## A Cat, a Parrot, and a Bag of Seed

- 1. The problem, as I see it, would be that the man would loose either one of the items he has if he does not get them across the river in the correct order. I wonder if the bird is in a cage or has it had its flight wings clipped.
- 2. The man cannot carry all items at one time. Leaving two items alone will cause a loss. How does the man get the items across?
- 3. One possible solution would be to take the bag of seed over first. Tie a string to the parrot's leg and fly him over with the cat in the boat.
- 4. This solution meets the goals of getting everything across without losing any of the items.

## Socks in the Dark

- 1. The problem is that the room is dark and you can only check the socks after two have been pulled. The goal would be to collect the correct socks in the least amount of pulls.
- 2. The constraints would be there is no light.
- 3. One solution might be to turn on a light to help choose.
- 4. My solution is to use a flashlight to choose the socks to pick them in the least amount of pulls
  - a. You will need to pull at least eleven socks to get one matching pair.
  - b. You will need too pull at least thirteen to have a pair of each color.

## **Predicting Fingers**

- 1. If she counts to 10 she will be pointing at her first finger.
- 2. If she counts to 100, she will be pointing at her ring finger.
- 3. If she counts to 1000, she will be pointing at her pinky.