## Lining Up

## Problem One

a. Add the numbers at the top of the yellow, blue, and red cards $(8+2+1)$.
What number is on all three of these cards?

b. Heather's mystery number is on the yellow and blue cards but not on the green and red cards.
What is Heather's number?
c. Can you explain how the cards work?
d. Choose your own secret number and give a classmate clues to find it.

## Problem Two

Car number plates in the land of Automobile have two letters and two digits.

How many different number plates could be made using two letters and two digits?

## Problem Three

In my family, the girls have twice as many sisters as brothers and the boys have one-third as many brothers as sisters.
How many children are in my family?

## Problem Four

All the streets of Lightsville are in straight lines. There is a lamp post on every corner where two streets meet.
If there were only three streets in Lightsville, the greatest number of lamp posts would be three.
What is the greatest number of lamp posts if there were six streets?

