



the answer key

What are the Odds

Previsit Activities

- With 2 players, the game has 9 different outcomes.

paper	rock	rock	rock	scissors	rock
paper	scissors	rock	scissors	scissors	scissors
paper	paper	rock	paper	scissors	paper
- There are 3 ways you can win, 3 ways you can lose and 3 ways you can tie.
- Probability of winning = $1/3$
- Probability of losing = $1/3$
- On average after 300 rounds:
 You will spend \$20 and win \$10.
 Your partner will spend \$20 and win \$10.
 The charity will spend \$0 and win \$20.

The Probability Quiz & The Probability Quiz 2

Youth Edition

- d
- b
- b
- b

- a
- c
- d
- c
- b

10. b

Highschool Edition

- a
- c
- c
- d

- b
- c
- c
- a

Exhibit Activities: Questions

- a
- b
- prizes are not distributed evenly, prizes are only distributed during certain periods of time
- c
- b, at $1/5$
- b, no chance of rolling a 1
- a
- c
- answers will vary
- d
- Bingo - chance, Football - skill, Snakes and Ladders - chance, Hoopsey - both, Monopoly - both
- being able to shoot hoops
- being able to get the ball to land in the "win" bin
- a
- c

Exhibit Activities: Matching

- | | |
|---|-----------------------------|
| Up or Down?
(landing teeth up) | varies from $1/11$ to $1/1$ |
| Medusi-Os
(getting the cobra) | $1/2$ |
| Missing Sock
(finding the matching sock) | $1/2$ |
| Probnopoly
(rolling a 2) | $1/4$ |
| Probnopoly
(rolling a 7) | $1/6$ |
| Exam Cram
(getting an A) | $1/36$ |
| Weigh In
(being the 1 millionth person to weigh in) | $1/100$ |
| Nit Pick Picnic
(finding the red bead) | $1/1,000,000$ |
| The Big Game
(getting the ball in the 'win' bin) | $1/14,000,000$ |