Know and use the notation for quarters of shapes

➡️ **Starting point**

Show the first column of the **Starting point** graphic. Ask:

- *How many equal parts have these whole items been split into?* [4] Encourage the children to see that each whole has been split into four equal parts. If the children do not suggest it, introduce the term 'quarter'.

- *What does 'a quarter' mean?* Remind the children that quarters are produced when something is split into four parts and stress that all four parts must be equal.

- *What do we call one/two/three/four of these parts?* [one-quarter, two-quarters, three-quarters, four-quarters] Remind the children that a part of a whole, such as a quarter, is called a 'fraction'.

Practical resources

- Use objects that can be cut into quarters, such as apples, cakes, lengths of celery, string or a ball of modelling clay.

- Use objects that can be folded into quarters, such as paper shapes, greetings cards or bank notes.

- Use objects where four identical pieces can be joined to make a whole, such as plastic shapes, collections of cubes or symmetry resources.

Reveal the remaining columns. Draw the children's attention to the 4 on the bottom of each fraction. Explain that this indicates quarters and that the number on the top shows how many quarters there are. Ask:

- *What do you notice about the fraction four-quarters?* [It is the same as one whole.]

Use some of the ideas in the **Practical resources** box to reinforce the children's understanding of quarters and the relevant notation.

> **Key point:** The word 'quarter' is used when a whole is split into four equal parts. One-, two-, three- and four-quarters are written as $\frac{1}{4}$, $\frac{2}{4}$, $\frac{3}{4}$ and $\frac{4}{4}$.

🔍 **Spot the mistake**

Ask:

- *What fraction is written as $\frac{3}{4}$?* [three-quarters]

- *The statement says that '$\frac{3}{4}$ is shaded'. Is this true?* [no]

- *What is the mistake?* [The 4 on the bottom of the fraction should show the number of parts altogether rather than the number of parts that are not shaded.]

- *Can someone sketch a shape where three-quarters is shaded?*
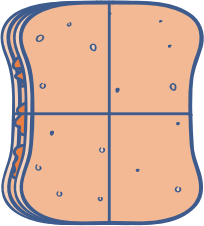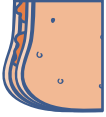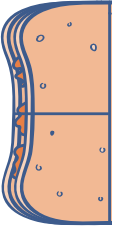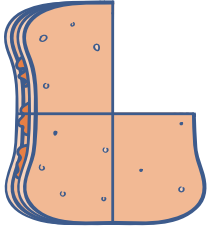
✔️ **Good to go?**
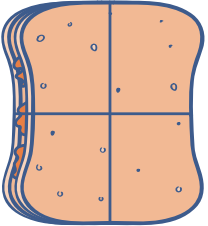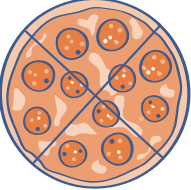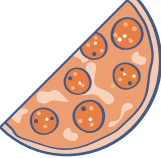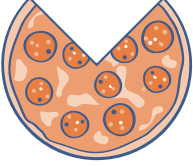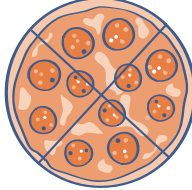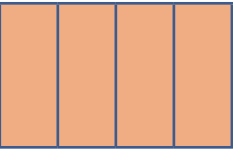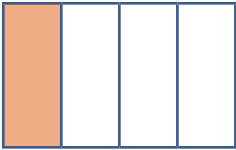
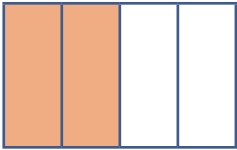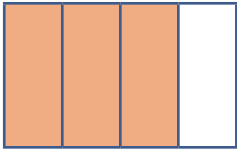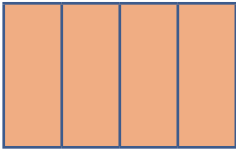Answers: **a)** $\frac{3}{4}$ **b)** $\frac{1}{4}$ **c)** $\frac{2}{4}$ **d)** $\frac{4}{4}$

Pupil book practice   **Pages 4 and 5**

This unit focuses on quarters as areas of shapes and the notation $\frac{1}{4}$, $\frac{2}{4}$, $\frac{3}{4}$ and $\frac{4}{4}$. The **Challenge** questions develop understanding of four-quarters as one whole, and of three-quarters and one-quarter being added to make one whole. Questions involving two-quarters and one-half help the children to begin to understand the relationship between these fractions. These concepts are explored further in later units.

➡️ Starting point

one whole	one-quarter	two-quarters	three-quarters	four-quarters

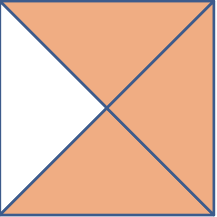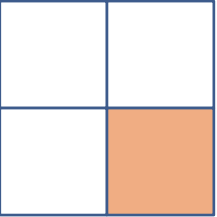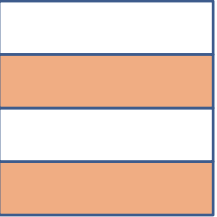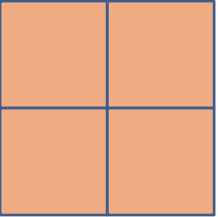1 $\frac{1}{4}$ $\frac{2}{4}$ $\frac{3}{4}$ $\frac{4}{4}$

🔍 Spot the mistake

$\frac{3}{4}$ is shaded.

✅ Good to go?

What fraction of each square is shaded?

a) **b)** **c)** **d)**