Dylan's Dominoes

You need ★ 2 dice (1–6) ★ a computer spreadsheet/graphing program ★ classmates

Activity

Dylan the domino designer makes maths dominoes. To make sure that he ends up with a variety of dominoes, he rolls two 1–6 dice and puts the two numbers that come up onto a blank domino.

He then adds up the dots on the domino and puts it in the cup with that total on it.

1. Dylan needs more cups. What dot totals are missing?
2. Dylan finds that some cups fill up faster than others.
   a. Draw up a table that shows all the possible totals.
   b. Which cups are likely to fill the fastest? With the help of your table, explain your reasoning to a classmate.
3. Roll two dice 40 times, recording the total for each roll. Create a graph from this data. How close is it to what you expected? Compare your results with those of your classmate.
4. Pool your data and the data of classmates who have carried out this experiment. Graph this data. How close is it to what you might expect? Explain.

Focus Comparing experimental results with expectations