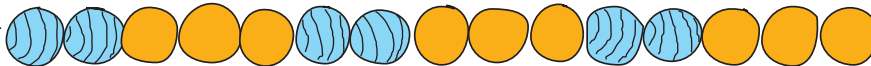# Friends Forever

You need ☑ beads (optional)

Activity

Liata and Miria are buying beads to make friendship bracelets. They have drawn plans of the patterns they want to use in their bracelets.

1.

a. Describe the pattern you see in Liata's bracelet plan.

b. What colour would the 35th bead be?

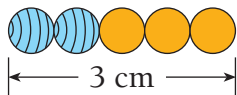Looking for groups of 5 will help you here.

c. What colour would the 21st bead be? Use your 5 times table to help you predict the answer.

2. Liata wants to make the bead part of her bracelet 12 centimetres long.

a. How many blue beads and how many orange beads should Liata buy?

⊢—— 3 cm ——⊣
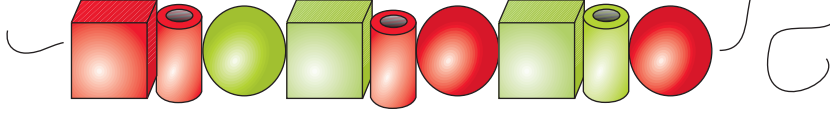
Times tables will help you with these problems, too.

b. Beads are 2 for 10 cents. How much money will Liata need to buy all the beads for her bracelet?

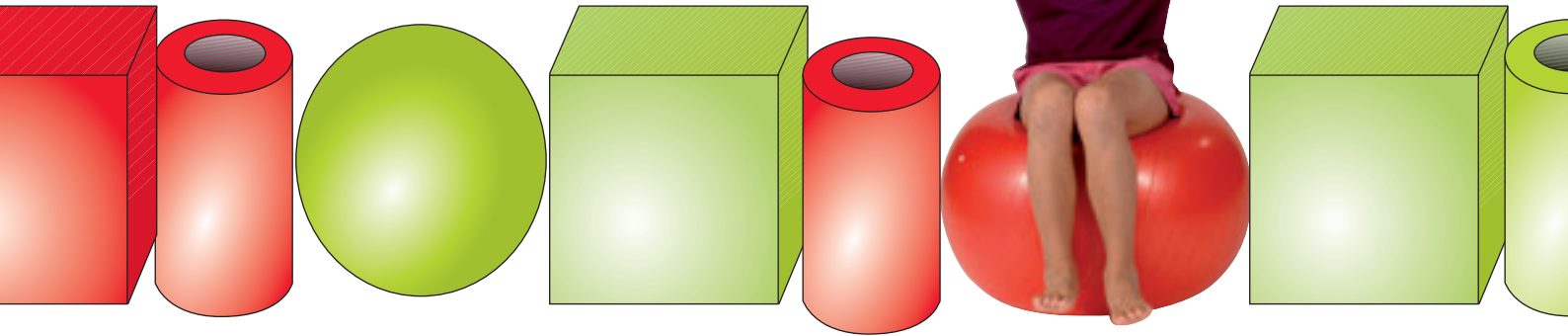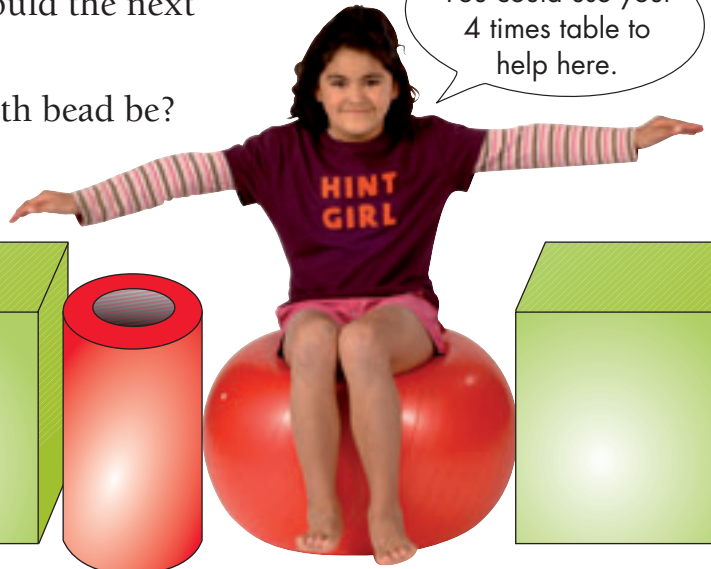Using multiplication to solve equal-groups problems

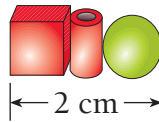**3.** Miria's plan is more complicated than Liata's:

a. Describe the patterns you see in Miria's bracelet plan.

b. What shape and colour would the next bead on the right be?

c. What colour would the 20th bead be? How do you know?

d. Which times table would help you with predicting the shapes? Why?

e. What shape would the 30th bead be? How do you know?

4. Back home, Miria makes a bracelet 20 centimetres long, using her pattern. She starts with 2 red beads.

├── 2 cm ──┤

a. How many red beads and how many green beads does Miria use?

b. How many spheres (round beads) does Miria use?

5. a. Draw a design for your own bead bracelet, using different shapes and colours to make a pattern.

b. If you repeated your pattern 5 times:

    i. how many beads would you need altogether?

    ii. how many beads of each colour would you need?

    iii. how many beads of each shape would you need?