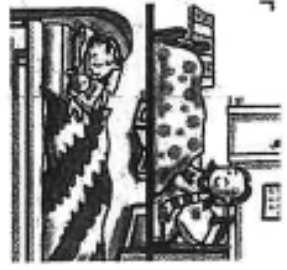


- Using interlocking-cubes, construct a model that has:
- half of its cubes red
  - one-third of its cubes blue
  - one-eighth of its cubes green
  - the rest of its cubes yellow.



Can you construct more than one model using these fractions?

**What's the Problem?**



Jamila sleeps for nine hours each night.  
Her friend Monica sleeps for ten hours each night.  
Jamila says to Monica: "You sleep 15 days more than I do each year." Is she correct?  
Write about how you worked out the answer.

**The Language of Maths**

Write different fraction statements comparing the different shapes in this grid.  
Here are two to get you started.

- One-quarter of the squares on the grid have a heart in them.
- Half as many squares on the grid have a circle in them when compared to squares with clubs in them.

♦	♦	♦	♥	♦	♦
♦	♣	♥	♥		♦
★	♣	♥	♥	♣	♦
♥		♠	♠		♥
♥		♠	♠		♥
▲	♣			♣	●
♦		♥	♥	♣	♦
♦	●	♥	♥		♦
♦		♥	♥	♣	♦
♦		♥	♥	♣	♦
♦	♦	♦	♦	♦	♦

Name: \_\_\_\_\_

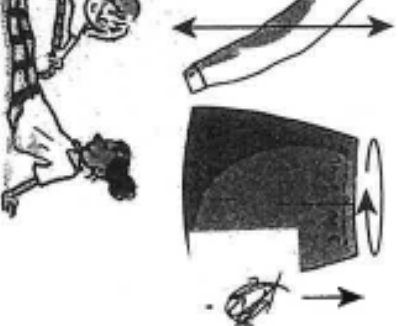
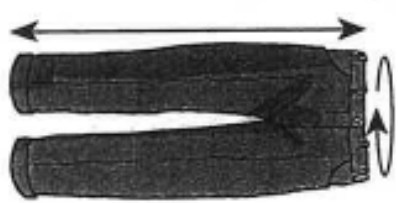
# The Maths Herald

Volume 3

Date: \_\_\_\_\_

**Let's Investigate**

Imagine that you have shrunk to  $\frac{1}{10}$  of your normal height. What would the measurements be for each of these pieces of clothing?



If you're a boy     If you're a girl

- a pair of trousers
- a shirt
- a skirt
- a shirt

**The Puzzler**

A king had five daughters. On his deathbed he said:



To my eldest daughter, I leave one-quarter of my kingdom.  
To my second daughter, I leave one-fifth of my kingdom.  
To my third daughter, I leave one-sixth of my kingdom.  
To my fourth daughter, I leave one-seventh of my kingdom.  
And to my youngest daughter, I leave the rest of my kingdom.

How much did his youngest daughter inherit?