



Objective: For children to develop their understanding of volume, mathematical and scientific language, number, gravity through sand play.

What I need:

Scoops (recycled laundry powder, formula scoops and measuring cups work well)

Cups/containers (recycled yogurt/plastic containers; let children resource from box construction)

Buckets (recycled ice-cream/larger containers)

Sand

(a sand pit is ideal but a large storage container or water trough with sand in it will do just as well! Remember to cover your sand after use to limit "contamination")

*when working with very young children watch carefully as they may find the sand tasty! Beware of choking hazard.

How To:

Put scoops, cups and buckets into sandpit.

Allow children time for free play.

Watch what they do. Discuss their actions.

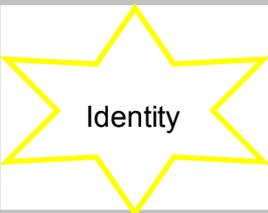
Encourage children to estimate and count how many scoops, cups and buckets it takes to fill each of the different containers.

Some children may wish to document or graph the play and their discoveries.

Watch the fall and flow of sand from one container to another. Discuss the look and feel.

*Children may wish to add water and other equipment to the play. Initially limiting equipment will change how the area is used and the play focus

***Links: Belonging, Being and Becoming: Early Years learning Framework of Australia Outcomes:**



Outcome 1: Children have a strong sense of identity. Children develop:

- knowledge and self-confidence through practicing skills, increasing vocabulary and working with others.
- social skills relating with care empathy and respect during play.



Outcome 2: Children are connected with and contribute to their world.

Children develop:

- sense of belonging to a group through shared activity, discussing investigations with others.
- awareness of respect and fairness, sharing play experiences, space, equipment.



Outcome 3: Children have a strong sense of wellbeing. Children develop:

- social and emotional wellbeing through shared goals, play and taking turns.
- responsibility for their own health and physical wellbeing through outdoor active play



Outcome 4: Children are confident and involved learners. Children develop:

- cooperation, confidence and curiosity through working with others exploring sand.
- skills and processes: problem solving, hypothesising and investigating.
- ability to transfer and adapt learning through the use of different media such as sand, seeds and water.
- ability to resource their learning, connecting with natural materials.



Outcome 5: Children are effective communicators. Children:

- interact verbally and non-verbally with others discussing investigations and results.
- express ideas and make meaning through discussions during play.



Play

Use different size containers.

Use water

Use seed mix in storage box or water trough. Large quantities available from produce stores.

Allow children to integrate other learning experiences into sand play (Nature walk and collage; treasure search, block play)

Go for an excursion to the beach or large area of sand or mud to play in.

Add tables and cooking utensils to sand area—children love to cook.

(Op shops are a great place to go for cooking equipment for the sand pit or digging patch!)

Extension

Literacy

Vocabulary - Sand, scoop, dig, pour, fill, full, half, empty, top, gritty, rough, smooth.

Read: *Magic Beach*
by Alison Lester

Sea, Sand and Me
by Patricia Hubbell

Write: How many scoops, cups, buckets fill other containers. Graph the information. Write in the sand. Children documenting or photographing play

Draw/plan play in the sandpit

Discuss: What other equipment could be added?
Tasks and roles during play
Describe what is happening and what to do next.

Community & Culture

Working with others for common goals, sharing, respect and empathy

Cultural and social significance of beaches in Australia

Sand is used in many cultures and is a key ingredient in many modern materials we take for granted. (concrete, mortar, plaster, glass, sand paper, moulds for casting metal)

Ancient Aboriginal communities traditionally used sand in a variety of ways including teaching symbols and for food storage.

Technology

Use the internet to research: Ways of shifting and measuring larger amounts of sand.

What makes up sand?

How is sand used?

The Arts

Medium and texture - discuss feel of sand.

Dramatic play - stories and imaginative play that develop during sand play.

Extension of sand play into art though collage, sculpture or painting.

Play



Academics

Numeracy

Measurement—Volume and cooking dramatization

Counting—How many scoops filled a cup?

Estimation and prediction: “How many cups do you think will fill a bucket?”

Mathematical Language—Many, more, “Add one more scoop.” “Is the cup full?” “How many more cups to fill a bucket?”

Positional Language— 1st, 2nd, 3rd. Before,/after/next; under/over/through

Fractions - 1/2, 1/4, 3/4

Science & Environment

Gravity (sand pouring down)

Problem solving, risk taking, experimentation, investigating, hypothesising and predicting (what will happen when...)

Physics: weight, mass, force.

Classifying, sorting items found.

Studying plants and animals that live in and around sand environments.

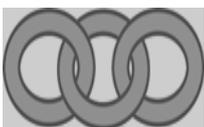
Health & Physical Education

Fine Motor Skill

- pouring into containers,
- tactile experience.
- digging with fingers in sand
- pinching sand

Gross Motor Skill

- digging, scooping, pouring.
- building muscle strength through lifting, digging, and walking through sand



Experience Links

Tubes, funnels and bottles

Floating and sinking

Sand and Seed

Pipes and tubes

Nature walk & Collage

Treasure Search