Unit 7 Practice Test A

1. Identify whether each described event is independent or dependent.	Independent	Dependent
A. Selecting 2 toys, given that the first is from the toy box and the second is from the table.	☐	☐
B. Rolling a die and then picking a card from a deck.	☐	☐
C. Choosing two students from period 3.	☐	☐

2. If you choose a shirt from a closet with14 t-shirts, 23 button-downs, 5 workout shirts, 3 blouses and 7 tank tops, and then spin a fair spinner that has 5 equal sections (white, green, purple, orange, and red), what is the probability that you will get a t-shirt and orange on the spinner?

3. There are 17 sneakers, 3 dress shoes and 6 sandals. If 2 of them are chosen without replacement, what is the probability of choosing two sandals?

Use the two-way frequency table shown below to evaluate problems 4 & 5.

	Marble	Button	Toy	TOTAL
Red	7	3	15	25
Blue	8	7	5	20
Green	13	5	12	30
TOTAL	28	15	32	75

4. What is the probability that an item selected at random will be blue?

5. What is the probability that an item selected at random will be a button, given that it is red?

Unit 7 Practice Test B

1. Identify whether each described event is independent or dependent.	Independent	Dependent
A. Selecting 5 bags of chips from the pantry.	☐	☐
B. Choosing two candies, given that each are from a different bag.	☐	☐
C. Choosing 3 cards from the deck, with replacement.	☐	☐

2. If you choose a card out of a 52-card deck, which has 4 aces, 36 number cards and 12 face cards, put it back and then choose another card, what is the probability that you will get an ace and a face card?

3. There are 2 ducks, 3 geese and 4 swans on a lake. If 2 birds are chosen without replacement, what is the probability of choosing two swans?

Use the two-way frequency table shown below to evaluate problems 4 & 5.

	AAA	AA	C	D	TOTAL
Toy	6	2	2	1	11
Remote	2	4	0	0	6
Flashlight	0	1	0	2	3
TOTAL	8	7	2	3	20

4. What is the probability that an item selected at random will use AA batteries?

5. What is the probability that an item selected at random will be a toy, given that it uses AAA batteries?

ANSWERS

Practice Test A				Practice Test B			
1.	Independent	Dependent	2. 5.4%	1.	Independent	Dependent	2. 1.8%
A.	☒	☐	3. 4.6%	A.	☐	☒	3. 16.7%
B.	☒	☐	4. 26.7%	B.	☒	☐	4. 35.0%
C.	☐	☒	5. 12.0%	C.	☒	☐	5. 75.0%

Unit 7 Practice Test C

1. Identify whether each described event is independent or dependent.	Independent	Dependent
A. Choosing 6 cards from the deck, replacing each one.	☐	☐
B. Choosing socks from a drawer and shoes from the closet.	☐	☐
C. Spinning a spinner 5 times.	☐	☐

2. If you choose a card from a 52-card deck, which has 2 red Kings and 2 black Kings, and then flip a coin, what is the probability that you will get a red King and heads?	3. There are 5 soccer players, 8 baseball players, 2 dancers and 1 football player. If 2 are chosen without replacement, what is the probability of choosing two baseball players?

Use the two-way frequency table shown below to evaluate problems 4 & 5.

	Pizza	Hot Dog	Burger	No Food	TOTAL
Soda	12	10	14	7	43
Water	11	7	10	9	37
No Drink	8	13	11	0	32
TOTAL	31	30	35	16	112

4. What is the probability that a customer selected at random bought a soda?	5. What is the probability that a customer selected at random bought pizza, given that he or she bought no drink?

Unit 7 Practice Test D

1. Identify whether each described event is independent or dependent.	Independent	Dependent
D. Choosing 2 marbles from a bag without replacement.	☐	☐
E. Selecting 2 different students from the same classroom.	☐	☐
F. Choosing an M&M and a Skittle, given that each candy was from a different bag.	☐	☐

2. If you choose a shirt from a bag that has 5 red , 7 blue, 3 green and 9 orange shirts and then pick a hat from a closet with 2 black, 11 pink and 7 yellow hats, what is the probability that you will get a red shirt and a black hat?	3. There are 2 toasters, 3 TVs and 1 microwave. If 2 are chosen without replacement, what is the probability of choosing two toasters?

Use the two-way frequency table shown below to evaluate problems 4 & 5.

	Pizza	Hot Dog	Burger	No Food	TOTAL
Soda	12	10	14	7	43
Water	11	7	10	9	37
No Drink	8	13	11	0	32
TOTAL	31	30	35	16	112

4. What is the probability that a customer selected at random bought a burger?	5. What is the probability that a customer selected at random bought a soda, given that he or she bought a hot dog?

ANSWERS

Practice Test C

1.	Independent	Dependent
A.	☒	☐
B.	☒	☐
C.	☒	☐

2. 1.9%
3. 23.3%
4. 38.4%
5. 25.0%

Practice Test D

1.	Independent	Dependent
A.	☐	☒
B.	☐	☒
C.	☒	☐

2. 2.1%
3. 6.7%
4. 31.3%
5. 33.3%