$\qquad$ Name $\qquad$ Period $\qquad$

The spinner at the right is spun and a coin is tossed.

1. What is the sample space of spinning the spinner twice?

2. What is the probability of getting an $A$ and heads?
3. A store is having a sale on winter clothes. You can purchase either white or black gloves in either a small, medium, or large size.
a) Show the sample space below.
b) What is the theoretical probability of buying black gloves.
4. You have four blocks (red, blue, yellow, and green) in a bag. You are also tossing a coin.
a) Show the sample space below.
b) Find the probability of choosing a yellow block and tossing heads.
5. Sam rolled a six sided die 24 times. His results are shown below
$\left.\begin{array}{|l|l|l|l|l|l|l|}\hline \text { Roll \#1 } & 3 & & \text { Roll \#9 } & 3 & & \text { Roll \#17 } \\ \hline \text { Roll \#2 } & 5 & & \text { Roll \#10 } & 5 & & \text { Roll \#18 }\end{array}\right) 4.4$.

What is the experimental probability of Sam rolling an odd number?
7. Johnny is rolling a die 25 times. His results are shown to the right:
a. What is Johnny's experimental probability of rolling a 5 ?
b. What the the theoretical probability of rolling a 5 ?
c. Compare Johnny's experimental probability to his theoretical probability. Are they close or not close? Explain how you know.

| \# on cube | \# of results |
| :---: | :---: |
|  | 4 times |
|  | 8 times |
|  | 2 times |
|  | 1 time |
|  | 4 times |
|  | 1 time |

8. A gumball machine contains blue, orange, yellow, red, and purple gumballs. Another candy machine contains laffy taffy and air heads. You want to purchase candy from each machine. What is the probability you will get a red gumball and an airhead?
9. Jerald is ordering a pizza for dinner. The probability of him ordering a large pizza that has pepperoni is $\frac{8}{20}$. According to this probability, is it very likely, somewhat likely, or not at all likely that he will pick a large pizza that has pepperoni? Explain how you know.
