Go Fish!
Solving Proportions: Overview of the Lesson

Modeling a Real Life Situation

- By modeling a capture-recapture situation, the students are able to see how proportions are useful.
- They become involved with data collection by capturing samples to find the proportion of tagged fish to the total sample.
- Then they find the mean of the tagged fish and the total from the 10 samples.

Solving the Proportion

- A ratio is used to determine the proportion of tagged to total fish from the samples. This ratio should be similar to the proportion in the total population.
- The following equation is used to solve the proportion and predict how many fish there are in the lake:

$$\frac{\text{Average \# tagged in samples}}{\text{Average \# in samples}} = \frac{\text{Total \# tagged in lake}}{\text{Total \# fish in lake}}$$

- Then the students count the true total of fish in the lake and compare that number with their predictions.