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

1. Define the problem
   1. The problem is that you can’t leave two certain animals or objects together.
   2. Immediately looking at the problem I can see that the man is going to have to carry one of the animals or objects back to the main land area because two can’t be together.
   3. The overall goal is to have the Cat, the Parrot, and the Bag of Seed to other side of the river.
2. Break the problem apart:
   1. The constraints are that you can only carry one animal over at a time and that specific animals can’t be together or left with the bag of seed.
   2. The sub-goals are to get them over one at a time without problems.
3. Identify potential solutions:
   1. A possible solution is to carry something back so that no two bad things are put together.
4. Evaluate each potential solution:
   1. Yes, the solution presented meets the goals because all of the items will go across the river with none of them getting harmed.
   2. Yes, the solution will work for all cases (with variation).
5. Choose a solution and develop a plan to implement it:
   1. My solution is for the man to take the Parrot across the river first and then go back to pick up the Bag of Seeds. When dropping off the Bag of Seeds on the same side as the parrot, he needs to take the parrot with him back. When he gets to the other side he picks up the cat and drops off the parrot. He takes the cat to the same side as the Bag of Seeds. Then goes back to pick up the parrot and gets to the other side of the river with all of them together and at with no injuries.
   2. At first I thought of tying them to a tree so that they didn’t harm each other, but no rope was mentioned.

Socks in the Dark:

1. Define the problem:
2. Break the problem apart:
3. Identify potential solutions
4. Evaluate potential solutions
5. Choose a solution and develop a plan to implement it