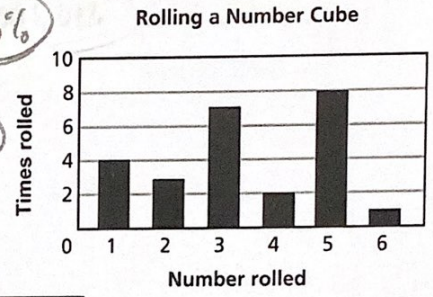Name _____ Sagona _____ Date _____

Lesson 6.2 Extra Practice

4 + 3 + 7 + 2 + 8, + 1 = 25

Use the bar graph to find the experimental probably of the event.

1. rolling a number greater than 4 $8+1 = \frac{9}{25}$ (36%)

2. rolling a 1 or a 4 $4+2 = \frac{6}{25}$ (24%)

3. *not* rolling a 5 $4+3+7+2+1 = \frac{17}{25} = 68\%$

4. Your friend uses the bar graph to find the experimental probability of rolling a 3. Is your friend correct? Explain your reasoning.

> There is 1 favorable outcome and 6 possible outcomes. So, the experimental probability of rolling a 3 is $\frac{1}{6}$.

no, he found theoretical

Rolling a Number Cube

no, he found theoretical

Use the spinner to find the theoretical probability of the event.

5. spinning a number greater than 5 $\frac{3}{5} = 60\%$

6. spinning a factor of 6 $\frac{1}{5} = 20\%$

7. spinning an odd number 0%

factor of 6
1 → 6
2 → 3

A bag contains the letters shown. You randomly draw a tile, record it, and then return it to the bag. The bar graph shows the results of drawing a letter 50 times. Compare the theoretical and experimental probabilities of the event.
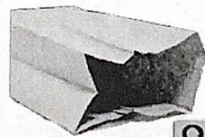
O U T C O M E S

8. drawing an S exp $\frac{5}{50} = 10\%$ theo $\frac{1}{8} = 12.5\%$

9. drawing a vowel exp $6+10+8 = \frac{24}{50}$ 48%

10. Should you use *theoretical* or *experimental* probability to predict the number of times you will draw an M in 2,000 draws? Explain. theo $\frac{3}{8} = 37.5\%$

Drawing a Letter
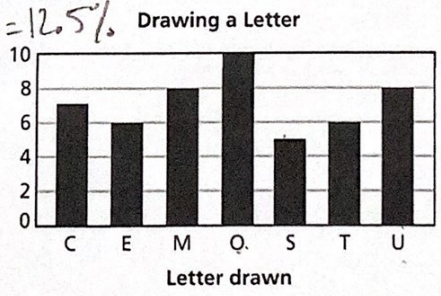
11. Use technology to simulate 200 spins of the spinner in Exercises 5–7. How does the experimental probability of spinning a number less than 5 compare with the theoretical probability?