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## Think together

WAYS OF WORKING Whole class teacher led (I do, We do, You do)

### ASK

- Question 1 : What do you notice about the denominator in each of the fractions?
- Question 2 : How do you know which fractions show one whole without drawing or making them?

N FOCUS Question 1 requires children to work through the pictures and write the shaded fraction of each shape. The question guides children to point out that the last image with all the parts shaded is one whole.

In question (3), children complete a missing number sentence scaffold by writing the fraction that would make a whole. Children can use the accompanying pictures to help them, by assigning the parts of each shape to the different parts of the missing number sentence scaffold.

**STRENGTHEN** There are multiple ways to fill in the missing number sentence scaffolds in question **3**. For example, question **3** b) can make two different number sentences:  $\frac{1}{3} + \frac{2}{3}$  and  $\frac{2}{3} + \frac{1}{3}$ . If children have physical resources to model the fractions they are working with, can they group the resources differently each time to model the parts that they are adding?

**DEEPEN** Building on work that children have done in previous lessons, can they add fractions to make one whole where the denominators are different? For example,  $\frac{1}{2} + \frac{2}{4} = 1$ .

ASSESSMENT CHECKPOINT In question 2, do children draw or make each fraction before deciding whether it is one whole or do they recognise a whole from the fact that the numerator and denominator are the same?

In question 3, do children know that the denominators have to be the same in order to add them to make the same whole?

#### ANSWERS

Question 1 : A is  $\frac{1}{4}$ , B is  $\frac{2}{4}$ , C is  $\frac{3}{4}$ , D is  $\frac{4}{4}$ . D has the whole shaded. Question 2 :  $\frac{3}{3}$ ,  $\frac{2}{2}$  and  $\frac{4}{4}$  are equal to one whole. Question 3 a):  $\frac{1}{2} + \frac{1}{2} = 1$ 



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Question (3) c): \frac{3}{4} + \frac{1}{4} = 1
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# Practice

WAYS OF WORKING Independent thinking

**IN FOCUS** In question **3**, children look for the correct number of shaded parts to make a whole.

Question 4 asks children to make one whole by writing a non-unit fraction and a unit fraction based on the pictures. Children write the answer with the same numerator and denominator and see that this is equal to 1.

Refer children to what Flo asks and guide them to conclude that the missing fraction in question (5 c) can be written as  $\frac{1}{2}$  or  $\frac{2}{4}$ .

**STRENGTHEN** Use different physical resources to model the different wholes in question **2**. Ask: What objects in the classroom can be split into two halves, three thirds or four quarters? Does the whole need to be different each time or can it be the same?

**DEEPEN** Question **6** requires children to understand that they have to start with the same whole but split it into different numbers of equal parts so that each child can have the same amount of cake. Ask children to draw a picture to represent this question and check that they have drawn two wholes that are the same size rather than five parts that are the same size. Ask the same question with the addition of a child eating four equal parts while eating the same amount of cake as Jemima and Sam.

**ASSESSMENT CHECKPOINT** In question 1, do children label each equal part on the image to help them fill in the box?

In question ④, do children rely on the pictures to work out what fractions to add together or are they aware of the pattern of numerators making the same total as the denominator?

**ANSWERS** Answers for the **Practice** part of the lesson appear in the separate **Practice and Reflect answer guide**.

### Reflect

WAYS OF WORKING Independent thinking

**IN FOCUS** Encourage children to think about this question and explanation for themselves. Ask children to write down fractions with the same numerator and denominator, so that they can use them either to prove their opinion or to help inform their mathematical opinion.

**ASSESSMENT CHECKPOINT** Do children automatically know the answer or do they have to draw fractions to check? Are they able to explain why the numerators and denominators have to be the same for the fraction to equal one whole? Do they attempt to write other fractions that make one whole based on this knowledge, such as  $\frac{5}{5}$  or  $\frac{6}{6}$ , even if they do not know the names of these fractions?

**ANSWERS** Answers for the **Reflect** part of the lesson appear in the separate **Practice and Reflect answer guide**.

# After the lesson 🕕

- Did children recognise a whole as a written fraction?
- Did children represent wholes that were the same but that were split into different parts?
- Did children understand the relationship between the numerator and the denominator in a whole and explain why they are the same?

Understanding a whole
What fraction of each shape is shaded?
Î, Î, L
2 Circle the fractions that show one whole.
<u> </u>
2 2 4 4
3 Match the fractions to make one whole.
143
PUPIL PRACTICE BOOK 2B PAGE 143
Unit 10: Fractions, Lesson 11
Complete the number contence to describe the
<ul> <li>Complete the number sentence to describe the picture.</li> </ul>
a) b)
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S Complete the number sentences.
a) $+ \frac{2}{3} = 1$
b) $\frac{3}{4} + \frac{1}{2} = 1$
Can L complete
c) $+\frac{2}{4} = 1$ this in more
than one way?
36
144
PUPIL PRACTICE BOOK 2B PAGE 144
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PUPIL PRACTICE BOOK 2B PAGE 144   Determine at a slices of cake.   Sam ate 2 slices of cake.   They both ate the same amount of cake.   Explain how this is possible.   Particular 2   Prefect   When the numerator and the denominator are the same, the fraction equals one whole.   Circle if this statement is   always true   sometimes true   never true   Write and draw fractions to prove your answer.   Image: Comparison of the denominator of the denominator of the same, the fraction equals one whole.   Strue   Strue   Strue   Dependence of the statement is   always true   sometimes true   never true   Write and draw fractions to prove your answer.   Image: Comparison of the denominator of the