Engaging Your Children in Problem Solving

Most problems can be solved using a variety of strategies. Below the suggested strategies are some problem which you can use with your children.

1. Possible strategies: Draw a picture; Use objects
   a) Alex caught 13 fish. He gave 4 away. How many fish does he have now?

   b) David and Joe ran a 50 meter race. When Joe crossed the finish line, David was 8 meters behind. How far had David fun so far?

   c) If 10 cookies are shared by 8 people so each person gets the same amount of cookies, how many cookies will each person get?

   d) Maria trades in her animals for smaller animals and always gets 4 new animals for each animal she trades in. She traded in her cow for 4 goats, each goat for 4 chickens, and each chicken for 4 birds. How many birds does she have?

2. Possible strategies: Make an organized list, Construct a table

   a) How many different ways can you make 25 cents using pennies, nickels and/or dimes?

   b) I am a number between 40 and 60. I am even. I have a reminder of 3 when divided by 5. I have a reminder of 2 when divided by 7. Who am I?

   c) Sara packed 3 shirts and 3 pants for her trip. Her shirts are red, white and blue. Her pants are red, white and blue. How many different outfits can Sara wear on her trip?

   d) Josh, Samantha, Sonia, and Alex have different color hair. One has red hair; one has brown hair, one has blond hair and one has black hair. One of the boys has brown hair. Josh has blond hair. Alex does not have red hair.

   e) Jerry's grandmother offered to pay him for chores during his stay with her. She gave him two choices on how she could pay him. First choice: he could have $1.00 for the first day, $2.00 the second day, $3.00 the third day and she would continue to give him one more dollar than the previous day for 2 weeks. Second choice: he could get paid 1¢ the first day, 2¢ the second day, 4¢ the third day, and double the amount of the preceding day. Which choice should Jerry take?