

# An Apple a Day

## Lesson Plan

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### The Task

Have you ever heard someone say, “An apple a day keeps the doctor away”? At a local grocery store, you can buy a bag of 8 apples for \$5.00. If everyone in your family ate one apple every day, how much money would your family spend in one year on apples?

#### Materials

- Extra paper for students to sketch out ideas
- Manipulatives, such as cubes or chips

#### Facilitating Task

- Although the task is written for individual students to consider their own respective families, you could allow students could work with a partner.
- Students will need to consider their own family size, and the number of days in a year in order to answer the question.
- As students work, circulate around the class, listening for places students may be stuck, and for strategies you may want to be shared with the class
- Whole class discussion: Select a few students to share their approaches. Because student family sizes vary, call attention to the strategies used to generalize methods regardless of family size.

### **Misconceptions**

- Students may need to discuss that different family sizes will result in different answers, since many problems they have experienced have only one answer.
- Students may have trouble coordinating quantities and keeping track of what each number represents in the context of the problem (apples, bags, money, days)
- Students may have different approaches (focusing on apples, bags, or money) and may struggle to understand someone else's approach when sharing with the whole group.

### **Suggested Prompts or Questions**

Supporting thinking:

- How many people are in your family?  
How will you use that information?
- What have you done so far? What will you need to figure out next?
- How will you know if your answer makes sense?

Extending thinking:

- What if there were\_\_people in your family? How could you use what you've already figured out to solve that problem quickly?
- What can we say about the cost per person to eat "an apple a day"?