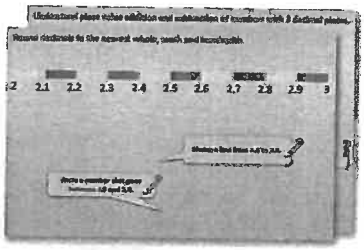
Year 4: Week 1, Day 1
Decimals on number lines

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

1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



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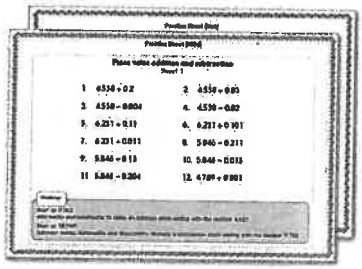
2. Tackle the questions on the **Practice Sheet**. There might be a choice of either Mild (easier) or Hot (harder)! Check the answers.



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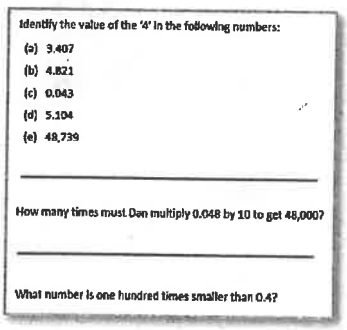
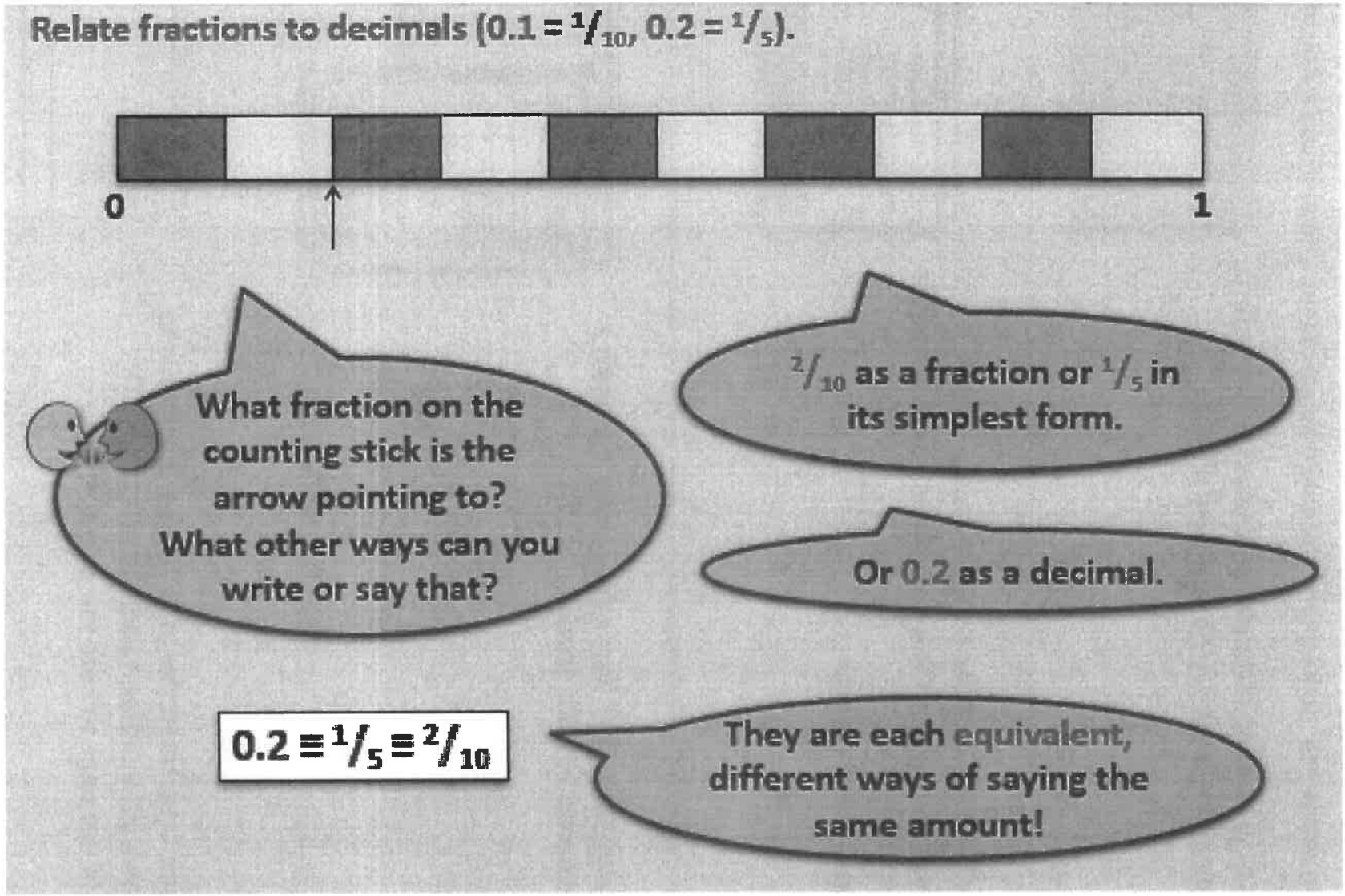
4. Have I mastered the topic? A few questions to **Check your understanding.** Fold the page to hide the answers!

