








## NUMBER SENSE – Basic Number Discovery for Preschoolers



Learning the basics about numbers, or **number sense**, is a very important math skill for children to develop during their preschool years. **Number recognition** is one of the first math concepts that preschool children learn. It is a skill that builds the foundation for other mathematical skills like counting.

**Subitize** (soo-bi-tahyz) is a word that means *the immediate recognition of a number group without counting*. For example, if a person shows you three fingers for just an instant, you can tell them how many fingers they are holding up without counting. That's **subitizing**. Mastering this skill will later help children with adding, subtracting and eventually more complicated math skills.

Here are some tips and ideas that will help make learning the basics of math fun.

-  In everyday conversation with young children, encourage them to think in numbers. For example, "Oh, I dropped three of the blocks!" You are teaching a number word and connecting it to a specific quantity.
-  Point out numbers on everyday objects such as remote controls, clocks, street and house signs.
-  Count how many library books you read before bed.
-  Count as you set the right number of places at the dinner table.
-  Count your steps as you walk.
-  Count and talk about the different crayons your child is using to color a picture.
-  Practice subitizing by encouraging number recognition by rolling dice.

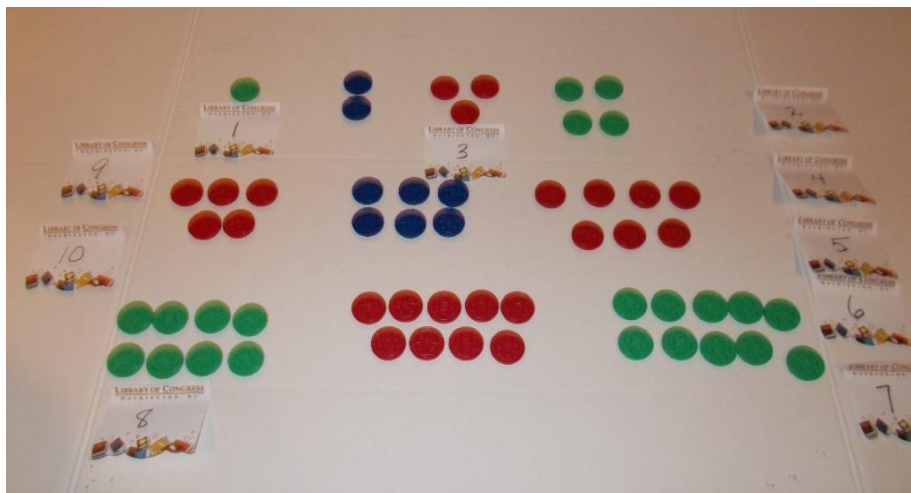
### **ACTIVITY #1: Sticky Note Number Recognition – a great way to incorporate fun, movement and learning!**

Materials needed:

- poster board, a large piece butcher paper, or piece of cardboard. You can also just set this up on a tabletop.
- permanent marker or sticker dots for use on paper. For a tabletop model you can use anything that can be set up in number groups. In the example below, game chips are used.
- sticky notes
- painter's tape, if you would like to hold your paper on the wall or refrigerator.



1. Use the permanent marker or sticker dots to make number quantities on your paper. Or place other objects (like the game chips below) on a tabletop.
2. Write numbers to represent each dot quantity on the sticky notes.
3. You can make this more fun by hiding the sticky notes around your house and have your child search for them. Once they find a note, have them place it over or next to the appropriate group of dots.



## ACTIVITY #2: Egg Carton or Muffin Tin Counting

Materials needed:

- One empty egg carton or muffin tin with paper cupcake liners. Stand-alone cupcake liners like the ones used below also work well.
  - A favorite snack (crackers, grapes, cereal), or a non-food item like game chips
1. Write numbers 1 – 12 inside the bottom of the empty egg carton or on the bottom of cupcake liners. The numbers do not necessarily have to be in order.
  2. Have your child practice counting the snacks or game pieces and place them in the appropriate section.



These are just a few simple ideas for helping introduce early math concepts to your child. Keep engaging them with stimulating math activities, lay the foundation for more complex ideas, and have fun together!

### **ADDITIONAL RESOURCES to help your child learn more:**

Books available from the Washoe County Library System:

*Butterfly Counting* by Jerry Pallotta and Shennen Bersani

*Counting* by Henry Arthur Pluckrose

*Counting Caterpillars and Other Math Poems* by Betsy Franco

*Counting Elephants* by Dawn Young

*Counting is for the Birds* by Frank Mazzola

*Counting Lions: Portraits from the Wild* by Katie Cotton, Stephen Walton, and Virginia McKenna

*Counting with Sebastian Pig and Friends: On the Farm* by Jill Anderson

*Ocean Counting* by Janet Lawler and Brian Skerry

### Videos:

Jack Hartmann, Math Song for Kids, "Subitize Up to 5 (soo-bi-tize)"

[https://www.youtube.com/watch?v=6yyz\\_OycV4A](https://www.youtube.com/watch?v=6yyz_OycV4A)

Jack Hartmann, Math Song for Kids, "Subitize Country Style – Subitizing up to 10"

<https://www.youtube.com/watch?v=nKO0yQgJAho>

Kids Academy, Learn Numbers, "Number Zero -How to Teach Number 0"

<https://www.youtube.com/watch?v=eJdTZU08peM>

The Learning Station, Number Recognition Kids Songs, "I Spy Song – Counting Songs for Children"

<https://www.youtube.com/watch?v=xgH7gXfchGw>

### Websites:

Erikson Institute, Early Math Collaborative, "Subitize: The Ability to 'See' Small Amounts"

<https://earlymath.erikson.edu/tag/subitizing/>

Scholastic, Early Childhood Today, "Early Math: How Children Learn About Numbers"

<https://www.scholastic.com/teachers/articles/teaching-content/early-math-how-children-learn-about-numbers/>

