

What can I learn through Integrated curriculum play explorations?



SOUND

- I can see sound waves move water.
- I can feel it through the speakers.
- I can hear it.
- I can see the picture of the anatomy of an ear.
- I can explore various music instruments and their sounds.
- I can work out sound differentials in the rocket ship.

What can I learn through play explorations?



AIR

- I can play with air thrust from the Bernoulli Blower.
- I can shoot balls and scarves from the Air Blower tubes.
- I can explore the forces of air in the vortex tubes.
- I can explore air flow at the air canon.
- I can play with air bubbles in various density liquids in tubes.
- I can play with bubbles in the little spa bath.
- I can watch air bubbles in the fish tank.

What can I learn through play explorations?



FORCES

- I can have races with cars on the friction motion tracks.
- I can have races with various weight distribution balls, rollers and tins on the ball run.
- I can throw balls into a ball run.
- I can watch vortexes in the air tubes.
- I can watch a pendulum create patterns.
- I can play with the Von Graff machine and watch the effects of static electricity.
- I can build a circuit with batteries.

What can I learn through play explorations?



LIGHT

- I can distinguish between darkness and light and fluorescent light.
- I can build structures that reflect light.
- I understand that convex and convergent mirrors distorts reflections of light and it has an effect on the image that I see.
- I can play with coloured objects and see its effect on light reflections and shadows.
- I can play with the coloured sphere and understand that it can change colours.
- I can play with flash lights in a dark space to make light.
- I build a solar vehicle and make it move in sun light.

What can I learn through play explorations?



CHEMISTRY

- I can sit at a table, focus on the teacher and follow their instructions.
- I can work carefully and safely with materials.
- I can name a test tube, use safety glasses and use a pipette.
- I understand the terminology of flow, colour diffusions, density, emulsions and mixtures.
- I understand the differences between gas, liquids and matter.
- I can blow a bubble.
- I understand the difference between oxygen and carbon dioxide.
- I understand the differences between base and acids.

What can I learn through play explorations?



THERMODYNAMICS

- I can distinguish what is hot and cold by looking at the colours of a thermal camera image.
- I can tell the difference in heat distribution of various objects that was in the freezer by looking at the thermal image.

What can I learn through play explorations?



ANATOMY

- I can build a skeleton and name the body parts.
- I can match the x-rays on the body parts of the skeleton.
- I can recognise a heart and open it and show you the veins and heart chambers.
- I can recognise an eye and show you where the lens and the cornea and iris is.
- I can recognise a mouth and teeth, an upper jaw and lower jaw.
- I can show you how to brush teeth.
- I can recognise a cell.

What can I learn through play explorations?



LIVING CREATURES

- I can name various animals, birds, reptiles, sea creatures and insects.
- I can tell you where various animals, birds, reptiles and insects live (habitats) and what they eat.
- I can tell you about Monarch butterflies and their life cycle.
- I can tell you about the ecosystem in, on and under a tree.
- I can tell you about our native birds and reptiles.
- I can name some dinosaurs and tell you if they are carnivores or herbivores.
- I can tell you about the differences in sharks, dolphins and whales.

What can I learn through play explorations?

NATURAL WORLD



- I understand and use the term 'recycle, reuse and reduce'.
- I understand sustainability and can 'plant' my own garden and 'vegetable patch.'
- I understand the need for conservation and the plight of Little Blue Penguins, Maui Dolphins and Green Leatherback Turtles.
- I can distinguish differences between rocks and fossils.
- I am aware of spirals in nature as described and looked at pictures that represent the Fibonacci code and Golden ratios.
- I know the rain cycle song.
- I understand how volcanoes, tsunamis, cyclones, earthquakes and hurricanes work.

What can I learn through play explorations?



MATHEMATICS

- I can count, sort by size, colour, weight, length and width.
- I can build towers.
- I can do seriation of width, length height, and sizes with cylinders.
- I can put fractions together in apples, spheres and squares.
- I can name different three dimensional shapes.
- I can build two and three dimensional structures with blocks.
- I can do tessellation patterns.
- I understand symmetry and can build my own patterns.
- I can do problem solving .
- I can measure and pour accurately, plan and set goals, analyse outcomes and make a hypothesis that I can test repeatedly until I manage to find the answer I am looking for.

What can I learn through play explorations?



ARTS AND CRAFTS

- I can produce sound, melodies, recognise familiar tunes and respond to singing.
- I can dance, hop and skip to a beat.
- I can draw, paint, make collages, use glue, scissors and different materials to create something I like.
- I can use recycled wood, boxes plastic and other materials to create something new, artistic or useful.
- I can use clay and other natural resources to be creative.

What can I learn through play explorations?



TECHNOLOGY AND ENGINEERING

- I can use the Note Pad correctly to watch a video, make a video, do research and plan activities..
- I can use blocks and other recycled resources to construct new objects or resources.
- I can use scissors safely.
- I can activate various switches to manipulate resources and activities.
- I can solve problems and be creative in finding solutions.
- I can be innovative.
- I can use the microscope and screen correctly.
- I can build movable solar vehicles and robots with Lego.
- I can build electronic circuits for various models.
- I can use a hot glue gun safely.
- I can use Bee Bot the Robot correctly by coding in messages.

What can I learn through play explorations?

**COMPETENT,
CONFIDENT ME**



- I can make choices to decide what I like to play with.
- I can use my senses to explore my environment.
- I can use my perceptions to make assumptions, estimations and predictions.
- I can take time to explore what I want to know more about.
- I can participate in dramatic play of real life situations.
- I can socialise and interact with others.
- I have the ability to learn new words, phrases, terminology, systems, theories and ideas.
- I can be creative and innovative because I now understand how something I explored work.
- I am curious, can problem solve and be interested in new activities, resources and experiments.