Grade 7 Science

Unit 2: Ecosystems

Today we will be playing another game. In order to play, all of the desks and stools need to be moved from the middle of the room, into the space behind the island. Please start now.

Today's game will focus on food chains, and we can see the passing of energy from one organism to the next. Here is how the game works:

- 2 students in the class are hawks
- 6 students in the class are sparrows
- The remaining students in the class are grasshoppers

- At the start of the game there will be a large pile of paper on the floor, this is to represent the corn in a farmer's field.
- The grasshoppers will be given 1 minute to eat as much corn as possible, by placing it in their bag (representing their stomach).
- After 1 minute the sparrows will be released into the game, attempting to eat the grasshoppers.
  - To eat a grasshopper a sparrow must touch it on the shoulder
  - They then play "Rock, Paper, Scissors" twice
  - If the grasshopper wins either time, then they are free to go
  - If the sparrow wins both, then the grasshopper hands over their bag and sits down
- Similarly, the hawks will be released, and follow the same rules to attempt to eat the sparrows.
- If a sparrow is attempting to eat a grasshopper, a hawk may interrupt to eat the sparrow.

No Running, No Pushing
No Fighting Over Paper or Bags
No Hiding Under the Counters

My word is final, don't mess with Father Time.

Organism	Number at Start of Game	Number Alive at End of Game	Number Alive After Pesticide Check	Number Alive in the Future of the Ecosystem
Grasshopper				?
Sparrow				?
Hawk				?

Your job is to graph the results of the game, showing how the use of pesticides can have an effect on an entire ecosystem.

It is expected that you will use the feedback you have received from your previous graph. If your new graph is significantly better than your first one, then your new mark will be counted for both graphs. If you wish to take advantage of this opportunity, you are to staple the two graphs together and submit them as a package.

You must include data for all four columns above, making a logical prediction as to what the numbers would be like in the future of this farm ecosystem.

Your graph is due in one week: _____