

## Supplies

- “Guide for Families” handout
- Clear plastic standup display (optional)
- 1 sealable snack-sized plastic bag
- 2 sealable sandwich-sized plastic bags
- 3 sealable gallon-sized plastic bags
- 10-pound bag of flour
- Measuring cups (1 cup, ½ cup, ¼ cup)
- Permanent marker
- Clear packing tape
- “Ages” handout
- Durable paper
- Display table

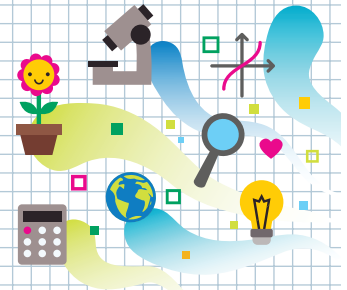
## Activity Preparation

- ▶ Purchase or locate items on supply list.
- ▶ Print one copy of the “Guide for Families” handout. Laminate or place in a clear plastic standup display to allow participants to see it more readily.
- ▶ Measure and pour the flour into the bags, and seal them ahead of time:
  - ¼ cup in snack bag
  - 2½ cups in sandwich bag
  - 3½ cups in sandwich bag
  - 7 cups in gallon bag
  - 11 cups in gallon bag
  - 6½ cups in gallon bag
- ▶ Use the permanent marker to label each sealable plastic bag with its contents, for example, “¼ cup,” “11 cups” and so on.
- ▶ Use the clear packing tape to attach plastic bags to the table. Tape all four sides. This will prevent the bags from being picked up and opened.
- ▶ Print two copies of the “Ages” handout on durable paper. Cut. Laminate, if desired. Place next to the plastic bags.
- ▶ Set up the display table with necessary supplies.





# HEADS IN, HEARTS IN



## Strong Bones = Calcium Guide for Families

### Learning Objectives

#### What you need to know:

There are 206 bones in the human body. Most bone growth occurs between the ages of 10 and 16. About 90 percent of adult bone mass is acquired by age 18 for girls and age 20 for boys. Our bodies stop building bone around the age of 30.

Your body needs lots of calcium to keep your bones strong. As you grow, your body needs more calcium so your bones will grow too. An adult with **osteoporosis** (a disorder in which bones lose calcium) has significantly less calcium in the bones.

To build strong bones:

- ▶ Eat foods rich in calcium and vitamin D, such as dairy products, broccoli and kale.
- ▶ Do regular bone-strengthening activities such as jumping rope, hopping, skipping, running and various sports.
- ▶ Don't smoke.

#### What you will do and learn:

If calcium was removed from our bones, it would look like flour. In this activity, you will match the bags of flour (which represent the amount of calcium in the bones) to the age of a person. This will reinforce the idea that people build bones as they get older but then bone building stops.

### Instructions

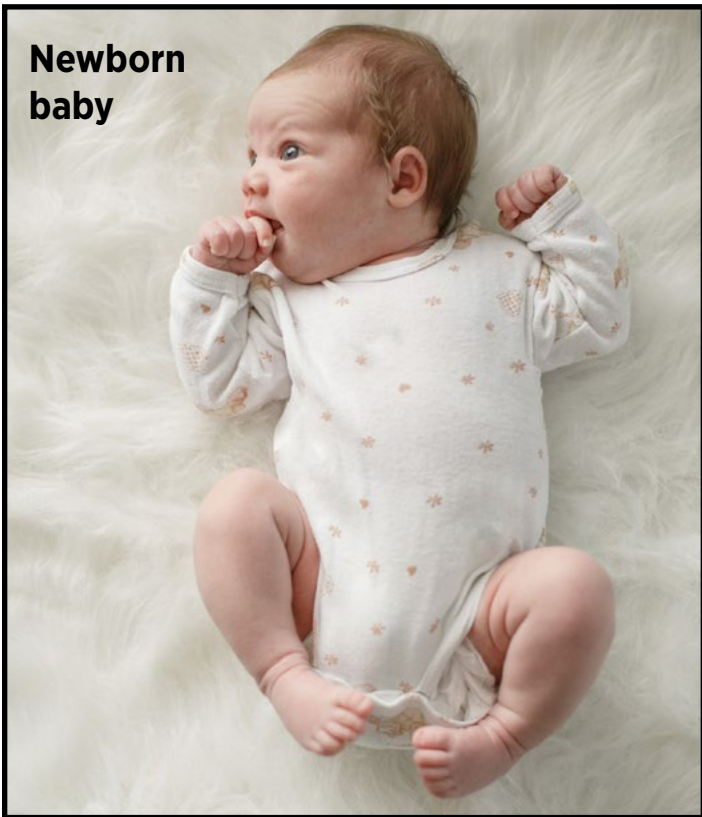
1. Guess how much calcium is in each person's bones based on their age.
2. Match the picture with the flour bags.
3. Check the following answer key to see if you were correct.

### Answer Key:

- ▶ ¼ cup in snack bag .....newborn
- ▶ 2½ cups in sandwich bag .....5-year-old
- ▶ 3½ cups in sandwich bag.....10-year-old
- ▶ 7 cups in gallon bag ..... 15-year-old
- ▶ 11 cups in gallon bag.....adult
- ▶ 6½ cups in gallon bag.....adult with osteoporosis

# Ages

## Strong Bones = Calcium Handout



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# Ages

## Strong Bones = Calcium Handout, continued

**Adult**



**Adult with osteoporosis**



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