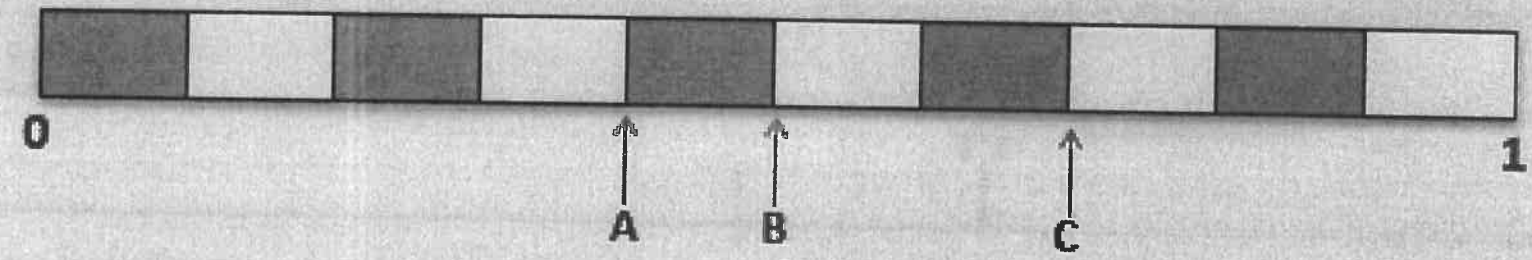


Learning Reminders



Learning Reminders

Relate fractions to decimals ($0.1 = {}^{1}/_{10}$, $0.2 = {}^{1}/_{5}$).



What decimals are the letters pointing to? How else can we write these?

A. $0.4 \equiv {}^{4}/_{10} \equiv {}^{2}/_{5}$

B. $0.5 \equiv {}^{5}/_{10} \equiv {}^{1}/_{2}$

C. $0.7 \equiv {}^{7}/_{10}$

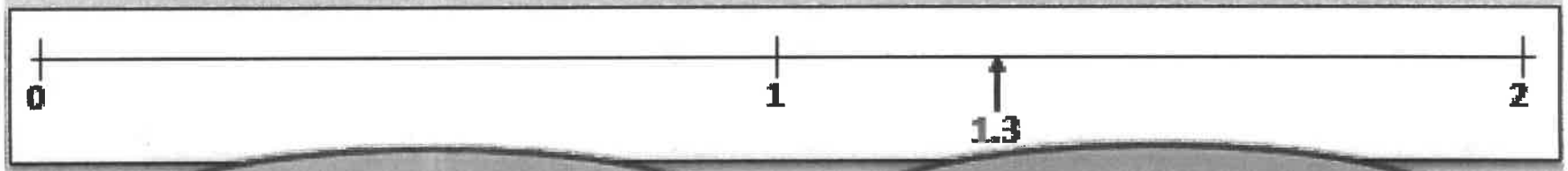
Learning Reminders

Relate 1-place decimals to cm and mm; Mark numbers with 1 decimal place on number lines; Round numbers with 1 decimal place to the nearest whole

Measuring each other's fingernails to the nearest millimetre.

If a fingernail is 1cm 3mm long we can also write that as 13mm.

The 3 in 1.3cm is $^{3}/_{10}$ of a cm or 3mm. What is this measurement to the nearest whole cm?



Let's mark 1.3 on this 0-2 line.

Is it closer to 1 or to 2?

Practice Sheet Mild
Placing decimals on lines

Place these decimals on the line. Draw a line from each decimal to round to the nearest whole number.
Remember that we round up numbers ending in 5.

1.5, 0.9, 3.2, 4.7, 2.4

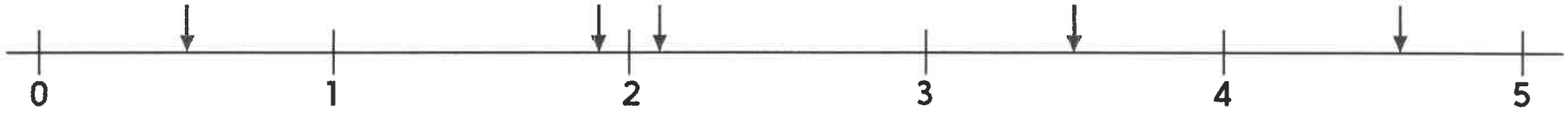
7.5, 5.7, 9.9, 6.3, 8.8

Challenge

Write two new numbers between 3 and 4, each with one decimal place.
One number must round **up**, and the other must round **down**.

Practice Sheet Hot
Identifying decimals on lines

Label the mystery decimals. Draw a line from each decimal to round to the nearest whole number.

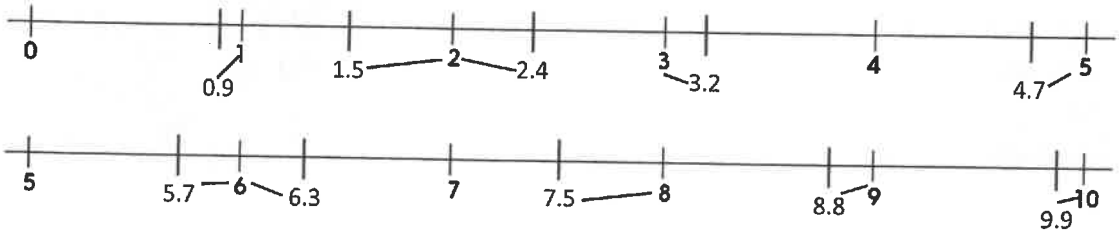


Challenge

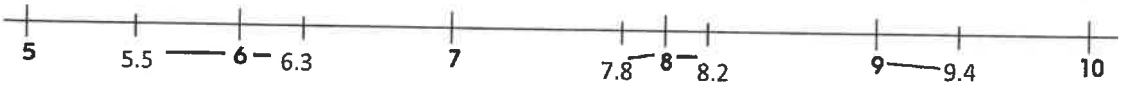
Write a different number with one decimal place which rounds **up** to 5.Write a different number with one decimal place which rounds **down** to 5.

Practice Sheets Answers

Placing decimals on lines (mild)



Identifying decimals on lines (hot)



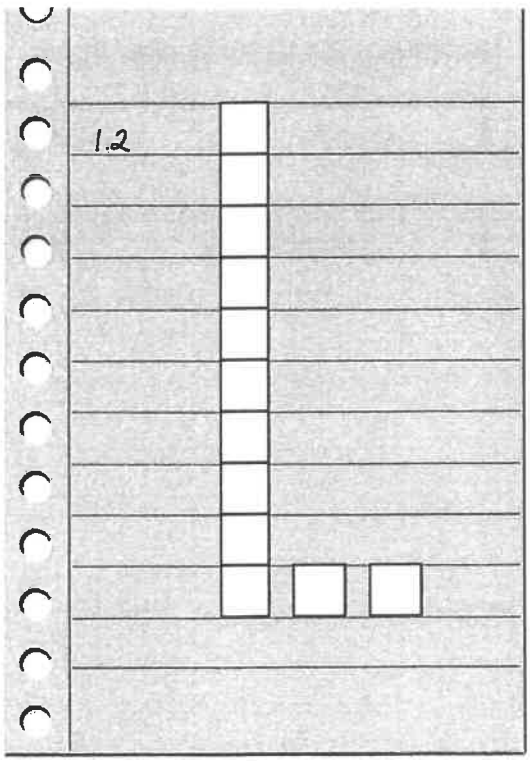
A Bit Stuck?
Decimals are a snip

*Work in pairs, but stick your **fraction strips into your** own book/on paper*

Things you will need:
- Tenths strips
- Scissors
- Glue sticks

What to do:

- Choose at least three numbers **less than 1** and at least three numbers **more than 1** to show using your tenths strips.
- **Look at each number written in the table below.**
- **Write the number and stick the strips by the side.**

