

# Conversation starters...

"How many crackers do you think Mommy gave you?" "15?" "Ok, let's count them and see how close you were."

After measuring the child, have them guess how tall you are. Then measure and check.

"How many M&M's do you think are in this bag?"

While looking at pictures in photo albums.

"How many pictures are on this page?"

"How many members in the family?"

"How many girls?" "How many boys?"

Count wheels, doors and other parts on the car.

"How many things are there 4 of?"

Looking at foods while shopping - count produce as you put it in the bag.

"How many bags of groceries did we buy?"

Have your child help put groceries away.

"Can you arrange the cans with the tallest ones in the back and the shortest ones in the front?"

You can do the same with the cereal and cracker boxes.

Count things in family collections - like stuffed animals or toy cars.

Count claps, hops, jumps, etc.

Count steps while walking and climbing.



**School Readiness is the sum of children's experiences prior to Kindergarten.**

A high quality early childhood education, whether provided by family or a formal program, increases a child's ability to succeed in school. The entire community is responsible for enhancing the physical, social, and cognitive development of children, from prenatal care through the age of five.



Math helps children make sense of the physical and social worlds around them, and children are naturally inclined to use math in this way ("He has more than I do!" "That won't fit in there—it's too big"). By building on these moments and by planning a variety of experiences with math in mind, you can cultivate and extend children's math sense and interest.

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### INDIANA DEPARTMENT OF EDUCATION OFFICE OF EARLY LEARNING AND INTERVENTION

# Is your child ready for mathematics in Kindergarten?



# Number Sense

Learning the meaning of numbers involves the ability to think and work with numbers and understand their relationships and the different uses for numbers.

- ⇒ Demonstrates an awareness of the presence of objects
- ⇒ Identifies more or less
- ⇒ Uses numbers to compare
- ⇒ Name and orders quantities
- ⇒ Describes relationships between numbers and quantity



# Computation

Comparing quantities is not dependent on knowledge of counting skills. An adult helps them understand math words such as more, less, smaller than, bigger than, different than. These words help children describe the size and shape of objects and the relationships of objects to one another.

- ⇒ Manipulates objects on purpose
- ⇒ Matches objects and sets
- ⇒ Makes a set of objects smaller or larger
- ⇒ Follows models of addition or subtraction situations
- ⇒ Describes the application of addition & subtraction



# Geometry, Measurement and Time

Early measurement concepts also include attributes such as length, volume, area, weight, and time. Children need many opportunities to explore and discover the increments of time. They learn by applying concepts of time to real life situations in order to construct the meaning of time.

- ⇒ Anticipates a routine
- ⇒ Uses vocabulary to identify events in a routine
- ⇒ Sequences events
- ⇒ Uses measuring vocabulary for time
- ⇒ Uses measuring units for time



# Location

To build the foundation for recognizing shapes and using directional words, children need opportunities to explore the size, shape, position, and movement of objects within their physical environment.

- ⇒ Demonstrates an awareness of location of objects
- ⇒ Identifies location
- ⇒ Follows directions involving location
- ⇒ Communicates with location words
- ⇒ Uses prepositions to describe location

# Length, Capacity, Weights, Temperature

Children explore objects/things by looking at, touching, or directly comparing them, they begin to understand the difference in the attributes of objects, an application of measurement. They begin to use actual measurement instruments and explore those relationships, they apply the results to real life situations in order to construct concepts of measurement.



- ⇒ Explores measurement attributes
- ⇒ Distinguishes between big & little, hot & cold
- ⇒ Differentiates various sizes and weights
- ⇒ Uses common measuring tools in correct context
- ⇒ Makes direct measurement comparisons

# Sorting and Classifying Objects

Learning to model, explain, and use addition and subtraction concepts in problem solving situations begins with the opportunity for young children to count, sort, compare objects, and describe their thinking and observations in everyday situations.

- ⇒ Explores attributes (shape, size, color)
- ⇒ Matches same attributes
- ⇒ Matches opposites
- ⇒ Sorts and patterns by one attribute
- ⇒ Sorts and patterns by more than one attribute

