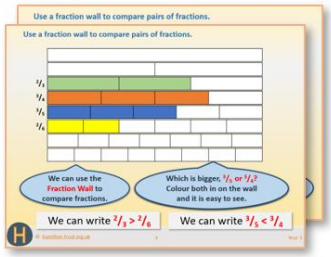
Week 11, Day 1

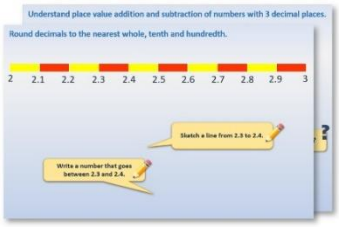
Multiply and divide numbers mentally drawing on known facts.

Each day covers one maths topic. It should take you about 1 hour or just a little more.

1. If possible, watch the **PowerPoint presentation** with a teacher or another grown-up.



OR start by carefully reading through the **Learning Reminders**.



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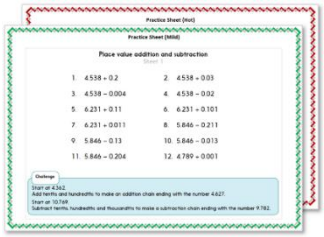
2. Tackle the questions on the **Practice Sheet**.
There might be a choice of either Mild (easier) or Hot (harder)!
Check the answers.



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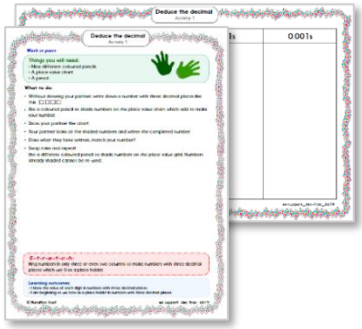
3. Finding it tricky? That's OK… have a go with a grown-up at **A Bit Stuck?**



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4. Think you've cracked it? Whizzed through the Practice Sheets?
Have a go at the **Investigation**…

Learning Reminders

Multiply and divide numbers mentally drawing on known facts.

$10 \times 46 = 460$

We can use this fact to work out other facts mentally.

$5 \times 46 = 230$

That's half of 230.

$20 \times 46 = 920$

That's double 230.

$15 \times 46 = 690$

That's (10 x 46) + (5 x 46).

$21 \times 46 = 966$

That's (20 x 46) + 46.

Learning Reminders

Multiply and divide numbers mentally drawing on known facts.

$20 \times 6 = 120$

$30 \times 6 = 180$

$20 \times 7 =$

$30 \times 7 =$

$20 \times 8 =$

$30 \times 8 =$

We can use times tables facts and place value to find multiples of 10.
For example we know 2 x 6 = 12, so 20 x 6 = 120.

We know 3 x 6 = 180, so 30 x 6 = 180.

Check the other answers in this way.

Answers

2 x 7 = 14 so 20 x 7 = 140

3 x 7 = 21 so 30 x 7 = 210

2 x 8 = 16 so 20 x 8 = 160

3 x 8 = 24 so 30 x 8 = 240

Learning Reminders

Multiply and divide numbers mentally drawing on known facts.

We can use these answers to help with division.

$20 \times 6 = 120$

$30 \times 6 = 180$

$20 \times 7 = 140$

$30 \times 7 = 210$

$20 \times 8 = 160$

$30 \times 8 = 240$

$123 \div 6$

We know that 20 x 6 = 120 so 123 ÷ 6 = 20 r 3 or 20½.

$244 \div 8$

We know that 30 x 8 = 240 so 244 ÷ 8 = 30 r 4 or 30½.

$154 \div 7$

We know that 20 x 7 = 140. 154 is 14 more than 140 so 154 ÷ 7 = 22.

Practice Sheet Mild

Using known facts to help with divisions

Work out 10 × 6, 20 × 6, 30 × 6, 10 × 7, 20 × 7, 30 × 7, 10 × 8, 20 × 8 and 30 × 8.

Use these facts to help calculate the exact answers to these divisions. Write remainders as fractions.

1. 69 ÷ 6
2. 129 ÷ 6
3. 77 ÷ 7
4. 147 ÷ 7
5. 88 ÷ 8
6. 164 ÷ 8
7. 122 ÷ 6
8. 242 ÷ 8
9. 209 ÷ 7
10. 183 ÷ 6

Make up your own divisions that you can solve using the nine multiplication facts that you found at the beginning.

Practice Sheet Hot

Using known facts to help with divisions

Work out 20 × 6, 30 × 6, 40 × 6, 20 × 7, 30 × 7, 40 × 7, 20 × 8, 30 × 8 and 40 × 8.

Use these facts to help calculate the exact answers to these divisions. Write remainders as fractions.

1. 129 ÷ 6
2. 147 ÷ 7
3. 164 ÷ 8
4. 122 ÷ 6
5. 162 ÷ 8
6. 166 ÷ 8
7. 183 ÷ 6
8. 224 ÷ 7
9. 244 ÷ 8
10. 255 ÷ 6
11. 287 ÷ 7
12. 332 ÷ 8

Make up your own divisions that you can solve using the nine multiplication facts that you found at the beginning.