

1. Data Management

Probability Grade 7
D-21, D-22,D-23,D-25
D-30, D-31, R-16

Materials: two dice, each of a different color
calculator

1. List all the possible outcomes if you toss two regular six-sided dice. e.g. (1,1), (1,2)

2.
 - a) Which of the above outcomes are favourable if you want to roll a sum of 7?
 - b) What is the probability of rolling a sum of seven if you roll 2 regular six-sided dice.
 - c) How many times would you expect to obtain a sum of seven if you roll 2 regular six-sided dice 100 times.
 - d) What are the odds of rolling a sum of 7 if you roll 2 regular six-sided dice.
 - e) Use the dice and roll one hundred times to see how close you meet those odds in d).

Tally as you roll:

| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|----|----|----|
| | | | | | | | | | | |

- f) Express the number of times you rolled each sum as a percent.

- g) Are sevens really lucky??? Explain your answer.

- h) Why are you more likely to get a sum of 6, 7 or 8 rather than a sum of 2 or 12?

When you have completed this station,
place your answer sheet in your portfolio.
Label your portfolio entry.

Please tidy up the station.

2. Data Management

Probability Grade 7
D-27

Materials: cards
cubes
dice
spreadsheet program with random numbers
paper bags or containers

A particular brand of cereal includes one of six hockey cards in each cereal box.

Using any of the above materials, design a simulation to arrive at estimating how many boxes you would need to purchase in order to get at least one of each hockey card.

It may be easier to write your answer as step by step instructions.

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