

ESTIMATION ACTIVITY

es-ti-mate - verb - roughly calculate or judge the value, number, quantity, or extent of

Today we are going to be guessing and predicting amounts, distances, and lengths. This will help us become better at estimating. Working in groups of two, complete the following exercises.

A.) Estimating Quantity

People in a Crowd:

1. Guess how many people are in this picture: _____



3. Actual # of people in picture:

4. How accurate was your guess? How could you estimate the size of a crowd w/o a birds-eye view?

2. Come up with some ways of better approximating the amount of people in the picture.

2A. People in the picture, method 1: _____
Describe method:

2B. People in the picture, method 2: _____
Describe method:

6. Same Methods?

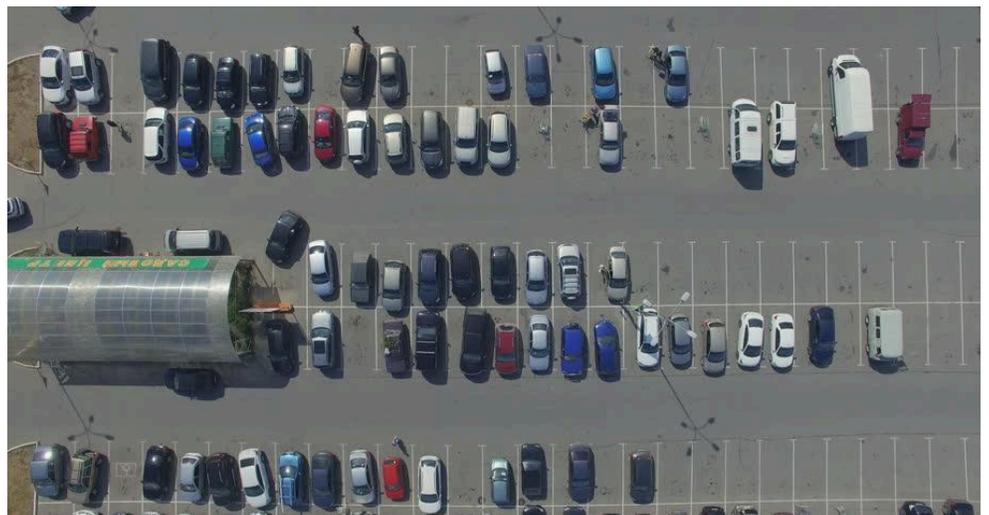
7. Better Methods?

Cars in Parking Lot

5. Guess how many cars are in this lot: _____

6. Can you use the methods for counting people in a crowd? Why or why not?

7. Come up with some ways of better approximating the amount of cars that fit into a parking lot. Write them below.



B.) Estimating Distance – Gait Measurement

1. Measure how many steps it takes you to travel 100 feet. Repeat three times, then take the average.

2. Find the distance you travel in 1 step.
Math: $100 \text{ ft} / (\text{avg. steps}) \Rightarrow \text{feet} / \text{step}$

	Trial 1	Trial 2	Trial 3	Average
Steps				

Distance you travel in 1 step: _____

C.) Estimating Size/Length

You can use parts of your body or objects around you to help guess long or how far away something is

1. Use a ruler/measuring tape to measure the following (remember to include units!):

Length of your pointer finger: _____

Length of your shoe: _____

Length of your phone: _____

Your height: _____

Width of your thumb: _____

Your Pencil

2. Find some objects around you that can be measured. Using the known values above, estimate how large the object is (length, width, and/or height). Then measure it and see how accurate you were. Try a variety of differently sized objects. Remember to include units.

Object 1: _____

Size Estimate:

Actual Size:

Object 2: _____

Size Estimate:

Actual Size:

Object 3: _____

Size Estimate:

Actual Size:

Object 4: _____

Size Estimate:

Actual Size:

3. Find some objects around you that you can measure the distance to. Using the known values above, estimate how far away the object is. Then measure the distance and see how accurate you were. Remember to include units.

Object 1: _____

Length Estimate:

Actual Length:

Object 2: _____

Length Estimate:

Actual Length:

Object 3: _____

Length Estimate:

Actual Length:

Object 4: _____

Length Estimate:

Actual Length: