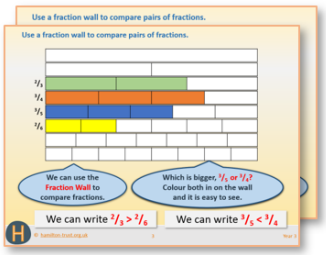
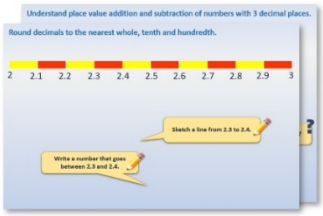
Week 5, Day 2
Short division

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

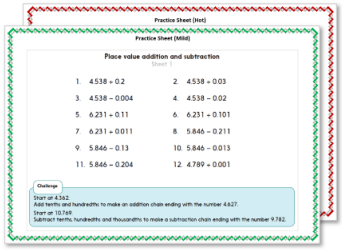
1. If possible, watch the **PowerPoint presentation** with a teacher or another grown-up.



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

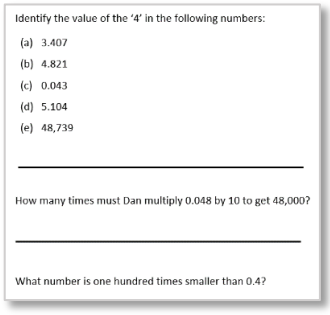


2. Tackle the questions on the **Practice Sheet**.
There might be a choice of either Mild (easier) or Hot (harder)!
Check the answers.



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

4. Have I mastered the topic? A few questions to **Check your understanding**.
Fold the page to hide the answers!



Learning Reminders

Use short division to divide 4-digit numbers by 1-digit numbers; Divide remainders to give fractions/decimals, round up or down.

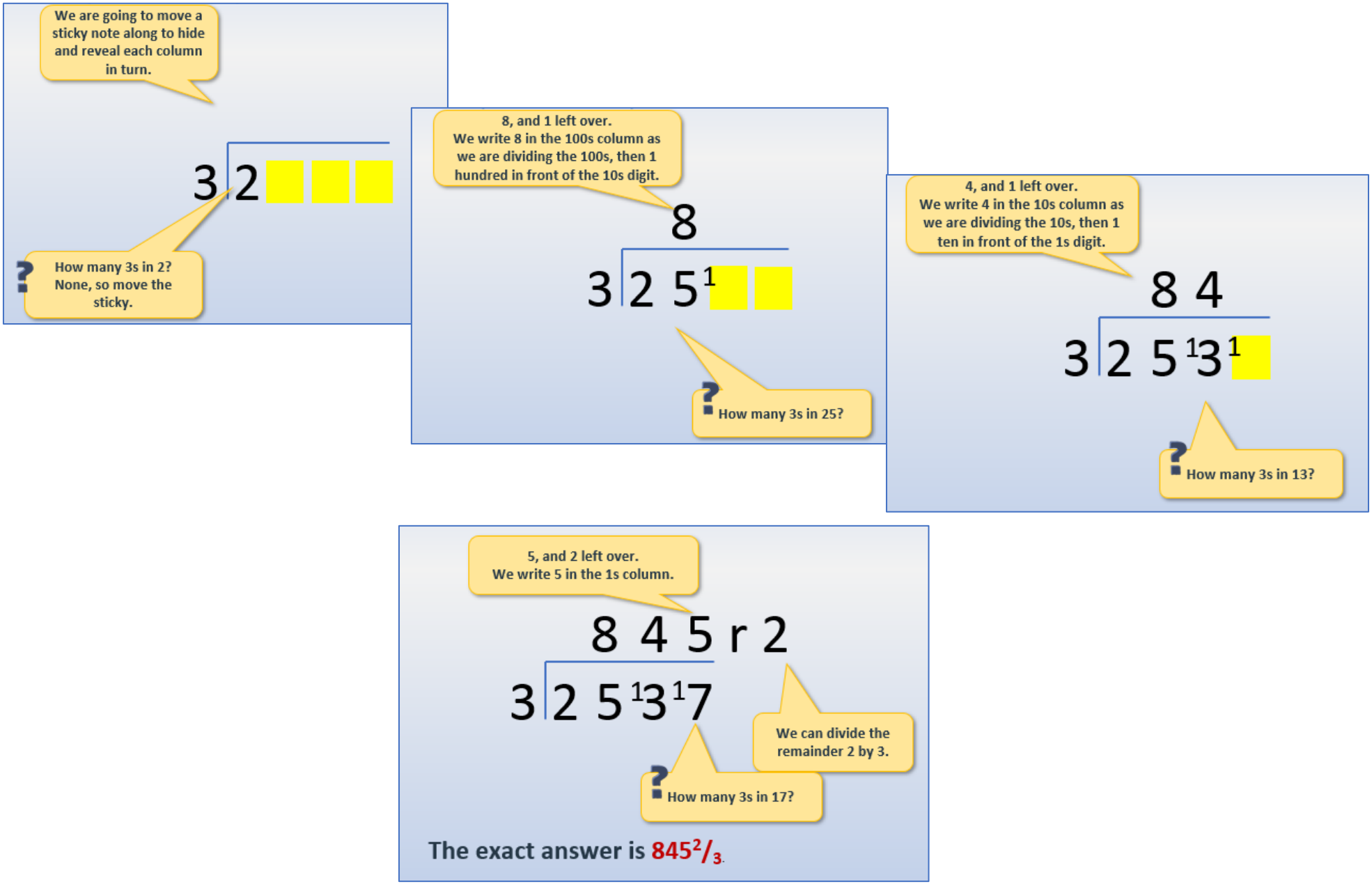
$$2537 \div 3$$

$$3\overline{)2537}$$

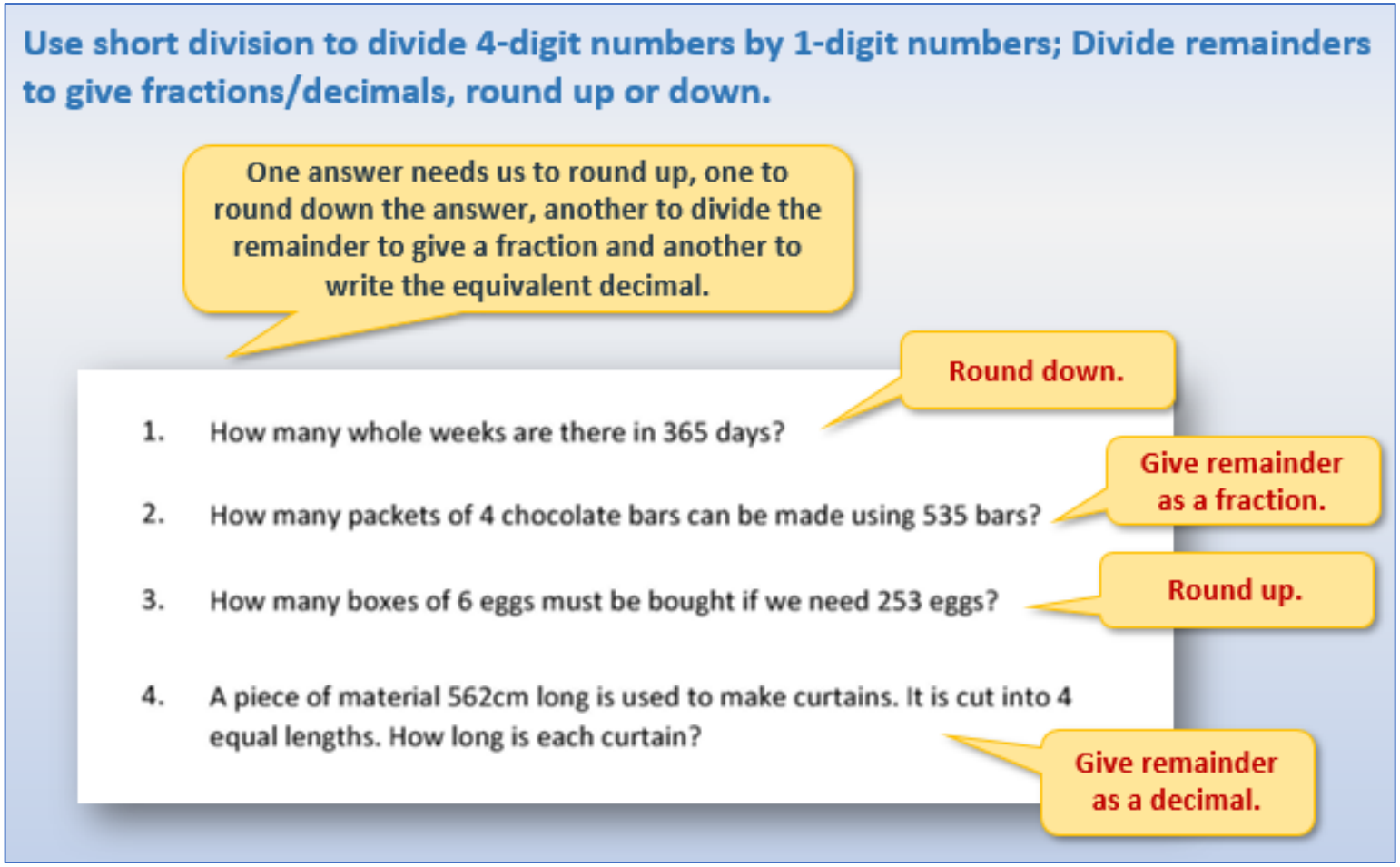
? About how many 3s are in 2537?

800 × 3 = 2400, so the answer must be a bit more than 800.

Learning Reminders



Learning Reminders



Practice Sheet Mild
Short division

Divide any remainders to give fractions.

1. 733 ÷ 3

2. 946 ÷ 6

3. 4783 ÷ 4

4. 6326 ÷ 4

5. 3142 ÷ 4

6. 3784 ÷ 5

7. Exactly how many weeks are there in 365 days?

8. How many packs of 4 chocolate bars can be made using 535 bars?

9. How many packs of 6 eggs need to be bought if 253 eggs are needed?

10. If a piece of material measuring 562cm long is divided into 4 equal lengths to make curtains, how long is each length?

Practice Sheet Hot

Short division

Divide any remainders to give fractions.

1. 7133 ÷ 3
2. 1946 ÷ 6
3. 3183 ÷ 4
4. 9326 ÷ 7
5. 2442 ÷ 11
6. 4752 ÷ 11
7. 3784 ÷ 12
8. 9524 ÷ 12
9. There are 12 months in a year, 365 days. If each month was an equal number of days, exactly how many days would there be in a month? How long would each month be in a leap year of 366 days?
10. How many packs of 5 chocolate bars can be made using 1453 bars?
11. How many packs of 12 eggs need to be bought if 253 eggs are needed?
12. If a piece of material measuring 962cm long is divided into 8 equal lengths to make curtains, how long is each length?

Use multiplication to check three of your answers. What do you need to do with the remainder?

Practice Sheet Answers

Short division (mild)

1. $733 \div 3 = 244\frac{1}{3}$
2. $946 \div 6 = 157\frac{2}{3}$
3. $4783 \div 4 = 1195\frac{3}{4}$
4. $6326 \div 4 = 1581\frac{1}{2}$
5. $3142 \div 4 = 785\frac{1}{2}$
6. $3784 \div 5 = 756\frac{4}{5}$
7. $365 \div 7 = 52\frac{1}{7}$
8. $535 \div 4 = 133\frac{3}{4}$
9. $253 \div 6 = 42\frac{1}{6}$ 43 packs of eggs must be bought
10. $562 \div 4 = 140\frac{1}{2}$ cm

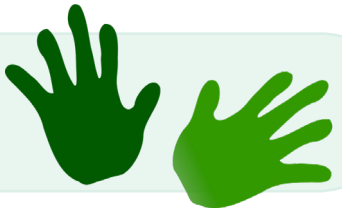
Short division (hot)

1. $7133 \div 3 = 2377\frac{2}{3}$
2. $1946 \div 6 = 324\frac{1}{3}$
3. $3183 \div 4 = 795\frac{3}{4}$
4. $9326 \div 7 = 1332\frac{2}{7}$
5. $2442 \div 11 = 222$
6. $4752 \div 11 = 432$
7. $3784 \div 12 = 315\frac{4}{12}$ ($315\frac{1}{3}$)
8. $9524 \div 12 = 793\frac{8}{12}$ ($793\frac{2}{3}$)
9. $365 \div 12 = 30\frac{5}{12}$ $366 \div 12 = 30\frac{6}{12}$ ($30\frac{1}{2}$)
10. $1453 \div 5 = 290\frac{3}{5}$ packs
11. $253 \div 12 = 21\frac{1}{12}$ packs 22 packs need to be bought
12. $962 \div 8 = 120\frac{2}{8}$ cm ($120\frac{1}{4}$ cm)

A Bit Stuck?
Any left?

