

Free



Pierce County Library System

FAVORITE BOOKS for Math Learning and Play

Building with blocks is a WONDERFUL WAY to learn together

20 Bia Trucks in the **Middle of the Street** by Mark Lee

Baby Goes to Market by Atinuke

Balancing Act by Ellen Stoll Walsh

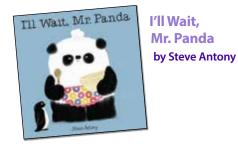
Everybody in the Red Brick Building by Anne Wynter

Frv Bread by Kevin Noble Maillard

How Long is a Whale? by Alison Limentani

I Got the Rhythm by Connie Schofield-Morrison

I Read Signs by Tana Hoban



It Looked Like Spilt Milk by Charles G. Shaw

Marta! Big & Small

by Jen Arena

Mouse Shapes by Ellen Stoll Walsh

Not a Box by Antoinette Portis

One Family by George Shannon

I Love My White Shoes by Eric Litwin

Round is a Tortilla by Roseanne Thong

Say Hello! by Rachel Isadora

So Many Circles, **So Many Squares** by Tana Hoban

> **Ten Black Dots** by Donald Crews



Pete the Cat:

When children build, they learn about:

Mathematical Concepts

- Learning numbers and counting
- Recognizing shapes
- Measuring and area
- Spotting patterns and repetition

Language and Vocabulary

- Storytelling such as describing what they built.
- Using math words including over, under, beside, through, longest, smallest and more.

Social Learning

- Building together and cooperation
- Sharing
- Waiting
- Problem solving

Imaginative Play

 Building on their own and independent play.



NUMBERS and COUNTING

Understanding numbers and counting is essential for math learning -COUNT EVERYTHING (Especially learning numbers 0-20)

Build the Tallest Tower

Build a tower and count how many blocks you stack before the tower falls down! Rebuild the tower and count again. Is the number the same or different? How tall is your tower compared to a favorite stuffed animal?

Count Your Numbers

Draw a number on a piece of paper and count out that number of blocks together. Draw another number and repeat.



Basic geometry begins with KNOWING THE NAMES of shapes

Choose One Shape

Let the child choose one shape. Sort all of those shapes from the rest. What can you build using that one shape?

Guess the Shape

Place one block into a bag or pillowcase. Encourage the child to feel the shape and try to guess what shape it is without looking at it.

Expand Shapes

Let the child choose a shape and do a search for that shape around the house. Make a list of what you find.

Build Shapes with Blocks

Use blocks of all shapes to build one large shape such as a triangle or a rectangle.

MEASUREMENT

Blocks are a fun way to help children LEARN ABOUT MEASUREMENT

Use Math Words

When building together, use math words. Many of these words describe measurement – tallest, biggest, widest, longest, etc.

Use a Block as a Measuring Tool

Choose one of the blocks and use it to measure things – how many of that shape does it take to measure a book? Or your arm? Place blocks all around a shoe. How many blocks did it take to get all around the shoe?

Build the Longest Road

Build a long road together, or have a contest to see who can build the longest road. How many blocks did you use to build the long road? Count them together.

shortest longest widest tallest biggest smallest heaviest lightest deepest shallowest highest lowest

shortest longest widest tallest biggest smallest heaviest lightest deepest shallowest highest lowest

PATTERNS

Creating patterns with blocks is a fun way to LEARN ABOUT REPETITION - an important math concept! Make patterns with shapes or colors.

Go on a Pattern Hunt

Look for patterns around the home or when you go on a walk (bricks, tile, books on a bookshelf, dishes in a cupboard). Can you create these patterns using blocks?

Make a Pattern Puzzle

Trace some of the block shapes on a piece of paper. Invite the child to color the shapes. Use this drawing as a puzzle – placing the corresponding block onto the shape outline.

Build a Pattern City

Children can turn their buildings into patterns. Create a building using all red blocks. Then create another building with only blue blocks. Repeat red and blue for as long as you like (or as many blocks) as you have!

repeat alternate sequence predict order continue identical matching rows lines take turns

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IMAGINATIVE PLAY

Blocks are an incredible toy with endless possibilities - THEY GAN BECOME ANYTHING, sparking a child's imagination!

Create a Block Animal

Build a block animal. What kind of animal did you make? Is it big or little? How many feet does it have?

Build a Block Home

Use the blocks to make a home for a favorite stuffed animal or doll.

Build Outside

Bring some blocks outdoors on a nice day. Do the blocks make shadows? If you have sidewalk chalk, trace the different block shapes. Bring in pinecones, sticks, leaves, rocks and other items from nature to use with the blocks.

Do a Home Scavenger Hunt

Incorporate recycled materials into block play! What can you find around the home that can be used with the blocks for even more fun building and learning? Go on a scavenger hunt. Together, search for tubes, boxes, containers, toys and more.

LANGUAGE LEARNING

Playing with blocks supports LANGUAGE DEVELOPMENT

The more you encourage a child to describe what they are seeing and doing while they build, the better.

Build a Block Teater-Totter

Build a teeter-totter with your blocks and other objects found at home. You will need something long that can serve as the teeter-totter (perhaps a long piece of cardboard). Using blocks of various sizes, place them on either side. How can you



balance the teeter-totter? A wonderful book to pair with this activity is "Balancing Act" by Ellen Stoll Walsh.

Design with Block Dominoes

On a flat surface, build a line of blocks close together, one after the other. Knock down the last block you line up, setting off a line of blocks falling down! Did it work? Why or why not? What could you change to make it work better?

Make a Block Chute

Using a wrapping paper tube, hold it at an angle for the child to drop small blocks through the tube. Ask the children to describe whathappens to the blocks. Which blocks move through the tube faster?

BUILDING TOGETHER -SOCIAL SKILLS

When children build block structures with other children. they practice skills like sharing, working together and problem-solving. Children can also build what they see in their communities.

Play Restaurant

Use blocks as pretend food. Encourage the child to be the chef or waiter and have them serve a three-block soup or four-block salad, or some other fun block-counted meal.

Explore Day Versus Night

Build your home out of blocks. Talk about how things look different when it is light outside versus when it is dark. Shine a flashlight in the middle of the building. How does it look different when the flashlight is on?

Combine Blocks and Cars

Use blocks to create structures for cars such as a garage, parking lot, car wash, roads, bridges and more.

Build Your Neighborhood

Take a walk around the neighborhood and talk together about what you see. Build your neighborhood using blocks.

Foundation

Block play is generously sponsored by the Pierce County Library Foundation.

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