

# Bean Counter

Math, Science, and Technology



**Level:** Preschool

**Cost:** Under \$5.00

**Mess factor:** Little

**Suggested room in the house:** Anywhere



It is ok to spill the beans in this activity because you can then count, sort and organize them all before putting them away again!

## Your child will experience:

- Counting
- Measuring
- Estimating
- Sorting by size, shape and color
- Building fine-motor skills



## Materials:

- Several kinds of small food items. Some recommended items are: dried beans, nuts in their shell and popcorn kernels.
- Several bowls
- One 8½ x11 sheet of paper torn in half

## Beginning:

Select a small number of beans, nuts or kernels to work with. About an adult-sized handful of each food item is plenty. Place each kind of food in its own small bowl. Let children grab a handful from each bowl and put them all together on the floor or table.



## Middle:

There are several different activities you can try:

### *Line-up*

See if children can place all of the kernels in a line. Then ask them to place a line of dried beans below it. Compare which line is longer. Use a ruler to measure in inches or feet how long the lines are.



### *Lost nuts*

As your children place a handful of food on the table say, "Oh, the poor little things are all mixed up and can't figure out how to get home. Let's see if we can get them home (back to the bowl). Take a piece of paper and put a few kernels on it. Pretend it is a car (or boat or plane) and drive the kernels back to their home. Give children their own pieces of paper, and let them do the same until all the food items are in the bowls.

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### Egg crate

Using an empty egg crate, start on the top left holder and write the number “1” in the bottom of the holder. In the next holder write the number “2.” Keep going until all the holders have been labeled up to 12. See if children can put one bean into the “1” holder and two beans in to the “2” holder and so on. Help them count out loud as they put the items in each holder.



### Groups

When all the beans, kernels and nuts are on the table mixed up, ask your children to sort them into groups. They might sort them by only color or size or kind of nut, which is fine, because it is the first way children categorize things — based on one characteristic or feature. Others might sort by more than one feature. To you, this might look like all the small and brown things going together, with children not caring whether they are nuts or beans.



Get to know how children are thinking by asking questions like “Tell me why you are sorting the beans that way”?

### End:

End the activity by putting all the items back in the correct bowl or container. You could count the number of handfuls or scoops it takes to clean them all up.

### Cleanup:

Have children help you put all the containers away.



### Younger children:

- Draw a circle, square and triangle on three separate sheets of paper. Place them on the table and show children how to place beans all around it. Let them place beans on the inside to create a unique picture.
- Let children use a glue stick to glue down the items in order to make a collage.

### Older children:

- Tell children what each of the food items is called. Have them write a label for each bowl.
- Have children pick two egg holders and ask them to add the number of beans together. For example, holder number “2” and “4.”
- Mix the numbers up as you write them on the egg holders, so that children have to read and recognize each one before putting the beans inside it.



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## Hints:

- Children can't choke on these items, but they do like to stick them in unusual places, so watch out for things going in the ears and nose!
- If you are not comfortable using a food product this way, find other items in your house or in nature that could be used in the same way. Rocks, sea shells and sticks are some other suggestions.



## More!

- Encourage children to sort other things throughout the day, like cars on the road and clothes that family members are wearing.

## Special Needs Accommodations:

- If allergies are an issue, try using other things, like dried cereal.
- To challenge a children's fine-motor development, have them pick up some small beans with small tongs or tweezers.

