PROBLEM SOLVING STRATEGIES

1. Choose **one problem** from the back side of this worksheet. You **do not** need to solve it yourself.

2. Choose **three people** to solve your problem. They should be different sexes, ages, and with different educational backgrounds. (For example, your 12-year-old little brother, your mother and your 50-year-old neighbor.) The more different your three people are, the more interesting your results will be! You can even ask someone over the phone but then they will have to explain verbally all of their thinking and work.

3. Separately, ask each person to attempt to solve your problem. Keep track of **everything** each person does. Include behavior as well as math computations. Do not help the person find a solution; just observe and document. Do not be concerned if the problem is correct or not.

4. Write a report of your observations. For each person, include a brief biography – name, age, sex, level of school completed, relation to you, and occupation of an adult. Then describe your observations from step 3. You may include paper with any work a person did.

5. If one of your people doesn’t write anything down and just verbally gives you an answer, be a detective. Ask the person to explain how he or she got their answer. Don’t forget to document behavior also.

Problems are on the back!
PROBLEM SOLVING

Choose one of the following problems:

1. Fourteen clothespins are placed on a clothesline at 7-foot intervals. How long is it from the first pin to the last?

2. After hearing a gloomy Sunday sermon on the dangers of smoking, Hugo promised himself to cut back 2 cigarettes a day, smoking 2 less on Monday than he had on Sunday, etc. He kept his promise for a week, that is, through Saturday. During the whole week he smoked 63 cigarettes. How many did he smoke on the day of the sermon?

3. If there are nine people in a room and every person shakes hands exactly once with each of the other people, how many handshakes will there be?

4. I have already covered one-third of the distance from Podunk to Boondocks, and after I walk one more mile I’ll be halfway there. How far is it from Podunk to Boondocks?

5. In the barnyard is an assortment of chickens and pigs. Counting heads I get 13; counting legs I get 46. How many pigs and chickens are there?

6. Arrange 18 bottles in a case containing 24 spaces so that every row and column has an even number of bottles in it.

```
  ABC
  DEF
  GHI
```