienceweek
- If you're running an event for the general public or other audience, set up a corner, activity or experiment station for early learners; this could include colouring-in the Science Week characters, or simple science-related activities such as sorting objects by shape, colour, number of legs, etc.

YOU'RE NOT ALONE

There are resources available on the National Science Week website (https://www. scienceweek.net.au), including:

- · instructions on how to run an event
- logos and characters to add to fliers, posters and advertisements
- a free teaching resource book full of ideas and activities
- a free workplace or school science quiz (Brain Break, see https://www. scienceweek.net.au/brainbreak), including science activity ideas for preschool-aged children
- events and other activities planned for National Science Week
- information on grants that are available annually; national large grants (up to \$20 000, open October for the following year) and smaller rounds of grants from states and territories (various, open around February to May depending on jurisdiction).

Your local Inspiring Australia manager or National Science Week coordinating committee can help with advice on becoming involved in science activities, provide a list of sciencerelated books, and connect you with science experts. See https://www. industry.gov.au/InspiringAustralia and https://www.scienceweek. net.au/contacts for a list of contacts in your state or territory.



THE IMPORTANCE OF PLANTS

Children aged from 4 to 5 at Rozelle Public School Preschool grew succulents from small cuttings to learn how plants grow.

The students brought in empty jars and lids from home to put the plants in. They chose from a range of succulents, such as the jade plant. They put one cutting into a jar with soil, and another into a jar with water so they could see the roots grow. They watered their plant each time they came to preschool and observed the changes in growth. More than 40 parents and grandparents came in to help with putting the plants into the jars, making it a big community event.

'The children really liked that they had a project to do that was their own, and that it was ongoing. They also got to take their plant home at the end of the year,' said Sepfora Amanatiadis, a teacher at the school. 'They also participated in other nature-focused activities. There was an etymological dig in the garden where children could find, observe and identify centipedes, slaters and other creatures... kids love bugs,' said Sepfora. 'We also had an archaeological dig where the children had to uncover buried dinosaur bones in the sand pit – they then had to identify them from the various books and charts about dinosaurs. They learned to do the investigating themselves!'

'The succulent activity was the most exciting for them because the parents got their hands dirty,' Sepfora reflected.

Making copies

Growing a new plant from a cutting of a piece of stem is a form of ancient cloning – the new plant that grows will be a genetic replica. Some plants can even be grown from a cutting of a leaf.

A GARDEN OF THE SENSES

A garden that was themed around the five senses helped pre-schoolers connect to nature at the Rockingham Early Learning & Child Care Centre.

The children looked at the shapes of leaves, listened to wind moving through the plants and wind chimes, smelled the crushed leaves, tasted the herbs from the garden, and touched the different textures of leaves and the wriggling worms.

'I wanted them to appreciate the importance of feeling the wind on our skin, the sun on our faces, see the beauty of the plants and feel the different textures of nature,' said Marina Roberts, Early Childhood Teacher.

The pre-schoolers made plant beds out of painted four-wheel drive tyres. There was a range of sensory herbs that the children could smell, such as pineapple sage and lemon verbena. They also planted a range of native plants to encourage birds and bugs into the garden.





'As a not-for-profit, one of our goals was linking with the local community and this project was great for that. The community includes our families, which is where some of our plants came from. Local businesses were also really generous and helped supply the resources. We didn't pay for paint, or tyres, and the delivery was free,' Marina explained.

'It's a work in progress and an ongoing activity,' said Marina. 'We did an activity in National Science Week and it's now become a part of our daily interaction.'

Tasting with your nose

The taste of food is a combination of signals from our taste buds as well as our sense of smell. If you hold your nose while you eat, you'll notice that food doesn't taste quite the same.

More info: https://www. rockinghamearlylearning.org.au

GERMS THAT GLOW

Young children learned about how bacteria can transfer from person to person, by using glowing fake germs at the Pelican Pre-School & Long Day Care in Shellharbour.

'When we tell the kids, 'If you touch someone, your germs will go onto them,' they say, 'But our hands aren't dirty!' The experiment helped us to explain to them that it's the microorganisms that you can't see that can stay on your hands,' said Rebecca Eshman, Centre Director of the Pelican Pre-School & Long Day Care.

The school bought a science experiment kit to demonstrate the importance of hand washing and hygiene. The children applied clear-drying cream from the kit that contained small plastic 'germs' that can be transferred by touch. They then shook hands to test how easily germs can go from one person to another, and also put some on toys to see how germs are transferred through play. They then went into the dark storeroom with a UV light, which lit up the 'germs' bright blue and revealed how far they had spread.





