Problem Solving

**1. A Cat A Parrot and a Bag of Seed:**

a. Define problem: The man needs to take a boat to the other side of the river and bring the parrot, the cat and a bag of seed with him. There is only enough room for the man and 1 other and he needs to find a way to transport one at a time without leaving the wrong ones alone.

b. Break problem apart: The man is unable to leave the parrot alone with either the cat or the seeds. The cat can be left with the seeds.

c. Identify possible solutions:

1. Take parrot over first. Then go back and get the cat. Take cat over and then pick up parrot to take back to other side. Leave parrot at other side and bring over seed. Go back to other side and pick up parrot. Bring parrot over to other side and you have everyone over safely.

2. Take Parrot over first. Then go back and get the seed. Take seed over and then pick up the parrot and take back over to the other side. Leave parrot and bring over the cat. Go back to the other side and pick up the parrot. Bring parrot over to the other side and you have everyone over safely.

d. Evaluate each possible solution: Each solution would work because they are both making sure the parrot is never alone with either the seed or the cat.

e. Chose a solution and develop a plan to implement it: Implement plan 1.

**2. Socks in the Dark:**

a. Define problem:

b. Break problem apart:

c. Identify possible solutions:

d. Evaluate each possible solution:

e. Chose a solution and develop a plan to implement it:

**3. Predicting Fingers:**

a. Define problem:

b. Break problem apart:

c. Identify possible solutions:

d. Evaluate each possible solution:

e. Chose a solution and develop a plan to implement it: