

April 28, 2015 ^{1st}
^{2nd}
Get out your homework



Liberal

4/28 Experiments/Outcomes/Events

An **experiment** is an investigation or a procedure that has varying results. The possible results of an experiment are called **outcomes**. A collection of one or more outcomes is an **event**. The outcomes of a specific event are called **favorable outcomes**.

For example, randomly selecting a marble from a group of marbles is an experiment. Each marble in the group is an outcome. Selecting a green marble from the group is an event.

Possible outcomes



Event: Choosing a green marble

Number of favorable outcomes: 2



Experiment: Roll a die

There are 6 possible outcomes.

Out of 20 rolls, you think you will roll a 1 $\frac{3}{4}$ times.

Event: Roll a die 20 times. Tally your outcomes in a table.
How close was your guess? How many favorable outcomes were there?

roll	#	roll	#
1	2	11	2
2	3	12	1
3	4	13	5
4	6	14	3
5	3	15	6
6	5	16	5
7	5	17	1
8	1	18	5
9	2	19	6
10	1	20	1



Experiment: Flip a coin

There are 2 possible outcomes.

Out of 20 flips, you think you will flip heads 10 times.

Event: Flip a dime 20 times. Tally your outcomes in a table.
How close was your guess? How many favorable outcomes where there? *Exact!*

10



#	H/T	#	H/T
1	T	11	H
2	H	12	H
3	H	13	T
4	T	14	H
5	H	15	T
6	H	16	T
7	T	17	T
8	H	18	H
9	T	19	H
10	T	20	T



Work with a partner. Use the spinner to the left.

a. Do you have a better chance of spinning an even number or a multiple of 4? Explain your reasoning.

Even because there are more favorable outcomes for even than multiples of 4.

b. Do you have a better chance of spinning an even number or an odd number? Explain your reasoning.

Same, favorable outcomes are the same.

Rock-Paper-Scissors

Work with a partner.

a. How many possible results are there? **9**

b. Of the possible results, in how many ways can Player A win? Player B win? the players tie?
3, 3, 3

Rock breaks scissors.
Paper covers rock.
Scissors cut paper.

		Player A Jacob		
		Rock	Paper	Scissors
Player B London	Rock			
	Paper			
	Scissors			

Tie

c. Does one of the players have a better chance of winning than the other player? Explain your reasoning. **No**

d. Play Rock Paper Scissors 30 times. Tally your results in the table.

Randomly chose one of these
marble out of a bag



a. How many possible outcomes are there?

8

b. In how many ways can choosing blue occur?

2

c. In how many ways can choosing *not* yellow occur? What are the favorable outcomes of choosing *not* yellow?

5

Blue², red, green, purple, blue¹

Homework

Pink WS 3

Due Wednesday