Fun Folding

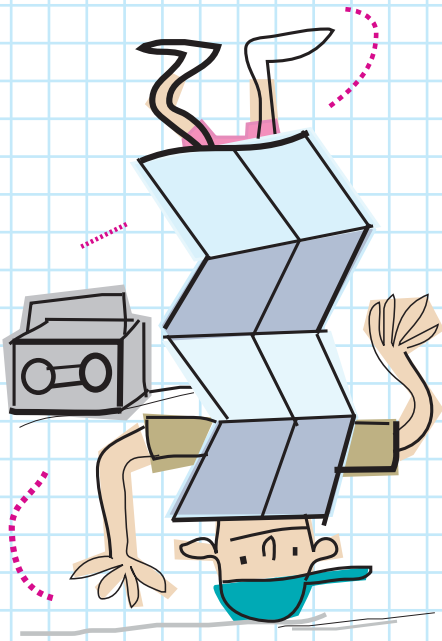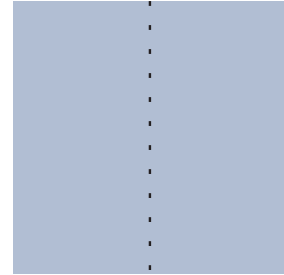**You need** ☑ square pieces of paper, at least 15 centimetres by 15 centimetres
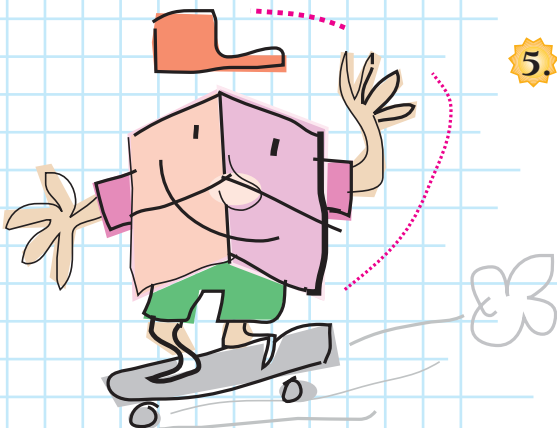
Activity One

1. Fold a square piece of paper in half and open it out again so that it looks like this:

2. **a.** Draw what you think your piece of paper would look like if you folded it in half again the other way and then opened it out.

b. Fold your paper and then open it to check your drawing.

3. Now your paper has got crease lines that divide it into quarters (or fourths).

a. How many quarters make one half of a piece of paper?

b. How many quarters make one whole piece of paper?

c. How many quarters make two pieces of paper?

4. Fold your paper back into quarters.

a. How many parts do you think you will make if you fold your paper in half again?

b. Fold your paper in half again and then open it out to check.

5. Now your paper has crease lines that divide it into eighths.

a. How many eighths make a half?

b. How many eighths make three quarters?
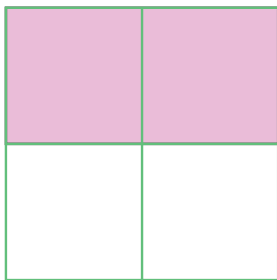
c. How many eighths make one and a half pieces of paper?

Exploring equivalent fractions

6. Fold your paper back into eighths.

    a. How many parts do you think you will make if you fold your paper in half again?

    b. Fold your paper in half again and then open it out to check.

7. Now your paper has crease lines that divide it into sixteenths.

    a. How many sixteenths make a half?

    b. How many sixteenths make a quarter?

    c. How many sixteenths make an eighth?
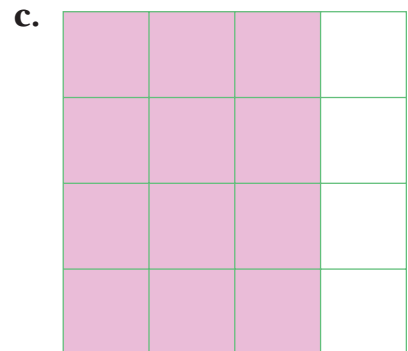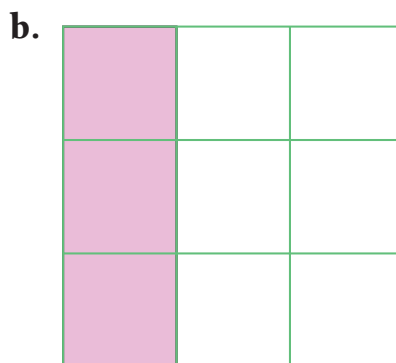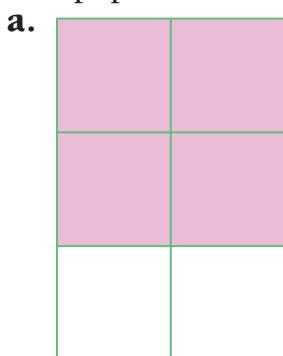
"Look, that's $\frac{2}{4}$ or $\frac{1}{2}$."

Activity Two

Sarah folds a piece of paper and colours it in to show fractions.

1. Write two fractions for each coloured piece of paper below.

    a.

    b.

    c.

2. Fold pieces of paper and colour them to show each fraction below.

    a. $\frac{1}{9}$ **b.** $\frac{6}{9}$

    c. $\frac{4}{16}$ **d.** $\frac{8}{16}$