'The kids really loved the novelty of going into the storeroom in the dark to see the glowing 'germs',' said Rebecca.

'We were surprised ourselves how far the 'germs' could go. They're not just passed on to one child and then gone: they keep going on.'

She said it was a really great educational tool for the importance of washing hands, especially when it comes to cold and flu season. Families were invited along to participate as well. Visitors are meant to sanitise their hands at the pre-school but not everyone does this, so the activity was a learning exercise for parents as well.

Tiny living things

Germs are very small living things. There are four kinds: bacteria, viruses, fungi and protozoa. Even though they are smaller than the eye can see, they can cause sickness in people when they start to multiply.

More information: https:// www.pelicanpreschool.nsw. edu.au/index.php/homepage

FAMILY SCIENTISTS

Family members from different science-related professions visited Margaret Ives Community Children's Centre (MICCC), Norwood, to show children from 2 to 5 years old what they do for a job.

'We had an overwhelming response from families when we invited them to visit. We had multiple people visiting each day during Science Week and even some before and after Science Week too,' said Olivia Lauder, an Educational Leader at MICCC.

They had a diverse range of sciencerelated professionals come into the centre. A paramedic opened up their ambulance, let children explore it and sit in the driver's seat, and put the siren on; a medical researcher brought in petri dishes to incubate bacteria; a geologist brought in different rocks and fossils for the children to touch; a radiographer X-rayed toys to show what they looked like on the inside; an audiologist played different sounds and talked about hearing; and a surgeon even brought in a pig's trotter and showed them how to suture a cut.

The family members wore their work uniforms and brought in as much equipment as they could – anything visual to help demonstrate their job. 'The children really enjoyed anything hands-on. They had a real connection to the people visiting, which increased interest,' said Olivia.

The children were engaged with the talks, and it prompted them to question what the world around them was made of. 'One child who was curious about a vomiting bug wanted to research online what vomiting germs look like under a microscope.'

'The children also talked about Science Week a lot at home,' explained Olivia. 'There was a lot of excitement about each day and the connections between the children, science, the community and their home were strengthened. Children explored their curiosity and new knowledge in their play and were walking around in doctors' outfits with stethoscopes for weeks.'

Scientists are curious

The scientific method is about asking questions and then doing experiments to find the answer. One of the most important parts of science is to make a hypothesis – a possible explanation of what might be happening.

More information: https:// www.margaretives.com.au





SCIENCE AND SCONES

The Australian Institute of Early Childhood Studies hosted a STEM morning tea for children aged 3 to 5 and their families in Shailer Park. While nibbling on jam and scones, adults and children alike could move between different science activities.

'We invited the local schools and other learning centres to come in and join us for the morning. We had a big STEM celebration with children and families!' said Marice Watts, Head Trainer at The Australian Institute of Early Childhood Studies.

Making paper aeroplanes, discovering what would float and what would sink, and crafting bee houses were just some of the activities on offer.

For the build-a-beehive activity, the organisers gave the children 'provocation images' of what beehives can look like, plus a lot of recycled cardboard materials. 'The children folded, rolled, padded down or combined the materials to form a shape. This made little houses for bees, with little grooves and gaps for the bees to crawl into,' explained Marice.

It was a day of designing and redesigning: children also competed to get their paper planes to go the furthest. 'We would try putting a weight on them to see if that made them go further, or used long and



then short pieces of paper. Although we had instructions for them, we allowed them to do it however they wanted to,' said Marice.

'It was great watching children gravitate to what they were interested in, and explore and experiment without having to have a particular outcome,' she said. 'They would trial and discover things for themselves.'

How things fly

There are four 'aerodynamic' forces that enable paper (and real) aeroplanes to fly. 'Thrust' is the forward motion, when you first throw the plane. 'Lift' is the force under the wings that lifts the plane up. 'Gravity' is what pulls the plane down. 'Drag', caused by friction with the air, is what slows the plane down.

More info: https://www.aiecs.com.au

MAGNETIC MARVELS

Families marvelled at magnets during an event held by the Goldfields Regional Toy Library and Wanslea Early Learning and Development in Kalgoorlie. The local community hall was filled with 12 hands-on activities aimed at under 10s.

Children were creative with 'magnetic paintings', using a magnet to make metal bits and pieces dance across the surface of a wet painting. They created interesting patterns using paperclips and steel wool.

