

Math Tips for Parents

Kindergarten Module 1

Numbers to 10

In Module 1, students begin to observe and analyze the world around them mathematically. They will count, order and draw up to ten objects. They will eventually work toward an understanding that each successive number names a quantity that is 1 more, and that the number before is 1 less. This is just the beginning of an exciting mathematical year for kindergarten students!

Key Standards:

Know number names and the count sequence

- Write numbers from 0 to 10

Count to tell the number of objects

- Understand the relationship between numbers and quantities; connect counting to cardinality

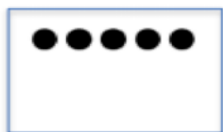
Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from

- Decompose numbers less than or equal to 10 into pairs in more than one way

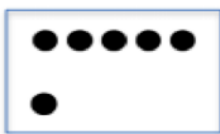
Classify objects and count the number of objects in each category

- Classify objects into given categories; count the numbers of objects in each category and sort the categories by count

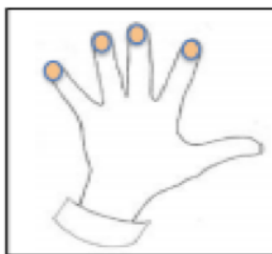
This module will feature 5-groups, as 5 is an important building block for understanding numbers 6-10. Students learn what 5 looks like, and different ways to make and count to 5.



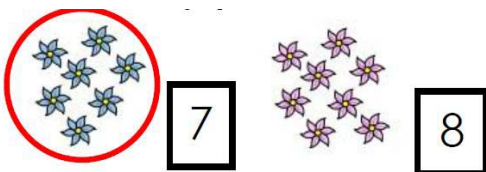
Left: 5-group cards with clearly marked groups of 5 in each row



Right: Counting on our hand: a natural group of 5!



Students will also recognize which group is larger or smaller.



Count how many are in each group. Write the number in the box. Circle the smaller group.

New Terms, Phrases, and Strategies in this Module:

Exactly the same/not exactly the same/the same, but...: ways to analyze objects to match or sort

Match: group items that are the same or that have the same given attribute

Sort: group objects according to a particular attribute

Answer “how many” when counting quantities or sets

Counting path: order of count, especially with large numbers

Number story: stories with add to or take from situations

Zero: understand the meaning of, write and recognize

Number sentence: $3=2+1$

5-group: see box to the left

Rows/columns: linear configuration types

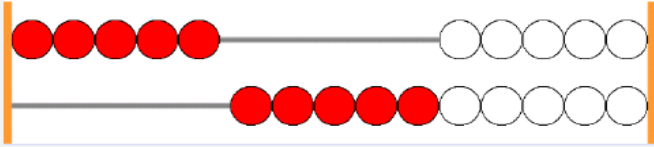
1 more/1 less: e.g.,

4. 1 more is 5, and

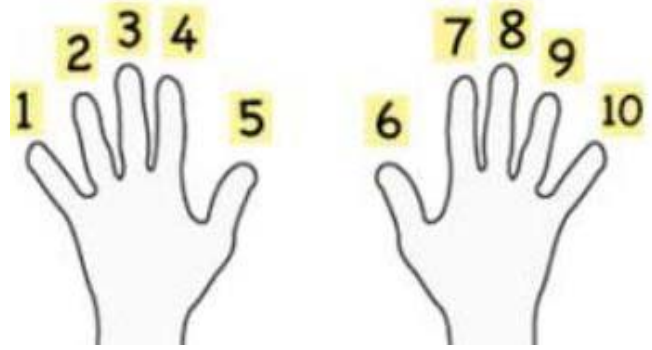
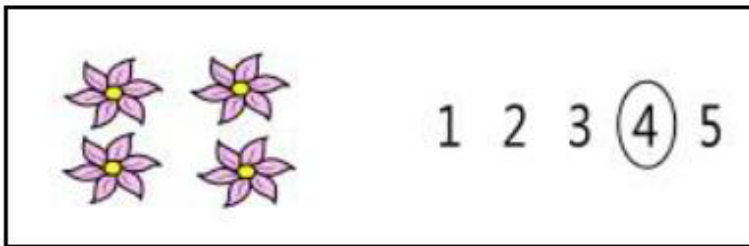
4. 1 less is 3

Kindergarten Module 1

Rekenrek-- The Rekenrek is comprised of two strings of ten beads each, strategically broken into two groups: five red beads, and five white beads. Readily apparent in this model is an implicit invitation for children to think in groups of five and ten. As illustrated below, the strings of red and white beads (in groups of 5) provide a visual model that encourages young learners to subitize, i.e., to build numbers based on groups of five and ten.



Students will count objects and match it to the numeral.



