Predator and Prey Game Name_____hr__

Predator and Prey relationships are everywhere -- Lions and gazelles, hawks and mice, skunks and larvae, monkeys and termites, sharks and fish, coyotes and rabbits. This game simulates the population changes that occur when such animals are interacting.

How to play:
Large card = predator (owl)
Small card = prey (mouse)
Spread 10 prey cards out on a small table. Put 3 large predator cards in your hand. Take a step away from the table and toss the large card in such a way that it might land on a prey card. If the large card lands ON a prey it "eats" the prey and stays alive (put in the "alive" pile). If the large card misses its prey it "goes hungry" and must die (goes to the discard pile). After all predator cards have been thrown, count up the survivors. All survivors (prey and predator) get to reproduce. So, if 7 prey cards remain after the eating time, seven more get added for the next round for a total of 14. If all 3 predators ate, then they all reproduce to make 6. These 2 numbers, 14 and 6, are what you enter into the trial boxes. These are the number of organisms that existed at the start of trial 2.

Play the game until either all predators or prey die, or until 10 rounds occur. If your game ends early, launch game 2. If your first game makes it all the way to trial 10, then you are finished, and you need to draw your graph. Each team member should get chances to be the owl.

GAME1	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5	Trial 6	Trial 7	Trial 8	Trial 9	Trial 10
Predator	3									
Prey	10									

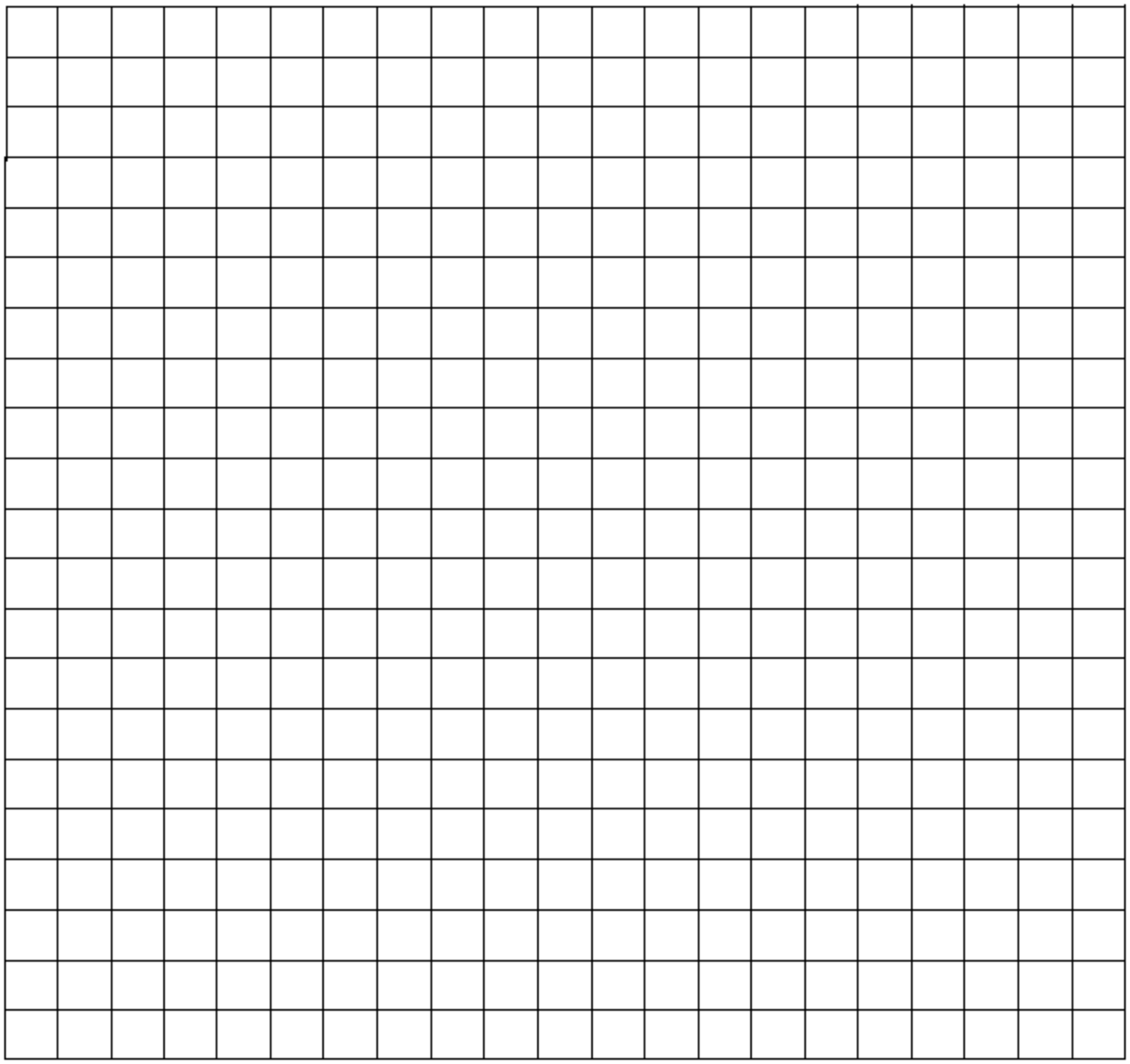
GAME2	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5	Trial 6	Trial 7	Trial 8	Trial 9	Trial 10
Predator	3									
Prey	10									

GAME3	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5	Trial 6	Trial 7	Trial 8	Trial 9	Trial 10
Predator	3									
Prey	10									

Pick a set of data from above (1, 2, or 3) and create a line graph on the back. The x axis should be trial numbers, and the y axis should be number of animals.

Do not forget:
the axis labels, (2 pts)
a title for the graph, (2 pts)
a key that defines the lines, (2 pts)
evenly spaced intervals, (2 pts)
and rulers for neatness (2 pts)

Predator and Prey Game Name_____hr__



1. When prey populations increase, what happens to predator populations?

2. When prey populations decrease, what happens to predator populations?

3. If a predator population is growing at a large rate, what happens to the prey population?

4. If a predator population is declining, what happens to the prey population?