









## Student Activity- Dice Rolling and Probability

(N)(A)(M)(E): \_\_\_\_\_


1. Open a new document and add Lists and Spreadsheet.
2. Move to the top of List A, and type the name for that column variable, "die". This is where you will simulate rolling a regular 6-sided die.
3. Use the command line and `=randint(1,6,100)` to guarantee outcomes that are integers between 1 and 6, rolled 100 times. Phew! You wouldn't want to have to roll a die 100 times and record all of that data...
4. When you press , you will see the column filled with random integers for you! If you would like to resize the column, use the  Actions, resize command.
5. Insert a page   with the Data and Statistics application. This is where you will make a Dot Plot that shows the frequency of each outcome.
6. Hover over the bottom where it says "click to add variable." When you  there, the only choice (so far) will be your variable "die" that is the heading for column A in your spreadsheet. Click it.
7. A very nice dot plot appears, but you may not like the labels for the numbers on the bottom axis. If you wish to change the numbers, choose    to change them
8. What outcome was the most frequent?



The least frequent?

Is this what you expected the results to be?

9. Repeat the procedure to create a second column of dice rolls called "die2". You may resize the column, and you should add a second dot plot. Are your results similar, the same, different?

Explain why:

10. Now, create a third column that will add together the two separate dice rolls. At the top of column C, type the variable name "total". In the command line below, =, then press the  button to have access to your other column

headings. Choose each variable, and add them. It will look like:  when you are done. Hit .





11. Insert another page with the Data and Statistics Application. Click on the variable line, and choose total. Again, you may not like the numeric labels on the axis, so you may change them if you wish.

What was the most frequent total rolled?

What was the least frequent total?

Was this what you expected?

Explain:

12. Save your document by pressing     to Save as... and then name it "di cer oll \_your name".