

# Probability and Chance

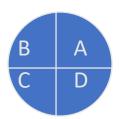


- Probability is a measure of how likely it is for an event to happen.
- We name a probability with a number from 0 to 1.
- If an event is certain to happen, then the probability of the event is 1.
- If an event is certain not to happen, then the probability of the event is 0.

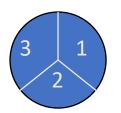
## Probability

• If it is uncertain whether or not an event will happen, then its probability is some fraction between 0 and 1 (or a fraction converted to a decimal number).

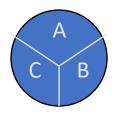




1. What is the probability that the spinner will stop on part A?



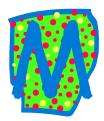
- 2. What is the probability that the spinner will stop on(a) An even number?
- (b) An odd number?



3. What fraction names the probability that the spinner will stop in the area marked A?

## Probability Activity

- In your group, open your M&M bag and put the candy on the paper plate.
- Put ten brown M&Ms and five yellow M&Ms in the bag.
- Ask your group, what is the probability of getting a brown M&M?
- Ask your group, what is the probability of getting a yellow M&M?

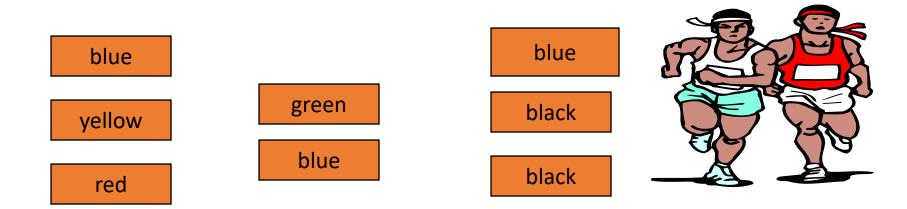


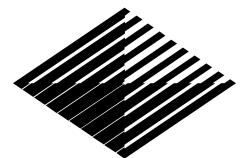


- Another person in the group will then put in 8 green M&Ms and 2 blue M&Ms.
- Ask the group to predict which color you are more likely to pull out, least likely, unlikely, or equally likely to pull out.
- The last person in the group will make up his/her own problem with the M&Ms.

#### **Probability Questions**

• Lawrence is the captain of his track team. The team is deciding on a color and all eight members wrote their choice down on equal size cards. If Lawrence picks one card at random, what is the probability that he will pick blue?

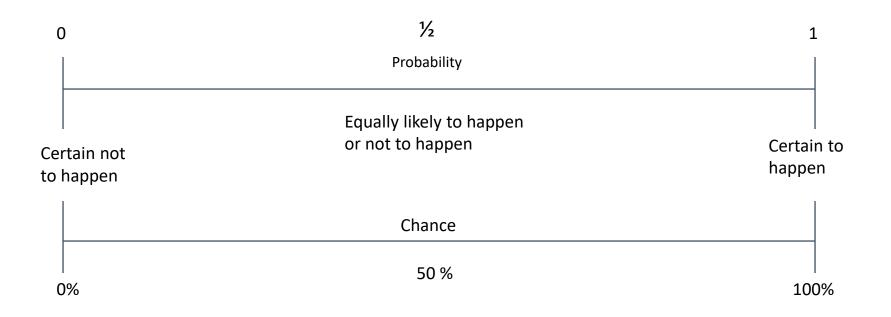




- Donald is rolling a number cube labeled 1 to 6. Which of the following is LEAST LIKELY?
- A. an even number
- B. an odd number
- C. a number greater than 5

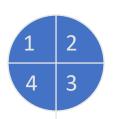
### CHANCE

• Chance is how likely it is that something will happen. To state a chance, we use a percent.



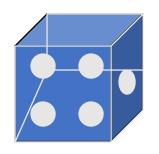


• When a meteorologist states that the chance of rain is 50%, the meteorologist is saying that it is equally likely to rain or not to rain. If the chance of rain rises to 80%, it is more likely to rain. If the chance drops to 20%, then it may rain, but it probably will not rain.



1. What is the chance of spinning a number greater than 1?





- What is the chance of spinning a 4?
- 3. What is the chance that the spinner will stop on an odd number?

4. What is the chance of rolling an even number with one toss of on number cube?