

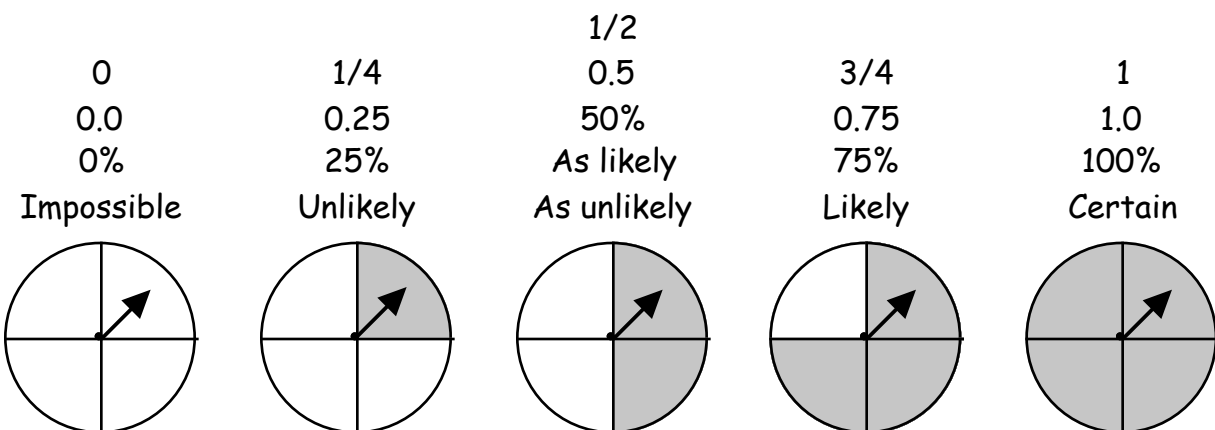
Probability Concentration

Module 9-Probability

Your child is studying the concept of probability. It is helpful to know if something is likely or unlikely to happen. Probability helps you decide how often something is likely to happen. It is useful if you can use a number to describe that likelihood.

The probability of an event can be any number from 0 through 1. It can be written as a fraction, a decimal, or a percent. If the probability of an event is 0, it is impossible. If an event is certain, it has a probability of 1. The more unlikely an event is, the closer its probability is to 0. The more likely an event is, the closer its probability is to 1. For example, if you spun the five spinners below, what would be the probability that you would land on gray?

What is the probability that the spinner will land on gray?



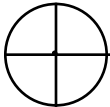
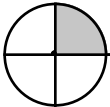
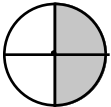
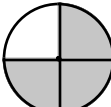
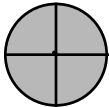
This game will help your child learn about probability.

Materials:

Probability Concentration Cards (cut out all three pages)
Pencil and paperclip

Object of the Game:

Players will match like cards that answer the question "What is the probability that the spinner will land on gray?" The cards that match are the following:

 0 0.0 Impossible	 $\frac{1}{4}$ 0.25 Unlikely	 $\frac{1}{2}$ 0.5 As likely As unlikely	 $\frac{3}{4}$ 0.75 Likely	 1 1.0 Certain
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Directions:

1. Cut out all 20 Probability Concentration Cards and shuffle the deck.
2. Arrange the cards face down in rows and columns in an organized way.
3. Player 1 turns over two cards. If the cards match (name/describe the same probability), he/she takes the cards and they are no longer in play.
4. If the cards do not match, the cards are turned back over and they continue to be in play.
5. Player 2 follows steps 3 and 4.
6. The game is over when all the matches have been found.
7. The player with the most cards wins the game.

Extension:

Experiment with each spinner.

Using a paper clip and a pencil, spin each spinner 20 times.

Did your results match the probabilities listed above?

What happens if you spin each spinner 40 times?