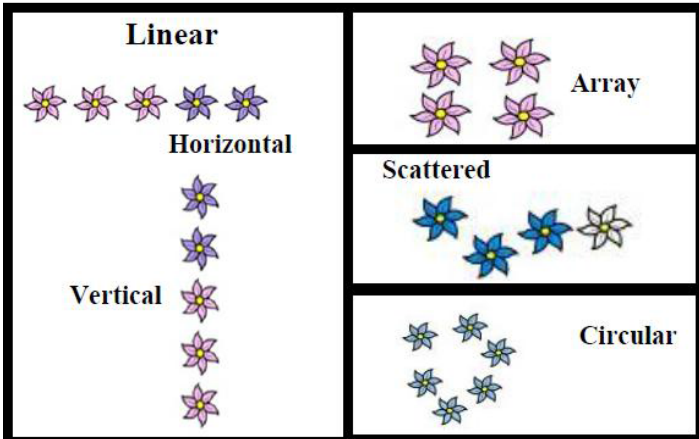
Finger Counting— In class, students will be taught to begin counting on their left hand pinky finger, which would be the number 1, then the ring finger is 2, middle finger 3, pointer 4, and thumb is 5. Right hand thumb is 6, pointer is 7, middle finger is 8, ring finger 9 and pinky is 10.

They will learn about number sentences.



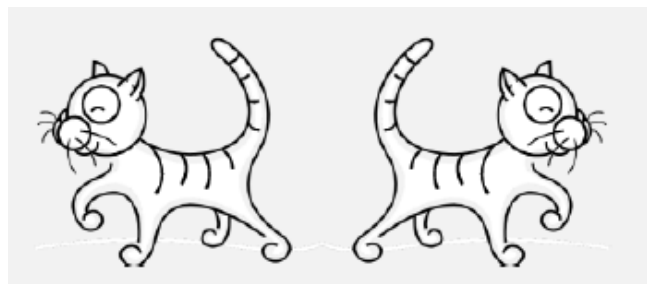
Write the number sentence:

$$3 = 2 + 1$$



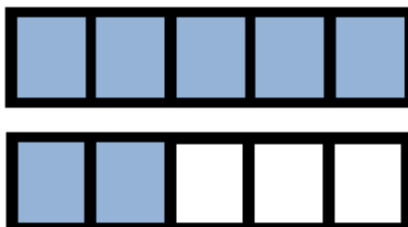
Students will learn to tell how two objects that are the same look different by filling in the blanks in this statement:

“These cats are the same, but one is _____ and the other is _____.”



Kindergarteners will need to be able to count items in various configuration. They will need to learn a way to track the items counted.

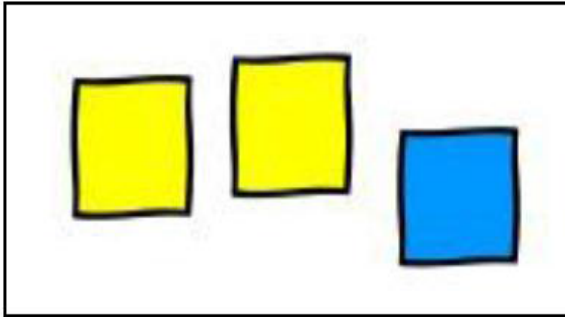
Color 5 squares on the 5-group. Then color 2 squares on the other 5-group.



Count how many squares are colored. Write the total.

7

Kindergarten Module 1

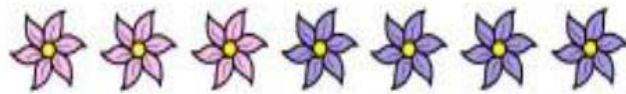


There are 2 yellow blocks and 1 blue one. There are $2+1$ blocks. Count the blocks. There are 3 blocks. $2+1$ is an expression.

Students will begin problem

solving with numbers up to 10.

Teacher: Color the picture to show what is happening in my story and then write how many in the box. Listen to my story. Joci picked 3 pink flowers. Then she picked 4 purple flowers. How many flowers did Joci pick?



7

How you can help at home....

- Play the license plate game with numbers as you walk through your neighborhood.
Have them look for a 1 on a license plate. Then find a 2, then a 3, and so on.
- Write your name and a family member's name. How many letters are in your name?
How many are in your family member's name? Which name has more?
- Grab a handful of an item, cereal, beans, etc. Estimate how many pieces you grabbed. Now count them. Was your estimate close?
- Estimate how many spoonful it takes to finish a bowl of cereal. Count each spoonful as you eat.
- Walk around your home. Count how many items are plugged into the wall.
- Show the number 5 in as many ways as you can. Use pictures and numbers.