



Quality **Child**Care

For Registered Home-Based Providers

LEARNING TO GROW ★ WINDWARD COMMUNITY COLLEGE Vol. VII, No. 1

10 Hallmarks of Quality Child Care

- ★ Build trusting relationships
- ★ Provide consistent care
- ★ Support children's health
- ★ Provide a safe environment
- ★ Provide positive guidance
- ★ Provide a languagerich environment
- ★ Foster curiosity and development through play
- ★ Individualize care and learning activities
- ★ Partner with parents
- ★ Pursue personal and professional growth

This Month's Hallmark of Quality Child Care

Individualize Care and Learning Activities

Math is Everywhere!

ccording to the Erikson Institute Early Math Collaborative, early math competence is one of the best predictors of school success across the curriculum. Family Child Care providers play an important role in helping young children gain this competence – by mathematizing the world around them. In other words, by helping children engage with the math that is all around them. Mathematizing means seeing math in daily life and using "math talk" to describe and explore situations. When math words are connected to real and interesting things, they become more meaningful and easier to learn. You can do this by:

- Providing playful math activities that engages multiple senses (vision, hearing, touch, and movement).
- Using story books to introduce the language or vocabulary of math as well as make math approachable and engaging for children.

The Erikson Math Collaborative identified "9 Big Ideas" or math concepts that lay the foundation for lifelong math learning and thinking. Two of these skills are shapes and spatial relationships (the relationship between people, objects and places). Helping young children learn about these skills is foundational to children's understanding of the physical world and is listed as one of the critical areas in the Kindergarten Math Common Core Standards. Children explore and gain awareness of shapes and spatial relationships in their environment from birth. Before young children

have the language to name or describe the different shapes or where something is located in relation to them, they are developing an intuitive understanding about shapes and spatial relationships, e.g. the round ball is rolling away from me.

In this newsletter, we will discuss activities that promote the learning of shapes and spatial relationships for infants, toddlers and preschoolers.

We will also offer tips on making math part of daily routines, activities and interactions.







Infants

Infants begin to learn about shapes by holding, looking at, and mouthing objects. They learn about space as they repeat a body movement or gesture to make something happen. They are learning new ways to play and interact with objects and people. You can support an infant's learning about shapes and spatial relationships by:

- Providing different shaped objects that are safe for the infant to grasp, explore and mouth. For example, a teething ring, soft blocks, textured balls, etc.
- Creating opportunities for the infant to play and move in different positions to manipulate objects. For example, lying on his back and reaching for a toy above, sitting on your lap and playing with a toy in front of him.
- Using mirror talk to describe what he is doing. For example saying, "You have a round teething ring. You see the ball in front of you. You got it!"





Toddlers

Toddlers form their understanding about shapes by actively manipulating and playing with them. They experiment with putting objects together. For example, nesting cups together or placing a round or square piece on a shape board. Toddlers are beginning to identify shapes by their name such as circle, square and triangle. They are further developing their understanding of spatial relationships as they use their whole bodies to explore and move through their environments. You can help toddlers learn about shapes and spatial relationships by:

- Reading picture books about shapes.
 While reading, point out the various shapes in the book and have the children point out some that they see. After reading, go on a shape hunt and have the children find similar shapes in your home or around the neighborhood. You can take photos of the shapes, print them and have the children make their own shape book.
- Creating obstacle courses for the children. For example, use sofa pillows for the children to climb over, an empty appliance box for the children to crawl through, and a chair for the children to walk around. Make up a playful chant to describe the children's movements to them, e.g. "You're climbing over the mountain, crawling through the tunnel, and going around the tree. Hurray, you've found me!"



Preschoolers

Preschoolers' knowledge and language about shapes expands as they become increasingly aware of the similarities and differences between shapes and as they use shapes to create and construct. They are able to recognize and name many common shapes. They have a growing understanding of the attributes of shapes and are beginning to describe them based on these attributes, for example noticing and saying "It has four sides that are the same and four corners, so it's a square." Preschoolers' understanding of spatial relationships broadens as they continue to explore, manipulate, fit together and construct with two-dimensional and threedimensional shapes. Their sense of space also develops as they gain the motor coordination to move their bodies through space and learn spatial language (positional and directional words). You play a critical role in supporting preschoolers' deepening understanding of shapes and spatial relationships by providing a variety of experiences such as:

 Providing different 3-dimensional (3-D) shaped blocks for the children to stamp into play dough to create 2-dimensional (2-D) shapes. Talk about the shapes as the children experiment. For example, say,





- "The cylinder makes a circle because it has one side that is round." Talk about their similarities and differences.
- Turning an everyday task into a hands-on math lesson. Your pantry items are usually 2-D or 3-D shapes in a variety of sizes, for example cylinders (cans of soup or juice) and rectangular prisms (boxes of cereal or crackers). Have the children help you put away the pantry items by matching similar sized and shaped items. Use positional words to describe how the children make the items fit on the shelf. For example, "You put one cylinder soup can on top of another same shaped can so it fits."
- Singing and moving along to spatial concept songs or chants, such as We're Going on A Bear Hunt. This movement chant gets spatial language (positional and directional words) into the eyes, ears, hands and feet of the children.

Training Opportunity

This online training offers a certificate for 2 training hours.

"Math for Every Age," Penn State Better Kid Care

https://extension.psu.edu/programs/ betterkidcare/lessons/math-for-every-age



Kids in the KitchenDIY Lunchable



Ingredients:

- · Fruits, such as banana and melon
- Cheese slices
- Cold cuts, such as sliced turkey
- Whole grain crackers
- Vegetables, such as cherry tomatoes or small cucumbers
- Meal prep container with compartments and a lid

What to do:

- 1. Create different shapes using the various fruits and vegetables to create a "lunchable" snack or meal.
- Using a plastic knife, provide the hand-over-hand guidance to assist the children (ages older toddler and above) with safely learning how to handle a knife. Help the children slice the fruit into different shapes.
 - Circles: banana, cucumbers, tomatoes
 - · Cubes: melon
 - Triangles: cheese
- 3. Talk about the different shapes that they are creating.
- The children can place the shapes in various parts of the containers, putting shapes together to make new shapes, or just putting their favorite foods together.

Suggested Books

Discover these books and more at the Hawai'i State Public Library www.librarieshawaii.org

Mouse Shapes: A Very First Book

by Jim Arnosky

A mouse scrambles through an obstacle course, introducing the reader to simple shapes.

My Very First Book of Shapes by Eric Carle Split pages help early learners find and match basic shapes to everyday objects.

Rosie's Walk by Pat Hutchins

Although unaware that a fox is after her as she takes a walk around the farmyard, Rosie the hen still manages to lead him into one accident after another.

When A Line Bends - A Shape Begins

by Rhonda Greene

Rhymed text describes how shapes are made from simple lines.

Citations

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