

## Go Fish!

### Solving Proportions: Estimating a Population

Estimate the number of fish in a lake:

- paper bag = lake
- cup = net
- goldfish = untagged fish
- pretzel fish = tagged fish

1. record the number of tagged fish and total fish for each sample
2. find the average of the 10 trials
3. use this equation to find the estimate

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

4. compare the estimated results with the actual number of fish