

Try using a number as an adjective when talking to children.

"Let's take three books home" or "There are two chairs at this table."

#### Math concept | Number Sense

Understanding what numbers mean and how they relate to one another







Use the words "more" and "less" to describe stacks of blocks, books, or puzzle pieces. Ask children to point to the stack that has more.

Math concept | Making Comparisons

Observing similarities and differences between objects or groups of objects







Use a puppet or stuffed animal to demonstrate position words like behind, between, or below.

"Where is the bunny? Let's look behind the chair. on top of the table, under the desk. etc."

### Math concept | Spatial Skills

Mentally manipulating shapes and objects in the environment and describing their relationship







Let children choose 3 books to take home: help them count each one and confirm there are 3 books. Stick with small numbers like 1, 2, and 3 to help build understanding of quantity.

#### Math concept | Number Sense

Understanding what numbers mean and how they relate to one another







Take 2 books and think about different ways to compare them.

"This book is red and that one is blue. This one is heavy and that one is light. This one is small and that one is big."

#### Math concept | Making Comparisons

Observing similarities and differences between objects or groups of objects







# Choose a picture book with repetitive text. Pause to let children fill in the blank and continue the pattern!

Math concept | Recognizing Patterns

Noticing predictable sequences that follow rules







# Putting things in order is a key math concept. Talk about what happens first, next, and last in the story.

#### Math concept | Sequencing

Putting things in order and recognizing that the order matters



California STATE LIBRARY

For more ideas, visit BADM.org/Activities



# Puzzles are great for learning math! If one is too easy, give children multiple puzzles at once and mix up the pieces.

### Math concept | Spatial Skills

Mentally manipulating shapes and objects in the environment and describing their relationship







When you read a counting book, try counting the items in different orders, like right to left or bottom to top.

#### Math concept | Number Sense

Understanding what numbers mean and how they relate to one another







Try counting windows, books, chairs, etc. with children. After counting, make sure to ask how many are there total.

"1, 2, 3...How many books are there? 3 books!"

#### Math concept | Number Sense

Understanding what numbers mean and how they relate to one another







### After reading, ask children to describe the events of the story in order using the words first, next, and last

### Math concept | Sequencing

Putting things in order and recognizing that the order matters









Gather 2 books of different sizes. Ask children to hold one in each hand.

# "Which one feels heavier? Why do you think that is?"

Math concept | Making Comparisons Observing similarities and differences between objects or groups of objects







Ages: Preschoolers

### Gather 5 - 10 books. Ask children,

"Can you stack these books from biggest to smallest? From lightest to heaviest? From shortest to tallest?"

### Math concept | Spatial Skills

Mentally manipulating shapes and objects in the environment and describing their relationship







Without counting, ask children how many chairs are around the table. Then count the chairs by tapping them one by one.

#### Math concept | Subitizing

Seeing small quantities and knowing what the number is without counting







Without counting, ask children how many rows of books there are on a bookcase. Then count the rows by tapping them one by one

### Math concept | Subitizing

Seeing small quantities and knowing what the number is without counting







Ages: Preschoolers

### Count a stack of books. Ask children,

# "If we add one more, how many will there be?"

### Math concept | Number Sense

Understanding what numbers mean and how they relate to one another







Gather 5-10 books and invite children to sort the books (by color, size, or any quality they choose). Then ask them to compare.

"Which category has the most books? The least? How many more or less?"

#### Math concept | Number Sense

Understanding what numbers mean and how they relate to one another







### Before you put a toy away, ask children to put it next to, behind, above or below another object.

### Math concept | Spatial Skills

Mentally manipulating shapes and objects in the environment and describing their relationship







Choose one shelf of books in the library. Ask children,

"Do you notice any patterns about how the books are organized?"

Math concept | Recognizing Patterns Noticing predictable sequences that follow rules







# Gather 5 - 10 books. Ask children.

"How many different ways can you sort these books? Can a friend guess your rules for sorting?"

Math concept | Making Comparisons

Observing similarities and differences between objects or groups of objects







Ages: Early Elementary

# Ask children to find an author who has more than 5 books in the library.

Math concept | Number Sense

Understanding what numbers mean and how they relate to one another







Use your time near a computer station to ask children questions like,

"If our family is going to use the computer for 60 min, how can you divide the time equally between family members?"

Math concept | Number Operations

Understanding how quantities can change, for example through addition, multiplication, etc.







### Ask children,

"If everyone in our family gets to check out 3 items today, how many items are we coming home with?"

Math concept | Number Operations

Understanding how quantities can change, for example through addition, multiplication, etc.







Ask children to draw a map with a path that leads to their favorite part in the library. Share it with someone to see if they can find their way there.

### Math concept | Spatial Skills

Mentally manipulating shapes and objects in the environment and describing their relationship







Take turns being the "robot" and the "programmer." The programmer must give step by step directions to a simple task like opening a door or getting a book off a shelf. The robot must follow the instructions exactly and not do anything they weren't instructed to do.

#### Math concept | Sequencing

Putting things in order and recognizing that the order matters



