

## **Lesson 16: Estimating Population Proportions**

## Cool Down: More than 48 Grams

A chemical engineer is trying to increase the amount of the useful product in a reaction. She performs the reaction with her new equipment 10 times and gets the following amounts of the useful product in grams:

47.1 48.2 48.3 47.5 48.5 48.1 47.2 48.2 48.4 48.3

- 1. What proportion of the reactions were above the 48 grams threshold?
- 2. Other chemists typically get 65% of their reactions to produce more than 48 grams. Should the engineer say that she was able to increase the useful product when compared to the other chemists?