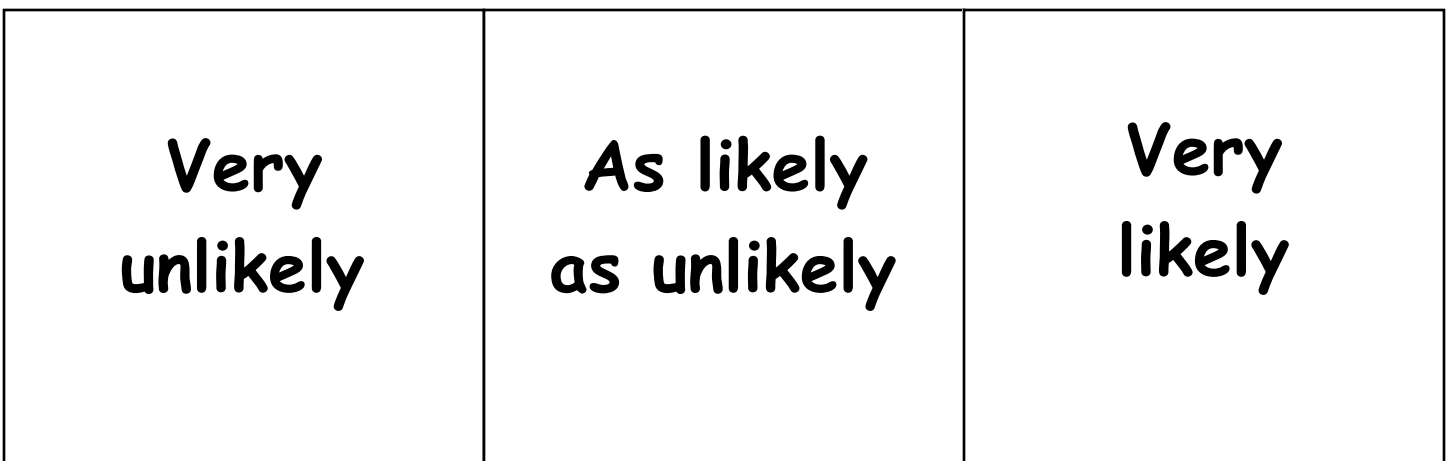
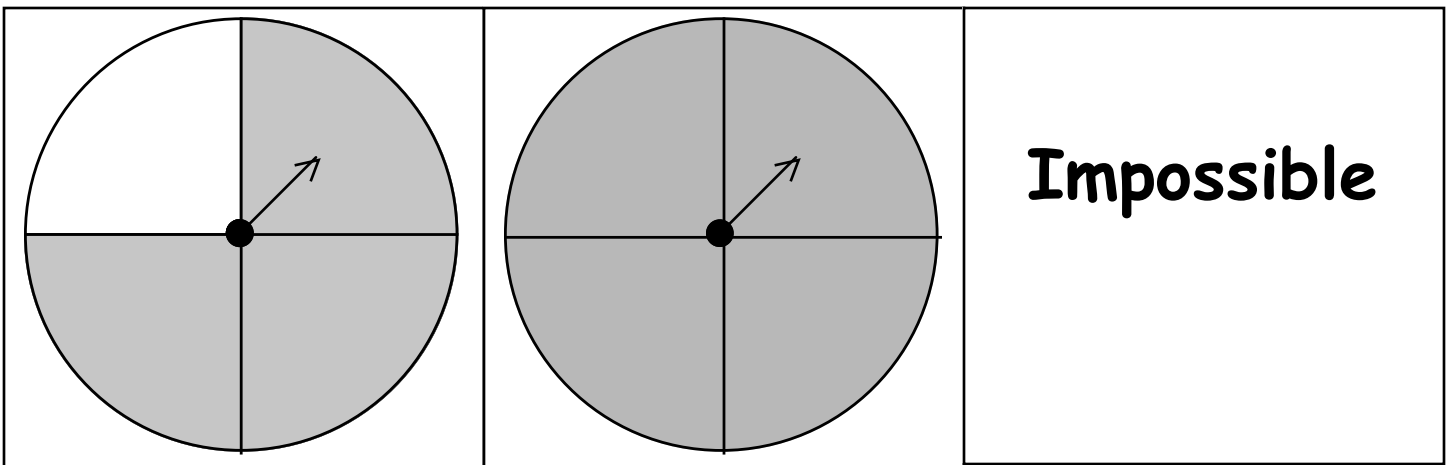
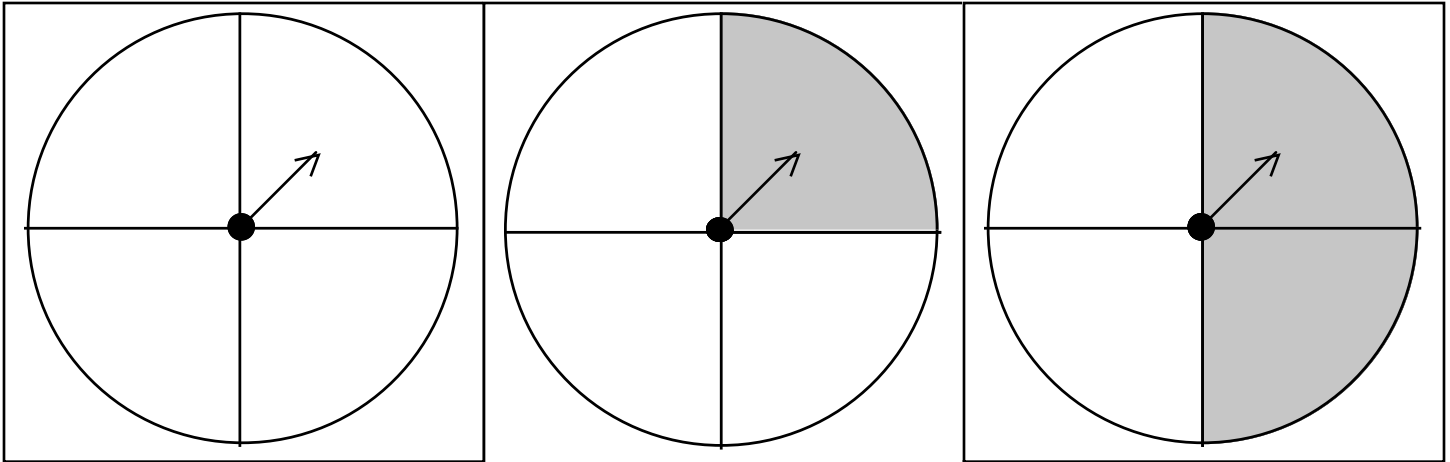
Questions to ask your child while playing:

Why would the probability be _____?

Why would it be (impossible, unlikely, equally likely, likely, or certain) that the spinner would land on the gray?

PROBABILITY CONCENTRATION CARDS, 1

What is the probability that the spinner will land on gray?



PROBABILITY CONCENTRATION CARDS, 2

What is the probability that the spinner will land on gray?

Certain	0	$\frac{1}{4}$
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$\frac{1}{2}$	$\frac{3}{4}$	1
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0.0	0.25	0.5
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PROBABILITY CONCENTRATION CARDS, 3

What is the probability that the spinner will land on gray?

0.75

1.0

0.75	1.0	
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