

Counting

The Counting Sequence

To be able to appropriately count how many of something there are, children need to learn the counting sequence: 1, 2, 3, ...

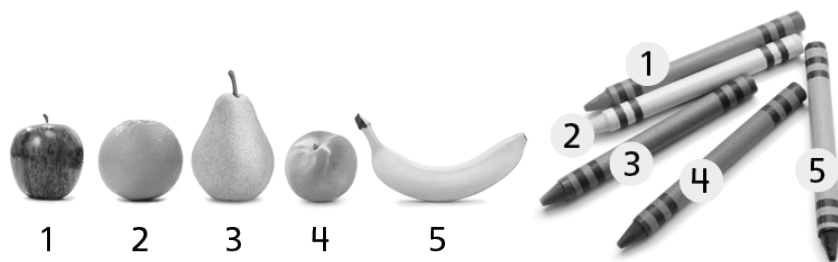
It is expected that the majority of children in kindergarten either already know or learn the sequence up to 10, 20, or 30. Many students can count back or even count by 2s, but this is not required.



Important Ideas When Counting

Counting is so natural for adults that it is easy to forget how many ideas children must master to be able to count effectively, but there are quite a few:

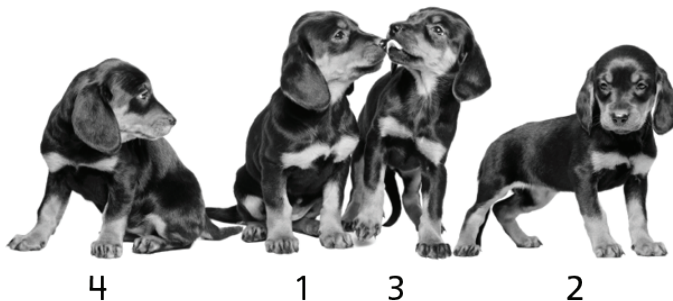
1. You count the same way no matter what you are counting. It does not matter how many items there are, how big they are, or whether the sizes of the items are the same or different.



2. You have to say exactly one number for each item to be counted. You cannot count anything twice, and you cannot leave anything out.
3. You have to say the numbers in the right order.

Important Ideas When Counting (continued)

4. You can start counting a set of items with any item and count in any order that you want, as long as you count one number for each item.



5. When someone asks how many items there are, you use only the last number you said.

These five ideas are known as the counting principles.

It is also important that children have the chance to organize the items to be counted in their own way — the items should not always be lined up for them.

Helping Your Child

You can help your child by providing lots of opportunities to count in everyday situations. For example, you could ask your child to count how many forks are on the table, how many people are standing in a line, how many tools are in a toolbox, how many flowers are in a garden, how many carrots are on a plate, and so on.

You can count with your child to help your child gain confidence.

You can make deliberate mistakes when counting to reinforce some of the important ideas about counting, particularly that you need to count one number for each item and that you need to say the numbers in the right sequence.

You can play a game where you sometimes count correctly and sometimes count incorrectly. Your child needs to decide which is which.

Helping Your Child (continued)

Your child's educator may suggest books you could read to your child and prompting questions you could pose that focus on counting. You could also read one or more of the following books:

10 Black Dots, by Donald Crews

8: An Animal Alphabet, by Elisha Cooper

Baby Goes to Market, by Atinuke

Doggies, by Sandra Boynton

Eggs and Legs: Counting by Twos, by Michael Dahl

Fish Eyes: A Book You Can Count On, by Lois Ehlert

Ten Little Ladybugs, by Melanie Gerth

The Right Number of Elephants, by Jeff Sheppard

Definitions

abstraction: the counting principle that says we can count any collection of items, including physical objects and intangible actions or sounds; a count of 4 large boxes will be the same as a count of 4 jumps or a count of 4 ladybugs

cardinality: the counting principle that says the number of items in a group is the last number you say when you count the items

conservation of number: the principle that says the number of objects does not change when those objects are rearranged

count back: to count in reverse order, for example, 5, 4, 3, 2, 1

count on: to count beginning with a number other than 1; for example, to count on from 3, you would say: 4, 5, 6, ...

counting principles: cardinality, conservation of number, one-to-one correspondence, order irrelevance, and stable order

non-standard unit: a unit that can vary in size, for example, a pencil, a footprint, a cup, a paper clip

one-to-one correspondence (one-to-one matching): each item in a group matches with only one item in another group, and vice versa; also the counting principle that says you say one number for each item that is touched while counting

Definitions (continued)

order irrelevance: the counting principle that says you can count a set of items in any order

ordinal number: a number that tells position in a series, for example, first, second, third

rote counting: saying the counting words, rather than counting objects

stable order: the counting principle that says you must say the numbers in the correct order when you count