

Prize Spinner

M2C3 Project (2018)

A fraction task



What kinds of board games do you play at home?

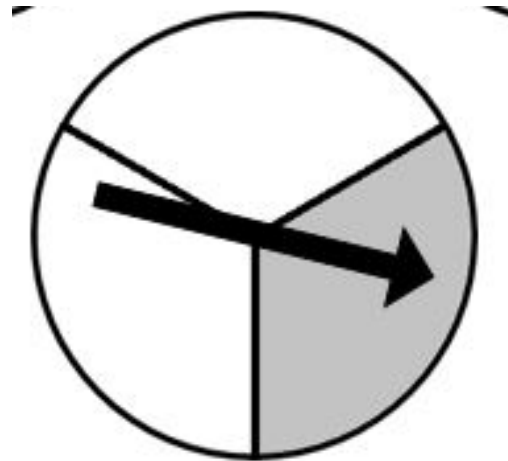
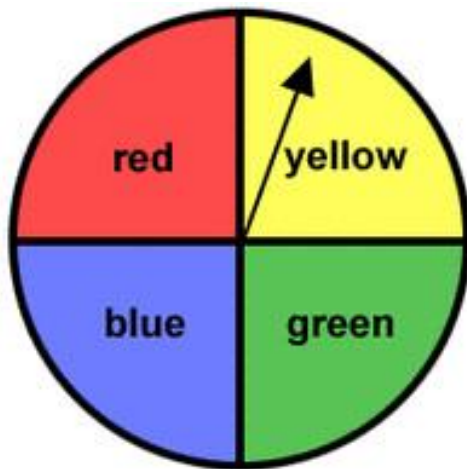
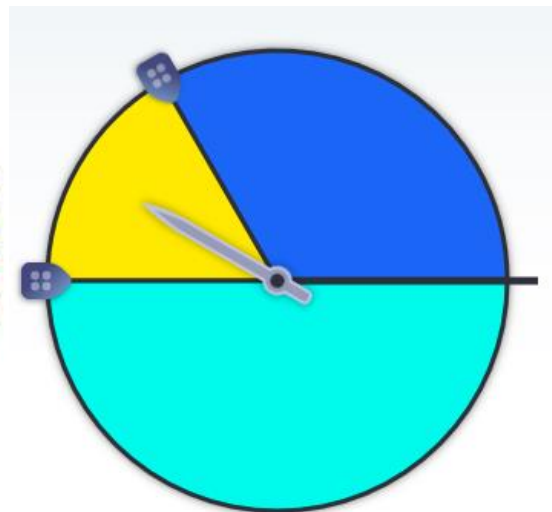


Some games that use spinners.

What games have you played that used spinners? Can you think of other times you have seen the use of spinners?



What do you notice?
What do you wonder?



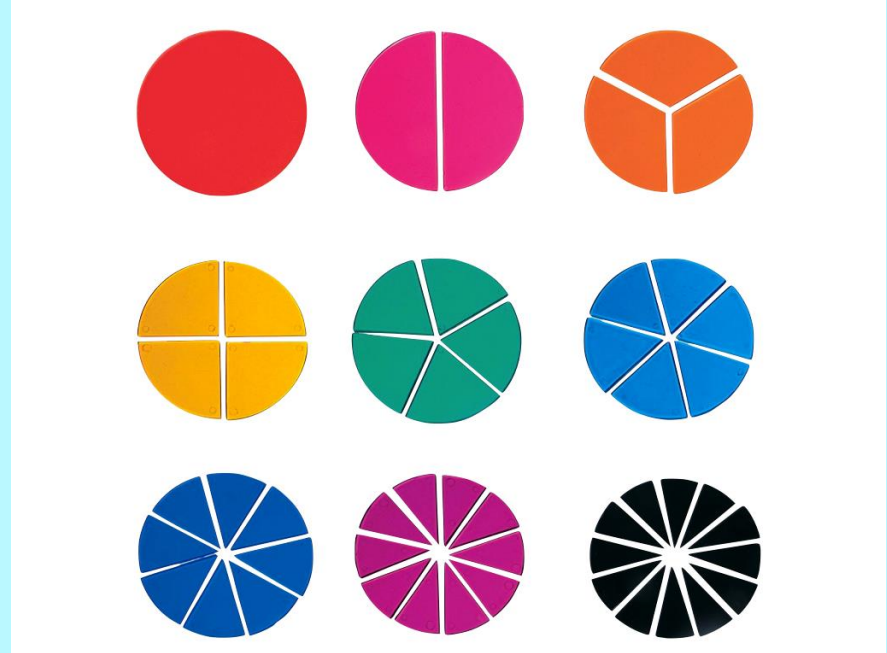
What would you need to consider when making your own prize spinner?

hmmmm...

