Chapter 1 BLM Answers

BLM 1–3 Chapter 1 Word Puzzle
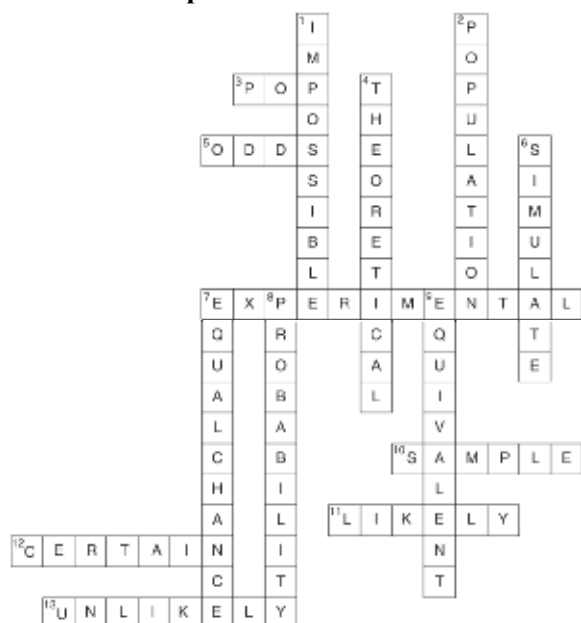
Across

 3. POP
 5. odds
 7. experimental
10. sample
11. likely
12. certain
13. unlikely

Down
1. impossible
2. population
4. theoretical
6. simulate
7. equal chance
8. probability
**9.** equivalent

BLM 1–4 Chapter 1 Test

1. Theoretical probability is the chance of something happening in a perfect world. If you flip a coin 10 times, the theoretical probability of getting heads is $\frac{5}{10}$.

Experimental probability is the ratio of the number of times an event occurs compared to the total number of trials. If you flip a coin 10 times, you probably will not get 5 heads and 5 tails.

2. a) $\frac{4}{52}$ or $\frac{1}{13}$
 b) 0.50
 c) 50%
 d) 0
 e) 0.5
 f) 5.6%
3. a) (4, 1), (3, 2), (2, 3), (1, 4), (5, 1), (4, 2), (3, 3), (2, 4), (1, 5), (6, 1), (5, 2), (4, 3), (3, 4), (2, 5), (1, 6)
 b) $\frac{4}{36}$
 c) $\frac{1}{9}$
4. a)–b) Answers will vary.
 c) experimental
5. Answers are in italics.

	Fraction	Decimal	Percent
a)	$\frac{3}{4}$	*0.75*	*75%*
b)	$\frac{2}{5}$	*0.4*	*40%*
c)	$\frac{6}{10}$ or $\frac{3}{5}$	0.6	*60%*
d)	$\frac{5}{100}$ or $\frac{1}{20}$	0.05	*5%*
e)	$\frac{8}{10}$ or $\frac{4}{5}$	*0.8*	80%

6. a)
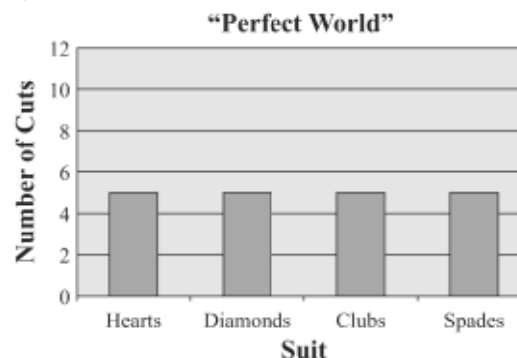
 b) theoretical
7. a) (R, R), (R, Y), (R, G), (Y, Y), (Y, R), (Y, G), (G, G), (G, R), (G, Y)
 b) $\frac{1}{9}$
 c) 1 : 8

BLM 1–6 Chapter 1 Task

1.–2. Answers will vary.

3. a) Some players must win in order to keep people playing. If there was no chance of winning, no one would play.

  b) If they won money, they might want to win more.

  c) If they lost money, they might try to win it back.

4. a) $\dfrac{1}{2}$

  b) $\dfrac{1}{4}$

  c) $\dfrac{1}{13}$

  d) $\dfrac{1}{52}$

  e)

Colour	Suit	Value	Card
1 : 1	1 : 3	1 : 12	1 : 51

5. Answers will vary.

6. a) Pick the Colour. In order to be fair, the payout should be the same as the number of ways of losing divided by the number of ways of winning, or, it should be the second number in the odds of winning ratio when the first number is 1.

  b) Suit, 3; Value: 12; Card: 51

7. a) "The house" will win money while players will gradually lose money.

8. Answers will vary. Look for responses that explain why people choose to gamble.