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

Defined Problem

A.) The problem of course in this situation is a man is trying to get across a riverbank with a cat, a parrot, and a bag of seed but can only fit himself and one other item in the boat.

Insight

B.) One thing I can see that’s not apparent upfront is the possibility that the bag could be a small bag that could fit inside his pants pockets.

Goal

C.) The overall goal is to get across the riverbank with everything or at least the most important without leaving anything that will lead to another issue.

Problem broke apart

Constraints

1. There’s limited room, if bird left with cat it will be ate, and seeds left with bird will be ate.
2. The sub-goals are to keep the wrong things from being left together, get everything across the river.

Possible solution

I think he could get into the boat with the cat, put the bag of seeds in his pocket, and parrot can ride on his shoulder.

Evaluate Solution

I think the one solution will handle the whole problem.

Plan in action

The man takes the bag of seeds and place them in his pocket. He will then put the parrot on his shoulder and put the cat in the boat and proceed across the riverbank.

Socks in the dark:

Defined Problem

1. The problem is there are several different pairs of socks and one set is needed but it’s dark.

Insight

1. There could be socks folded within each other or they could be placed on a certain side to separate.

Goal

1. The goal is to find a matching pair of socks in the dark.

Problem broke apart

Constraints

1. It’s Dark
2. There are several different number of color socks

Possible Solution

I think if he can fold his socks together and that way he can just grab a pair in any situation.

Evaluated Solution

The solution is a great solution that will solve the issue.

Plan in action

I would do laundry and place my socks one inside each other and place them in the drawer. I will be able to select a particular color and a matching pair in any situation.

Predicting Fingers

Defined Problem

1. I think the problem is hard for a prediction without a proper technique to keep up with which finger is being used for each number.
2. There could be something used on paper to keep up with which finger is used for which number.

Goal

1. The goal is to predict which finger will represent which number during counting.

Problem broke apart

Constraints

1. No way to keep up with which finger represents which number once you get high enough in the count.
2. She only counting on one hand.

Possible Solution

There should be some sort of record keeping of the fingers and the numbers being counted.

Evaluated Solution

The solution should help with keeping count and remembering the fingers that correspond with which numbers.

Plan in action

The little girl could start her count and have someone writing and keeping up with the count and fingers being used. This could be time consuming but would help.