① . In the Mushroom Hunt model, we create four clusters of red patches. For each of these clusters, we ask 20 patches to turn red. Are there always 80 red patches? You can check this very quickly using the Command Center, entering the statement `show count patches with [pcolor = red]`. Do this several times after hitting `setup` each time. Why do you get the answers you do?

② . Make the following small changes in the Mushroom Hunt model. Make them one at a time, check each, and save the model with a new name after each change.

* There is only one hunter instead of two.
* The hunter's initial heading is always 45 degrees.
* Instead of four clusters that each have 20 mushrooms, there are eight clusters of 10 mushrooms. Each cluster has a radius of only three patches.
* Whenever the hunter finds a mushroom, it writes "I found one!" to the Command Center (see the primitives `print`, `write`, `type`, and `show`).
* When the hunter has not recently found a mushroom, it turns by a random angle between -45 and +45 degrees instead of between -10 and +10.
* The hunter starts in the lower left corner instead of in the middle (see the primitives `min-pxcor`, `min-pycor`, and `setxy`).
* The hunter counts how many mushrooms it catches. This requires a new turtle variable that must be incremented each time a mushroom is found. Instead of writing "I found one!" to the command center, the hunter now writes out how many items it has found so far.

Due on Friday October 4th