Work in pairs

Things you will need:
- A pencil



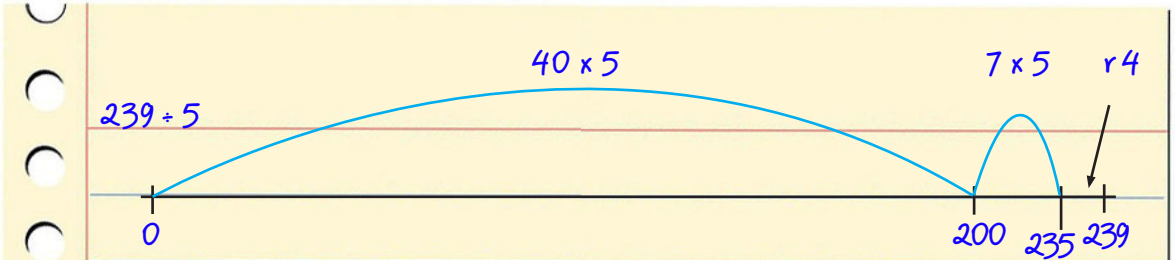
What to do:

1. Calculate the answers to:

10 x 5 = 20 x 5 = 30 x 5 = 40 x 5 = 50 x 5 = 60 x 5 = 70 x 5 = 80 x 5 = 90 x 5 = 100 x 5 =

Now use your answers to help work out the answers to at least two of these divisions.
You score 10 points for each correct answer BUT you will score 10 bonus points if the division has a remainder.

239 ÷ 5 162 ÷ 5 365 ÷ 5 235 ÷ 5 414 ÷ 5



2. Calculate the answers to:

10 x 4 = 20 x 4 = 30 x 4 = 40 x 4 = 50 x 4 = 60 x 4 = 70 x 4 = 80 x 4 = 90 x 4 = 100 x 4 =

Now use your answers to help work out the answers to at least two of these divisions.
You score 10 points for each correct answer BUT you will score 10 bonus points if the division has a remainder.

143 ÷ 4 249 ÷ 4 326 ÷ 4 371 ÷ 4 208 ÷ 4

S-t-r-e-t-c-h:
Use chunking to work out 254 ÷ 6 and 378 ÷ 6.
What multiplications facts could you list to help?

Learning outcomes:
- I can use chunking to divide, using lists of multiples of 10 of the divisor to help.
- I am beginning to write my own lists of multiples to help.

Check your understanding

Questions

If Sally multiplies a number by 12 she gets 9,432. What was her starting number?

Tom multiplies his number by 9 and gets 7074. What was his starting number?

Calculate 1575 ÷ 6.

- A piece of ribbon 1575cm long is cut into six equal pieces. How long is each piece?
- 1575 eggs are needed to make breakfast at a hotel. The eggs are in boxes of 6. Exactly how many boxes of eggs will be used?
- The school needs 1575 pens. The pens come in packs of 6. How many packs need to be bought?
- There are 1575 oranges. They are put into bags of 6 oranges. How many bags can be packed?

Fold here to hide answers

Check your understanding

Answers

If Sally multiplies a number by 12 she gets 9,432. What was her starting number? 786.

Tom multiplies his number by 9 and gets 7074. What was his starting number? 786.
Solved by division – for some children 'multiplies' is a trigger to do just that, rather than the division (as the reverse of multiplication) needed to solve these.

Calculate 1575 ÷ 6.

- A piece of ribbon 1575cm long is cut into six equal pieces. How long is each piece? 262.5cm
- 1575 eggs are needed to make breakfast at a hotel. The eggs are in boxes of 6. Exactly how many boxes of eggs will be used? $262^{1}/_{2}$
- The school needs 1575 pens. The pens come in packs of 6. How many packs need to be bought? 263
- There are 1575 oranges. They are put into bags of 6 oranges. How many bags can be packed? 262