Cup Capers

You need ☑ plastic cups   ☑ multilink cubes

Activity

1. There are 12 cubes altogether in these cups.
   Each yellow cup has the same number of cubes in it.
   The blue cup has twice as many cubes as one yellow cup.

   How many cubes are in each cup?

2. There are 25 cubes altogether.
   Each red cup has the same number of cubes in it.
   The green cup has one less cube in it than each red cup has.
   There are two cubes outside the cups.

   How many cubes are in the green cup?

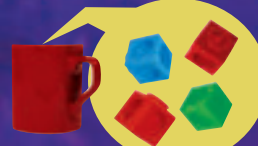3. These collections of cups can be described using letters:

   2y + b (y for yellow, b for blue)   2r + 3g + p (r for red, g for green, p for purple)

   Describe each set of cups below using letters:

   i.

   ii.

   iii.

   iv.

   v.

4. If the coloured cups above contained these cubes:

   a. How many cubes would be hidden in each collection of cups in question 3?

   b. Why do collections **iii** and **v** have the same number of cubes?

Describing expressions using letters