# Mathematics 

Shapes, Number, Measurment, Geometri

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## Learning SHAPES

How many sides and vertices does this shape have?



Today, preschoolers has a Math's session that focused on shapes. Using ice sticks and 2D and 3D shape cards, the children replicated shapes from the cards they chose. This hands-on lesson reinforced children's understanding of geometric forms while also developing fine motor skills and spatial awareness.

Educator used teaching practices, such as collaborative thinking, co-construction of knowledge, and purposeful planning, to scaffold children's learning. Children are directed and promoted shape-related talks, teaching children to think critically and solve problems cooperatively.


The purpose of teaching mathematics using shape identification and modification is to help children grasp geometric shapes and spatial relationships. Hands-on exercises with 2D and 3D shapes teach children to identify, classify, and modify shapes, creating a firm basis for future mathematical ideas.


Children's fine motor skills will be improved via hands-on activities that use materials such as ice sticks and shape papers to manipulate and create forms. Furthermore, children will develop spatial awareness and a better comprehension of geometric relationships.

Collaborative solving issues and ongoing collaborative thinking during shape exploration will improve critical thinking abilities. Children will also improve their vocabulary and language abilities via shape-related talks. Finally, this strategy seeks to establish a positive attitude regarding mathematics and learning through engaging, play-based activities.

## Learning Number

Link to:

- Teaching strategy: Sustained shared thinking, intentional teaching, co-constructing, directing
- EYLF Outcome 4 . Children are confident and involved learners
- Australian Teaching Standards. 2.l Content and teaching strategies of the teaching area
- Play pedagogy: Integrated pedagogical approaches- purposefully-framed play


Elene try to solve the taks with confident


Henri and Brady communication each other to solved the taks

Today, the children did a numeracy activity with natural resources. They participated in a "match to its number" activity, which involved pairing elements from nature, such as pine cones, with the matching numbers written on paper. Working together, they collected pine cones and organized them into groups based on the numbers indicated on the paper. This activity promoted conversation among children as they supported and encouraged one another throughout the process. The numeracy project involving natural resources was a captivating and enriching experience for today's children. Curiosity was evident as they gathered around. They tackled the activity with enthusiasm, eager to discover and learn.

Under the educator's supervision, the children diligently matched each pine cone to its matching number, participating in continuous collaborative thinking as they discussed their observations and judgements. It was encouraging As they gathered around, curiosity was evidentto see their collaborative spirit as they gathered and organised the pine cones.

Throughout the activity, the children engaged in lively discussions, sharing their views and supporting one another. They showed confidence in their talents and actively participated in the learning process. The intentional teaching tactics used, such as continuous shared thinking and coconstruction, effectively facilitated meaningful interactions and learning opportunities.



As the practice progressed, the children's comprehension of numbers became clearer as they confidently identified and matched the pine cones to the appropriate
numbers. Their participation and engagement demonstrated the benefits of incorporating natural resources into numeracy learning.

## Learning Math-Measurement

Let's make Playdough
Playdough ingredients:

- 2 cups all-purpose flour
- 3/4 cup salt
- 4 teaspoons cream of tartar
- 2 cups lukewarm water
- 2 Tablespoons of vegetable oil (coconut oil works too)
- Food coloring, optional
- Quart sized bags


We gathered children in the play area today for an entertaining and educational activity: creating playdough! Educator is discussing the importance of measuring the ingredients to make the right dough before got started.


Different-sized measuring cups, bowls, and spoons are examples of measurement equipment. We talked about the idea of measurement and why measuring instruments are used. "Why do we need these cups rather than just using our hands?"


Comparing the sizes of the measuring cups and talking about which size we might require for each component, the children investigated the containers. Our selection was to use a medium cup for water, a large cup for flour, and a little spoon for salt.



Each child took turns measuring the ingredients. I used simple terms, such as "three cups of flour" and "four tablespoons of salt," to demonstrate the way to scale the ingredients.


We mixed all the ingredients after we had measured all of them. The children like the sensory sensation of kneading the dough, they will feel if the dough is too dry, they will pour more water, or if the dough is too wet, they will add more flour.


After adding a food colour to the dough, children have colorful playdough. They use creative imaginations to make different figures and shapes. We discussed the sizes and shapes they were creating, using terms such as "big," "small," "star," "circle," and "square."

## Learning Math - PATTERN



Children experience patterns through Lego bricks. There was tangible excitement as they join the table! Educator taught children a simple Lego brick design. We discussed patterns, which are continue repeating the sequences of colours or shapes.


Children engaged both independently and collaboratively. Some made their own patterned, while others enjoyed expanding current patterns or working together. They switched turns sharing their worl with the group.

This activity introduced children to the idea of patterns in an interesting and enjoyable manner. They experimented with colour and shape repetition to create patterns, so boosting their basic numeracy skills.

The End

