

**Theoretical and Experimental Probability***Lesson Quiz*

- 1 The board game, *Spin to Win*, uses a spinner with 5 congruent sections. Each section contains a different color: red, blue, green, purple, and yellow. What is the probability of a player spinning two reds in a row?

A $\frac{1}{25}$

B $\frac{1}{5}$

C $\frac{1}{10}$

D $\frac{1}{20}$

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- 2 James played a game with a spinner. The spinner had 8 congruent sections, 2 each of the following colors: white, black, green, and red. What is the probability that James spun green then red on two of his turns?

A $\frac{2}{8}$

B $\frac{1}{8}$

C $\frac{4}{64}$

D $\frac{2}{64}$



3 Geraldo rolled two six-sided dice. What is the probability he rolled two odd numbers?

A $\frac{9}{36}$

B $\frac{6}{36}$

C $\frac{1}{6}$

D $\frac{1}{36}$

4 Yesenia rolled two six-sided dice. What is the probability she rolled two numbers less than 5?

A $\frac{20}{36}$

B $\frac{25}{36}$

C $\frac{1}{36}$

D $\frac{16}{36}$



- 5 Robin has a bucket of 14 cubes. The bucket contains 7 blue cubes, 3 red cubes, 2 yellow cubes, and 2 green cubes. What is the probability Robin pulled a red cube from the bucket, placed it on the table, and then pulled a yellow cube from the bucket?

A $\frac{3}{182}$

B $\frac{6}{182}$

C $\frac{6}{196}$

D $\frac{5}{14}$

- 6 Veronica has colored marbles in a bag.

- 2 lavender marbles
- 2 lime marbles
- 2 teal marbles
- 2 yellow marbles
- 2 red marbles

Veronica will randomly choose one marble. Then she will put it back and randomly choose another marble. What is the probability that she will choose a lavender marble and then a lime marble?

A $\frac{1}{5}$

B $\frac{1}{50}$

C $\frac{1}{25}$

D $\frac{1}{45}$



7 There are colors of marbles in a box: red, blue, and green. If the probability of picking up a red marble is $\frac{1}{4}$, and the probability of picking up a blue marble is $\frac{2}{5}$, what is the probability of picking up a green marble?

A $\frac{2}{20}$

B $\frac{7}{20}$

C $\frac{3}{9}$

D $\frac{13}{20}$

8 Jane has a quarter and a number cube. If she tosses the quarter once, and rolls the number cube once, what is the probability of she will get a heads-up quarter and an even number on the cube?

A $\frac{2}{3}$

B $\frac{1}{2}$

C $\frac{1}{6}$

D $\frac{1}{4}$



9 The Woodland Middle School student council has an election coming up. According to a poll of 50 students, selected at random, 35 of the students said that they would vote for Sheyenne as 8th grade class president. If there are 250 students in the 8th grade class, what is a reasonable prediction for the number of votes that Sheyenne will get?

- A** 7
 - B** 35
 - C** 70
 - D** 175
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10 A swimming pool float company has determined that 1 out of 125 of the swimming pool floats they manufacture do not meet the company's quality control requirements. Based on this information, what can the company predict about its swimming pool floats?

- A** Out of 200 swimming pool floats there will be 3 floats that do not meet company requirements.
- B** Out of 500 swimming pool floats there will be 4 floats that do not meet company requirements.
- C** Out of 700 swimming pool floats there will be 5 floats that do not meet company requirements.
- D** Out of 1,000 swimming pool floats there will be 6 floats that do not meet company requirements.

