

Differentiation

Less confident learners: The support version of the sheet covers just halves, quarters and eighths.

More confident learners: The extension version of the sheet includes twelfths and twentieths.

worth the same as $\frac{2}{8}$ and $\frac{6}{8}$? So $\frac{1}{4} + \frac{3}{4}$ is worth the same as $\frac{2}{8} + \frac{6}{8}$. Using the challenge set to the more confident children, review with them the fractions that they found and write these on the board with their equivalents, such as $\frac{6}{12}$, $\frac{1}{2}$, $\frac{3}{6}$, and so on.

Lesson 3 (Teach and practise)

Starter

Recall: Repeat the Starter from Lesson 1, this time for counting in 6s from zero. Again discuss the unit's pattern: 0, 6, 2, 8, 4, 0, 6...

Main teaching activities

Whole class: Explain that in today's lesson the children will use their table facts to solve a problem. Begin by writing on the board: *There are 32 legs. How many horses is that? Ask: How did you work that out? Which table fact did you use? Now say: There are 24 legs. These could be horses' legs, or chickens' legs, or a mixture of both. How many animals do you think there are?* Give the children about five minutes, working in pairs, to suggest some solutions.

Discuss possible solutions and how the children worked this out. For example, there could be 6 horses (6×4) or 12 chickens (12×2) or a mixture of both animals such as 5 horses ($5 \times 4 = 20$) and 4 chickens ($2 \times 2 = 4$). There are other solutions. Discuss the table facts that the children used and how these helped them to find a solution.

Paired work: Provide each child with a copy of the activity sheet 'Wheels'. This contains a problem about how many vehicles there could be for a given number of wheels. Remind the children to use their table facts to solve the problem.

Review

Review the core sheet together. Discuss the solutions and the table facts used. Ask, for example: *Which table fact did you use? Did you use this for multiplication or division? Why? How did you decide how many of each vehicle to try?* Remind the children that with problems like this there can be more than one solution. Now ask the more confident children to report back on both parts of the problem on the more complex version of the sheet. Discuss their solutions, the table facts they needed, and the range of solutions that they found.

Lesson 4 (Teach and apply)

Starter

Recall: Ask the children to count in 3s, then 5s, again looking at the pattern of the units. 3s: 0, 3, 6, 9, 2, 5, 8, 1, 4, 7, 0, 3... And 5s: 0, 5, 0, 5...

Main teaching activities

Whole class: Explain that in today's lesson children will be solving more problems using multiplication and division facts. Ask: *What is 8 times 3? So how can I use this to find 8 times 6?* Discuss how the first fact can be doubled to derive another fact. Write on the board: $24 \div \bigcirc = \bigcirc$. Ask: *How could we complete this division fact?* Write the different ways that the children suggest: $24 \div 6 = 4$; $24 \div 4 = 6$; $24 \div 8 = 3$; $24 \div 3 = 8$; $24 \div 2 = 12$; $24 \div 12 = 2$. Discuss how the children found the answers, such as if you know that $6 \times 4 = 24$, then you can derive $24 \div 6 = 4$ and $24 \div 4 = 6$.

Paired work: Write on the board: $\bigcirc \times \bigcirc = 36$ and $36 \div \bigcirc = \bigcirc$. Ask the children to work in pairs to find solutions that fit both of these equations.

Review

Write on the board the answers that the children give, starting with the multiplication equation. Put the division answers alongside the multiplication fact. Discuss how, from knowing one fact, the others can be derived.

Differentiation

Less confident learners: There is a simpler version of 'Wheels' which uses only the 2- and 4-times tables.

More confident learners: The extension version of the sheet involves the 2-, 3-, 4- and 6-times tables.

Differentiation

Less confident learners: Suggest that they try the multiplication first and that the answers to this will help them to find the division answers.

More confident learners: Challenge the children to extend their responses to, for example, 18×2 and 12×3 , and so on.