




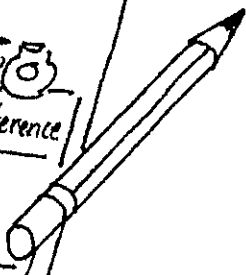
Estimating

One of the most important concepts that students learn through estimation activities is that it is not always necessary to find an exact answer. Help students develop basic strategies for arriving at reasonable estimates and refining their estimates. These center activities focus on estimating quantity, area, and duration of time.

Name Rhonda

Estimation Jars 


Jar	My Estimate	Actual Number	Difference
 A	45 bottle caps	39	6
 B			



Estimation Jars

Teaching Tips and Extensions

- ☆ Fill each jar with a different kind of object. Use a total number of objects appropriate for your students.
- As an alternative, vary the sizes of the jars but use the same objects in all the jars.
- Have an estimation contest with a jar of jelly beans or other treat.




Materials

- Estimation Jars reproducibles (pages 37-38)
- 5 identical jars, labeled A, B, C, D, E
- bottle caps, blocks, toy figures, walnuts, crayons, or other objects to fill the jars

Materials

- Estimating Area reproducibles (pages 39-40)
- 6-8 pieces of yarn cut in various lengths, ranging from 15" (38 cm) to 40" (102 cm)
- masking tape
- small cubes



Estimating Area


Teaching Tips and Extensions

- Make sure students securely tape the ends of each piece of yarn together.
- Have students work on a textured surface. The yarn shape tends to change on smooth surfaces.
- Ask students to describe the difference between the shape that held the most cubes and the shape that held the least cubes.

Estimating Time

Teaching Tips and Extensions

- Teach students how to operate a stopwatch. If the wall clock has a second hand, students could use it to time the activities.
- Remind students to use the most appropriate unit of time (seconds or minutes) when making estimates.



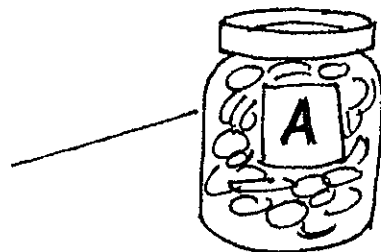
Materials

- Estimating Time reproducibles (pages 41-42)
- stopwatches with second hands

Estimation Jars

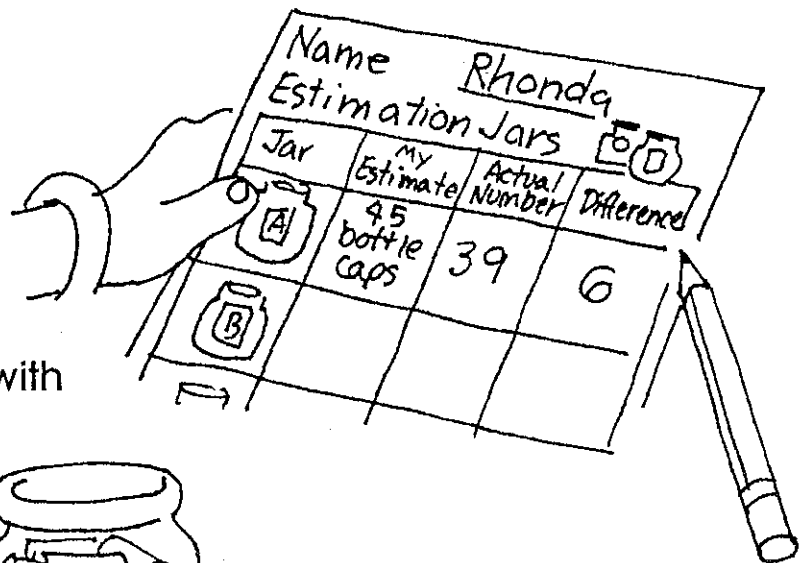
1

Pick a jar. Estimate how many objects are in the jar. Write your estimate on your Estimation Jars sheet.



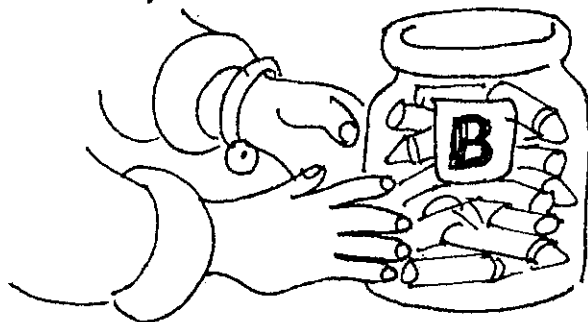
2

Count the objects in the jar and write the actual number. Compare your estimate with the actual number. Write the difference between the two numbers.



3

Repeat the activity with 4 other jars.



Challenge

Work with a partner. Each of you fill a jar with objects. Estimate how many objects are in each other's jar. Count the objects and see who comes closest to the actual number.