

Textbook Unit 7 Lesson 6 Answers

- a) The outcomes are: green tile, yellow tile, and a blue tile.
b) There are 7 tiles in total.
i) green $\frac{2}{7}$ ii) yellow $\frac{4}{7}$ iii) blue $\frac{1}{7}$
- There are 13 girls and a total of 30 students. So the theoretical probability that a girl's name will be picked first is $\frac{13}{30}$.
- a) The outcomes are: landing on black, white, yellow, or red.
b) i) black $\frac{1}{4}$ ii) red $\frac{1}{4}$ iii) yellow or white $\frac{2}{4}$ or $\frac{1}{2}$ iv) not yellow $\frac{3}{4}$
- a) Possible outcomes: 1, 2, 3, 4, 5, 6
b) Probability of rolling a 1 is $\frac{1}{6}$ Even number: $\frac{3}{6}$ or $\frac{1}{2}$ Greater than 4: $\frac{2}{6}$ or $\frac{1}{3}$
- a) The outcomes are: black, red, orange, and green.
b) i) black $\frac{9}{70}$ ii) green $\frac{13}{70}$ iii) red or orange $\frac{48}{70}$
- a) $\frac{2}{5}$ b) $\frac{4}{12}$ c) $\frac{3}{7}$ d) $\frac{4}{8}$ or $\frac{1}{2}$
- a) The outcomes are: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10
b) Odd number: $\frac{5}{10}$ or $\frac{1}{2}$
c) $\frac{1}{5} = \frac{2}{10}$ The digit must occur in 2 of the 10 outcomes. The digit is 1 which occurs in the numbers 1 and 10.
- The probability of landing on a star on the first wheel is $\frac{2}{8}$ or $\frac{1}{4}$
The probability of landing on a happy face is $\frac{1}{5}$ so there is a better chance of winning on the first spinner.
- The total number of students is 30.
a) $\frac{3}{30}$ b) $\frac{1}{30}$ c) $\frac{8}{30}$ d) $\frac{28}{30}$
- a) Color one cube yellow and five cubes blue
b) Color three cubes yellow and three cubes blue.