

CC2 1.2.3: 1-75, 1-77, & 1-79 Student eTools (CPM)

Click the links below.

[CC2 1-75 Student eTool \(CPM\)](#)

[CC2 1-77 Student eTool \(CPM\)](#)

[CC2 1-79 Student eTool \(CPM\)](#)

CC2 1-75:

Click on the bag to select a block randomly.

CPM Probability

CC2 1-75 Student eTool

1-75. Your team will be given a bag containing a set of colored blocks or counters. Each team will receive a bag that is identical to yours.

a. Look at the blocks in your bag. If you were to reach into the bag and select one block without looking, what is the likelihood that it would be:

- Red?
- Green?
- Blue?
- Orange?

b. Do your answers for part (a) represent theoretical or experimental probabilities? Justify your response.

HINT: Click on the bag to select a block randomly.

► Probability Tools

► General Tools

This bag contains 1 yellow, 2 red, 4 green and :

CC2 1-77:

Click on the bag to select a block randomly.

⚙️ ? CPM Probability
◀

CC2 1-77 Student eTool

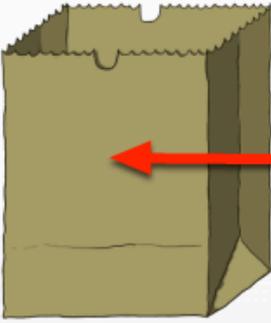
1-77. DOUBLING BAGS

Now imagine that you and another team have combined the blocks from both of your bags into one bag. Explore this concept where two bags from 1-75 are combined.

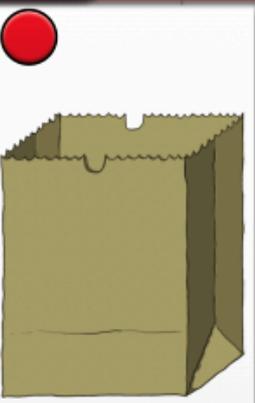
a. Do you think the larger sample space will change the likelihood of drawing blocks of different colors? Discuss this with your team and be ready to explain your ideas to the class.

b. Get a second bag of blocks from your teacher and combine the contents of both bags. How many total blocks are there in the bag now? How many are there of each color?

c. Work with your team to find the theoretical probability for selecting each color of block in the combined



This bag contains 2 yellow, 4 red, 8 green and



CC2 1-79:

Click on the spinner to spin.

⚙️ ? CPM Probability
◀

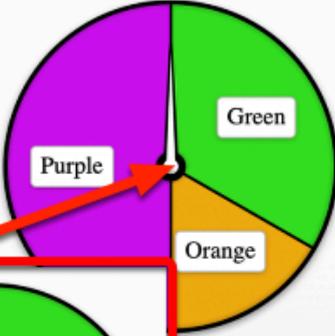
CC2 1-79 Student eTool

1-79. Additional Challenge: Play a game with the spinner while keeping score as follows:

- Every time you spin purple, you lose two points.
- Every time you spin green, you get one point.
- Every time you spin orange, you get three points.

If you play this game for a long time, do you think it is more likely that you will end up with a positive score or a negative score? Make a prediction and then try it out. You may want to keep score with counters.

▶ Probability Tools
▶ General Tools



Spinner to spin!