'We got a lot of ideas from the internet but then rebuilt them ourselves using different pieces of equipment,' said Michelle Hassel, President of the Goldfields Regional Toy Library.

Children also made their own magnetic slime from glue and iron filings, put magnets on toy cars so they could be pushed and pulled along a race-track, and created a game of 'magnetic fishing'.

The organisers bought magnetic toys in bulk for the day that could then be put into the library's catalogue for use in future. 'Children could build really big intricate structures using the magnetic tiles we bought; they really enjoyed that freedom,' explained Michelle. 'Typically, parents can only afford one or two kits, which is about 40 pieces. When you've got 400 pieces, the sky's the limit! Those sets have been borrowed again and again, over twenty times in the past year.'





Michelle said the favourite activity was the simplest to make. Children stuck googly eyes onto magnetic wands, which they dipped into a bowl of cut-up pipe cleaners to make crazy hairdos. 'Kids would just sit and dip them for ages. It brought really easy joy to everybody,' she said.



Earth is a big magnet

The outer core of the Earth is made of molten iron, which is constantly moving. This movement creates a magnetic force that makes compasses point north.

More information: https:// www.facebook.com/ GoldfieldsRegionalToyLibrary

COLOURFUL CHEMISTRY

Explore density, colour and the properties of liquids

ACTIVITY IDEA: Fireworks in a jar

TYPE OF ACTIVITY: Small group demonstration

MATERIALS: Tall glass (or glass jar), water, small measuring cup, vegetable oil, food colouring (a few different colours) in dropper bottles, fork

METHOD:

- Half-fill the tall glass with water.
- Pour about 50 mL of vegetable oil into the measuring cup.
- Add food colouring to the oil (three drops of each colour).
- Mix the oil and food colouring with the fork to break up the drops of food colouring to make smaller drops.
- Slowly and carefully pour the vegetable oil and food colouring from the jug into the glass of water and notice how the oil floats to the top.
- Watch as the drops of food colouring slowly sink through the oil. As each drop reaches the water, you will see a burst of colour in the water. Invite children to describe what is happening and to explain why they think it is happening.





What's happening?

Oil and water do not mix well and oil floats on water because it is less dense. The food colouring sinks through the oil towards the water because it is made of pigment mixed with water. When the colour pigment reaches the water, it creates streamers that look like fireworks.

Density is a measure of the amount of mass in a given volume. It is a difficult concept to introduce to young children, but exposing children to activities related to density provides them with experiences that will help them build knowledge and understanding. Knowing 'what' happens will give a child the experience they need to learn 'why' these things happen as they grow older and move into higher levels of education.



More colourful chemistry ideas

- Use plastic pipettes to transfer coloured liquids between containers, exploring the properties of fluids and developing fine motor skills. Cheap pipettes are available from discount stores and craft shops.
- Draw on a strip of paper towel using water-soluble markers and stand the strip of paper in a cup of water. Watch as the colours move up the paper. For darker colours, the different pigments in the ink will separate as they move up the paper.
- Create a role play chemistry laboratory with test tubes, beakers and flasks made from recycled materials.
- Research traditional paints used in Indigenous art and how the different colours are created from natural materials.
- For 0 to 2 year olds, fill small plastic bottles with various liquids such as different amounts of coloured water, vegetable oil and water, and make glitter bottles using warm water, gum glue and glitter. Close the bottles tightly and secure with duct tape.

GROOVY GRAVITY

Explore the force that makes things fall and how air resistance slows them down

ACTIVITY IDEA: Fastest fall

TYPE OF ACTIVITY: Guided discovery

MATERIALS: Sheets of paper, balls of various sizes, feathers, toy hammer

METHOD:

- Hold two identical sheets of paper, flat on outstretched hands, and ask the children to guess which piece of paper will hit the ground first if they are dropped. Drop the sheets of paper at the same time and watch as they drift to the ground.
- Repeat Step 1, but this time, scrunch up one of the sheets of paper into a ball. Drop the two pieces of paper at the same time and ask the children to describe what happens and why.
- Ask the children to fan their cheeks with their hands, and discuss how air cannot be seen, but it can be felt. This may lead to a discussion about how air can make things move, such as leaves moving in the wind, a kite flying, or clouds moving across the sky.
- Invite the children to test how fast other objects fall, such as balls of various sizes and weights, feathers, and sheets of paper of various sizes and shapes.