Warm-up

Explore with fraction circles.

Find combination of fractions piece that make whole circles and those that do not make whole circles.



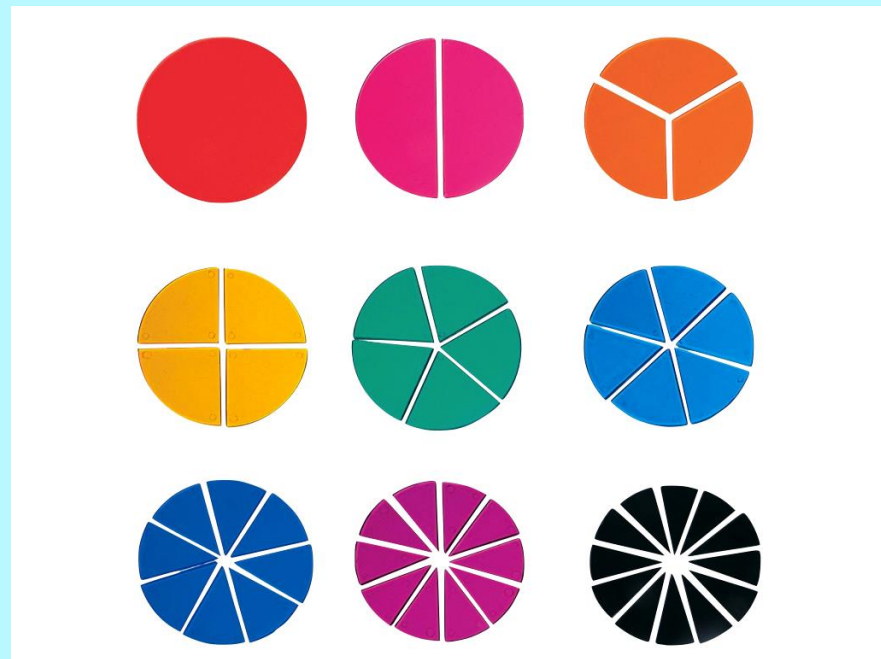
Version A Task:

Explore with fraction circles

Design your own spinner prize wheel using fraction circles.

Give examples of solutions fraction circle pieces that would not form a whole circle and those that would.

Develop a method that your class can use to create a variety of prize spinners with different combinations of fraction circle pieces.



Version B: Creating a Spinner for a Reward System

Here is
how one
school
uses
spinners for
prizes...



Version B Task: Class/School Reward

Reward systems are a great way to recognize kindness, helpfulness, responsibility and other positive contributions to our school. What would you like to encourage at your school? Design a reward system that uses a spinner to give out prizes for positive contributions to your school.

In your groups:

- Determine what you would like to encourage at the school
- Design a spinner for the rewards (prizes) using fraction circles
- Determine rewards that you would give and what portion/fraction of the spinner you want for each reward
- Write a proposal to your teacher or principal describing how you determined the behaviors, rewards and spinner

Version C Task: Carnival Prize Wheel Game

At the spring carnival, there will be a prize wheel game. Students can buy tickets to spin the wheel and win prizes. Our class gets to design the prize wheel game. The game should help raise money for the school, and it should be fun to play.

In your groups:

- Design a spinner for the game using fraction circles
- Determine prizes for the game and decide what portion/fraction of the wheel you want for each prize
- Consider the number of people that might play the game, and estimate the number of each prize needed
- Extension: Find a fair number of tickets students should pay to play
- Extension: Estimate how much money the game will raise

Other videos-- Make a spinner



Other videos Carnival spinners




Test it out with NCTM's spinner app

Number of spins: Spin Skip to End Reset

Number of spins so far: 0

Color	Count	Experimental %	Theoretical %
Blue	0	0.0%	16.7%
Yellow	0	0.0%	7.0%
Cyan	0	0.0%	12.5%
Red	0	0.0%	19.0%
Purple	0	0.0%	28.1%
Lime	0	0.0%	16.7%



% 🎯

Number of sectors: ◀ ▶