$\qquad$ Date: $\qquad$ Block: $\qquad$

## Probability Worksheet

1. Solve the following. SHOW ALL STEPS.

You have one quarter, show the following as fractions:
a. $\mathrm{P}(\mathrm{H})$
b. $\mathrm{P}(\mathrm{T}, \mathrm{H})$
c. $\mathrm{P}(\mathrm{H}, \mathrm{T}, \mathrm{H})$

You have one six-sided die that you roll two times. Fill out the rest of the table to find the sample space, then answer the questions:

| XXX | SIX SIDED DIE |  |  |  |  |  |  | a. $P(3,2)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | XXX |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | b. $\mathrm{P}(1$ then 2$)$ |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | P (even then od |
|  |  |  |  |  |  |  |  | P(even then odd |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

You have one four-sided die and one six-sided die. Make a table and then determine $P(4$ then 5$)$.

You have one coin and one six-sided die. Make a tree diagram, then give the sample space.
a. Find $P$ (sum less than 4 ).
b. Find $P(T$ then even $)$.

You have one three sided spinner and one six-sided die. Make a tree diagram, then give the sample space.
a. Find $\mathrm{P}(3$ then 5$)$.
b. Find P (sum is odd).

Can the probability be greater than 1 ? Can it be negative? Why or why not?