- Ask the children to predict whether a toy hammer or a feather will hit the ground first before dropping them at the same time. The toy hammer falls quickly, while the feather floats slowly to the ground due to air resistance.
- What would happen if the hammer and feather were dropped on the Moon where there is no air? Watch the video of Apollo 15 astronaut David Scott dropping a hammer and a feather on the Moon in 1971 (http://apod.nasa. gov/apod/ap111101.html).
- What if there was a place on Earth that did not have any air? Watch the video of a bowling ball and feather falling in a vacuum chamber (https://youtu.be/E43-CfukEgs
 – skip to 01:25 for the objects falling in air, and 02:50 for no air).

What's happening?

The force of gravity pulls objects towards the Earth and air resistance slows down falling objects. The shape of an object affects how much air it has to push through. Heavier objects push against air with more force than lighter objects, so heavier objects tend to fall faster than lighter objects of the same size and shape. On the Moon, or in a vacuum chamber, where there is no air, objects fall to the ground at the same rate, regardless of their size, shape or weight. A person can jump higher on the Moon than on Earth because the force of gravity is not as strong on the Moon.

More groovy gravity ideas

- Make a hole in the side of a plastic cup, close to the bottom. Fill the cup with water and observe how the water pours out through the hole. Cover the hole with a finger and refill the cup with water. Ask the children to predict what will happen if the cup of water is dropped from high above the ground. Drop the cup and notice that the water falls with the cup and does not pour out of the hole in the side of the cup while it is falling.
- Play with paper aeroplanes and 'Roto-copters' (mini paper helicopters: see https://www. exploratorium.edu/science_ explorer/roto-copter.html) to explore air resistance and flight.
- Research boomerangs using books and videos and make cardboard boomerangs that can fly (https://www.abc.net. au/science/experimentals/ experiments/episode10_2.htm).
- For 0 to 2 year olds, provide children with ramps, toy cars and trucks, and balls of various sizes and weights to roll down the ramps. Build block towers and knock them down.





SUPER SPACE SCIENCE

Explore the Moon, the Solar System, and beyond!

ACTIVITY IDEA: Crazy craters

TYPE OF ACTIVITY: Guided discovery and free play

MATERIALS: Large baking tray, plain flour to cover the tray to about 2 cm deep, powdered drinking chocolate (e.g. cocoa), fine strainer or sieve, small and large marbles or small balls

METHOD:

NOTE: This is a messy activity and is best done outside, sheltered from wind.

- Spread the plain flour evenly over the baking tray to about 2 cm deep.
- Use the strainer to sprinkle a fine layer of powdered chocolate over the flour.
- Invite the children to take turns to select a marble or ball, choose how high to hold it above the tray, and drop it straight down onto the tray.

- Ask the children to describe the craters made by the marbles and balls of different sizes held from different heights. Compare the results to images of Moon craters, either in books or downloaded from the NASA website (https://moon.nasa.gov).
- During free play in a sandpit, provide the children with balls of different shapes and sizes and encourage them to create moon craters by dropping the balls on the sand.

HINT: Recycle the flour and powdered chocolate by using it to make play dough.

What's happening?

Craters form when asteroids hit the surface of a moon or planet. Asteroids are made of rock and the shape of a crater depends on the size and speed of the asteroid that created it. The Earth has been hit by a lot of asteroids, but most of the craters have been worn away by wind, rain and oceans. Unlike Earth, Mercury has a lot of visible craters because it doesn't have an atmosphere or oceans to wear them away.

More super space science ideas

- Create a Space display and role play area with astronomical images, books and toys related to the Moon, planets, stars, and space travel.
- Make planets from craft materials, using different colours and textures to represent the real planets. The NASA website has high quality images and detailed information about all of the planets (https:// solarsystem.nasa.gov).
- Play with straw rockets (https:// www.jpl.nasa.gov/edu/teach/ activity/straw-rocket) and stomp rockets (https://www.jpl.nasa.gov/ edu/teach/activity/stomp-rockets) and read books about space travel.
- Encourage families to look at the stars with their children at home and use free mobile apps such as 'Star Chart' or 'SkyView Free' to locate planets and constellations in the night sky.
- Explore Indigenous astronomy, such as the 'Emu in the Sky', which is made up of the dark spaces between the stars of the Milky Way (http://www. aboriginalastronomy.com.au).
- For 0 to 2 year olds, use cushions to make a Moon crater and add cars and trucks to represent moon buggies to push around blocks or pretend rocks.







