

DICE DATA

Objective: Collect and organize statistical data generated from activities with manipulative materials.

Materials: Dice Data Activity Sheet
Dice Data Activity Sheet Transparency
One die per participant

Procedures:

1. Participants will roll a die and record the total number of rolls it took to roll all numbers.
2. Repeat for 15 trials.
3. Find the median for the trials.
4. Compile results from entire class to investigate if a larger sample changes the "averages."

Extensions:

1. Use computer software to generate the data. Do 1000 trials.

Notes

1. Statistically, the average number of times the die needs to be rolled before all six numbers occur should be about 12. With the small samples generated, expect larger "averages."

DICE DATA

Roll a die and record the numbers that result from each roll on the chart below. Continue rolling the die until you have rolled a 1, 2, 3, 4, 5, and 6. Record the total number of rolls it took for you to do this and then start on the next try. A sample try that ended when a 5 was rolled is shown below.

Try	1	2	3	4	5	6	Total Rolls
(Sample)							15
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							

1. What was the median number of rolls it took for all six numbers to appear?
