

## Distribution Shift

Name(s) \_\_\_\_\_

A pumpkin farmer decided to add a fertilizer to part of her crop. You will use TinkerPlots to help you decide whether the fertilized pumpkins weigh more, and if so, by how much.

1. Open the TinkerPlots document **Pumpkin Farm.tp**. The weights of 400 pumpkins are shown in the plot, some grown with fertilizer and some grown with no fertilizer.
2. Make a plot that allows you to compare the weights of fertilized pumpkins and unfertilized pumpkins.
3. Do the pumpkins with fertilizer tend to weigh more? Sketch your plot below and explain how your plot supports your conclusion.

4. If you concluded that the fertilized pumpkins do tend to weigh more than the unfertilized pumpkins, about how much more do they tend to weigh?

5. Does it matter that there were fewer fertilized pumpkins than unfertilized pumpkins? Explain.