BEAUTIFUL BIOLOGY

Explore camouflage, collecting, and categorising ACTIVITY IDEA: Camouflage race TYPE OF ACTIVITY: Small group game

MATERIALS: Green, white, brown, black and red cardboard shapes (small squares, circles or triangles, or plastic counters), approximately 10 of each colour

METHOD:

- Explain to the children that when you say 'Go!' their challenge is to quickly collect the cardboard shapes from the ground before you say, 'Stop!'
- Scatter the cardboard shapes over an open area of grass and say 'Go!'
- When about half of the shapes have been found, say 'Stop!'
- Ask the children to tell you how many shapes they collected of each colour and discuss why they may have collected more of one colour than the other.
- Try repeating the activity on different coloured surfaces, such as brown mulch, black soft fall playground surface, and white concrete.
- Look at images of animal camouflage in books or download



images from the internet (https:// listverse.com/2013/05/08/10-trulyamazing-animal-camouflages).

 Provide a range of colourful dress up clothes and invite children to camouflage themselves to blend in with different backgrounds (e.g. wear a red dress to sit on a red chair).

What's happening?

The colour and texture of an animal can help it blend into its surroundings. This is important for animals to hide from predators that might eat them, and for predators to sneak up on their prey! However, some animals use the opposite strategy to survive: their bodies are brightly coloured and they stand out to warn other animals to stay away because they are poisonous (e.g. corroboree frogs).

More Beautiful Biology ideas

- Provide children with small toy animals and invite them to find or make places for the animals to hide by matching each animal's colour to its surroundings.
- Research stick insects and adopt one as a pet (https:// australianmuseum.net.au/learn/ animals/insects/leaf-and-stickinsects-order-phasmatodea).
- Create a 'found on the ground' treasure hunt by asking children to make a collection of objects that have fallen to the ground, such as dead leaves, sticks, and tree seeds, and then discuss the origin of each object. To hold their collections, provide each child with a basket or bag, or make boards with wooden pegs glued to one side (pictured).
- Provide children with magnifying glasses and a variety of natural objects, such as shells, seeds, leaves and rocks. Include tongs or jumbo-sized tweezers and a sorting tray with compartments to allow children to decide how to sort and categorise the objects.
- Learn the Indigenous names for some local plants and animals and find examples of bush foods, such as wattleseed, lemon myrtle or finger lime. Australian Native Food and Botanicals has detailed fact sheets on a range of bush foods (https://anfab.org.au).
- For 0 to 2 year olds, fill a treasure basket with natural objects that will not easily break into smaller pieces, such as large pebbles, shells, and banksia cones.



TOP TIPS

- Start planning early in the year to be ready for National Science Week in August, especially if you want to apply for a grant or book an incursion as providers book out fast!
- Sign up for the National Science Week newsletter to receive updates about grant rounds and other opportunities (https://www.scienceweek. net.au/subscription).
- Register your event on the National Science Week website (https:// www.scienceweek.net.au).
- Find guides, ideas and other resources for event holders on the National Science Week website (https://www.scienceweek.net.au/ get-involved/organise-an-event).
- Make your event waste free or

low waste by using recycled or reusable materials.

- Aim for open ended experiences, and embrace the mess: be prepared for the kids to take the activity somewhere unexpected as they follow their interest.
- Allocate tasks to share the load! For example, each staff member can be responsible for running one handson activity, setting up a display, or creating an area for discovery play.
- Do a risk assessment for each activity and be sure to consider: allergies (e.g. nuts, latex, egg), the strength of materials and whether they might break if dropped by a young child, small parts that can be a choking hazard for children under the age of 3, and good hygiene practices such as hand washing and regular cleaning of equipment.



RESOURCES

There are lots of online resources that can help. Here are some to get you started.

- Search for science resources from Early Childhood Australia: https://www. earlychildhoodaustralia.org.au
- Look for discovery centres, including science centres, zoos, botanic gardens and museums in your area for activity ideas and excursions: https://www.scienceweek. net.au/discovery-centres
- Watch preschool science activities in action in Questacon Science Time videos: https://www.youtube.com/ playlist?list=PLDB39 B71C547E6E83
- Check out activities from Children's Discovery Museum in the Little Bang Book of Discovery: https:// childrensdiscovery.org.au

Contact us

Follow National Science Week on Facebook (https://www.facebook. com/nationalscienceweek) and Twitter (@Aus_ScienceWeek) and tell us what you're doing by tagging #scienceweek.

For general information about National Science Week,
contact the National Science Week Team at:Emailscienceweek@industry.gov.auPhone02 6270 2880PostQuestacon, PO Box 5322, Kingston ACT 2604

Register your events on the National Science Week website at https://www.scienceweek.net.au/event-holder-registration

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