

# How much is on the floor?

## Materials

Ordinary household clutter



*“Oh, Mom! Do I really have to clean up everything?”*

Sometimes a little math can make chores more interesting. In this activity, children estimate how many things are scattered on the floor (or in some other cluttered place) and then count the things as they put them away.

## Before you begin

Choose something your child can count and put away, such as crayons scattered on a table or toys on the floor. When you can't be available to help your younger children count, choose an area with limited clutter so that they'll be able to do the counting themselves. (Many 5- and 6-year-olds can count only 10 to 20 items accurately, even if they can recite the “counting numbers” much higher.)

## 1. Estimate how many things there are to put away

Ask your child to make an estimate—or to guess the number of items to be picked up.

*“About how many things are we looking at here—about 10? About 50? Closer to 100 or 1000?”*

Some children's estimates will be on the high side. They might say there are a thousand or even a million things on a messy floor. Over time, as they practice counting and estimating, their ability to judge amounts will improve.

## 2. Count the things as they are put away

Suggest that your children count each item that they put away. If you are supervising, you can help younger ones count as the numbers get larger.

## 3. Compare the actual count with the estimate

Part way through cleanup, give your child a chance to revise the original estimate.

*“You predicted that there were about 1000 books on the floor. So far, you put away 29, and there are just a few left. Do you still think there are about 1000? Do you want to change your prediction?”*

When the chore is done, compare the actual count to the latest estimate. If the estimate was “way off,” assure your child that an estimate is just a guess, and that learning to make close estimates can take a long time.

## Variations

### Would that be enough? (ages 5–9)

Decide on a particular number of things for your children to put away. Before they begin, ask them to predict whether that amount is “enough” to clear all the clutter. Vary the task for children of different ages.

**For ages 5–7: Give the children a total number of items.** *“Look at all these toys on the floor! If we put away 15 toys, do you think we’d get the floor clean? Or would there still be some left on the floor?”*

**For ages 7–9: Specify an amount for each of several people to pick up.** *“There are three of us here to unload the dishwasher. What if we each put away 14 things? Would that be enough to empty the dishwasher? Let’s try it and see.”*

### What’s the most? (ages 5–9)

Try this when there are different kinds of things to put away—for instance, when you’re sorting clean laundry that includes different kinds of clothes, or when there are different types of art supplies (markers, crayons, sheets of paper) on the table. First, make an estimate. Then count as you sort and put away.

*“Let’s take everything out of the clothes dryer. Do you think there are more socks, shirts, or towels in this load of laundry?”*

*“Who do you think has the most clothes in this load of clean laundry—you, Tony, Marco, me, or Mom? Let’s sort the laundry to see!”*

### How many can you put away in a minute? (ages 5–9)

This works well when there are lots of little things scattered around. First, everyone estimates how much they can put away in exactly one minute (or some other amount of time). Then an older child or adult is the timer while everyone else picks up and counts. When the time is up, compare your estimates with your actual counts.

## When you repeat this activity

To give children lots of practice judging amounts, try this activity in different situations: when there are small things like beads or buttons to put away, larger items like clothing or shoes, or items of all different sizes. If you’ve been helping young children count, see if they can do more of the counting themselves.