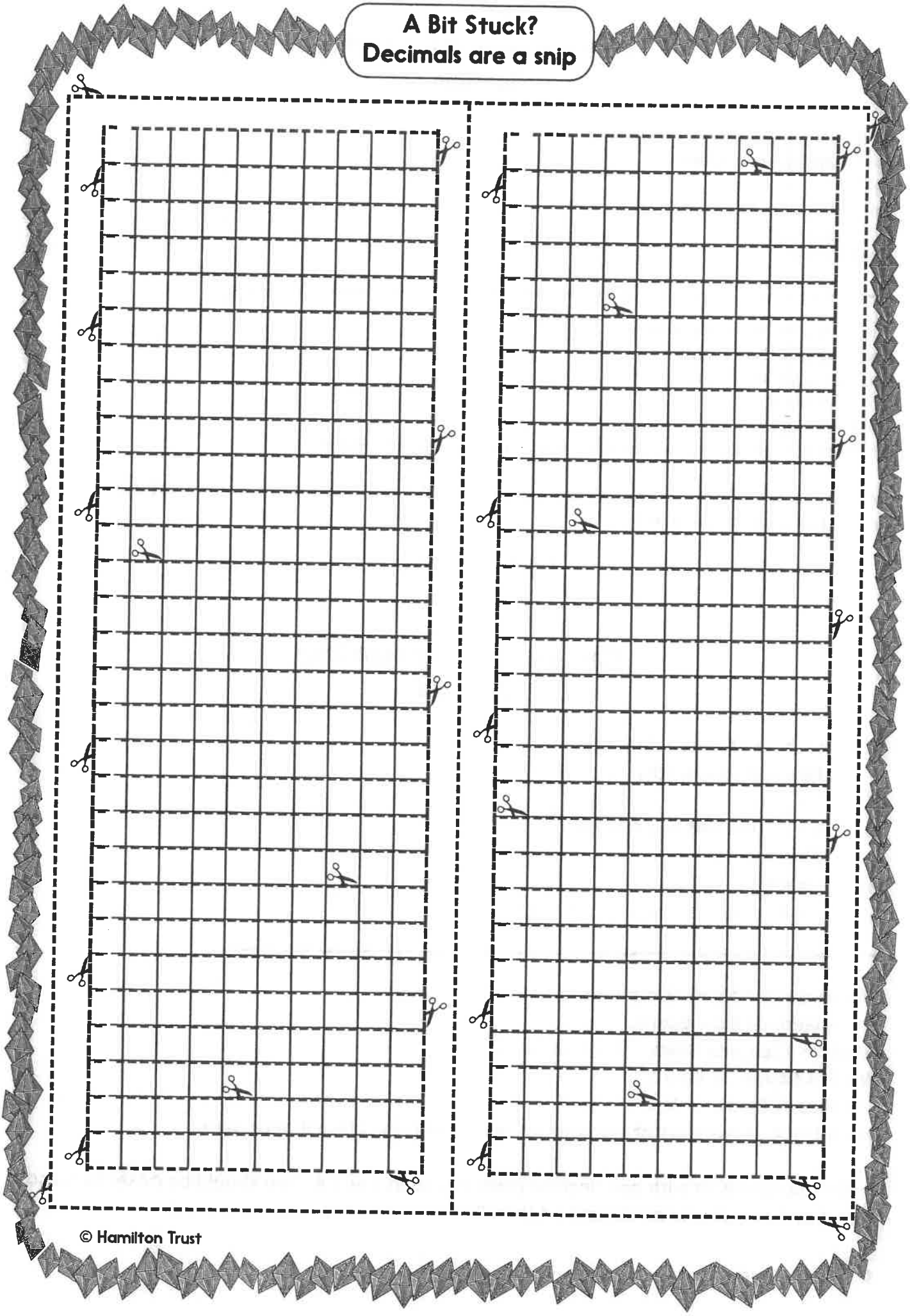


1s	0.1s
0	2
0	7
1	2
2	1
2	4
1	8
0	6
1	5
2	3

S-t-r-e-t-c-h:
Write all your numbers in order from smallest to largest.

Learning outcomes:
- I can understand the value of each digit in numbers with one decimal place.
- I am beginning to order numbers with one decimal place.

A Bit Stuck?
Decimals are a snip



Check your understanding

Questions

Write each number as a decimal:

(i) One and four tenths

(ii) $^{6}/_{10}$

(iii) $10^{2}/_{10}$ (ten and two tenths)

(iv) One half

(v) One fifth

Billy measured his mobile phone.
These were its dimensions:
Length = 12cm and 8mm
Width = 64mm
Thickness = 8mm
Write these as numbers of centimetres, with a decimal place if necessary.

Write four numbers with one decimal place between 3 and 4. Two should be closer to 3 and then 4 and two should be closer to 4 than 3.

Fold here to hide answers

Check your understanding

Answers

Write each number as a decimal:

(i) One and four tenths 1.4

(ii) $^{6}/_{10}$ 0.6

(iii) $10^{2}/_{10}$ (ten and two tenths) 10.2

(iv) One half 0.5

(v) One fifth 0.2

Check on a fraction/decimal number line.

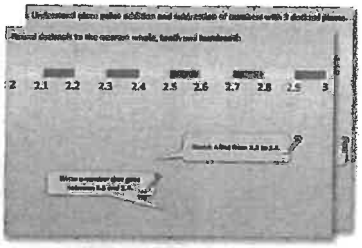
Billy measured his mobile phone.
These were its dimensions:
Length = 12cm and 8mm 12cm and 0.8cm
Width = 64mm 6.4cm
Thickness = 8mm 0.8cm
Write these as numbers of centimetres, with a decimal place if necessary.

Write four numbers with one decimal place between 3 and 4. Two should be closer to 3 and then 4 and two should be closer to 4 than 3. E.g. 3.2 and 3.4, and 3.6 and 3.9.

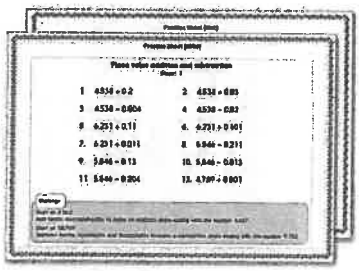
Year 4: Week 1, Day 2
Multiply and divide by 10 and 100

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

1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.

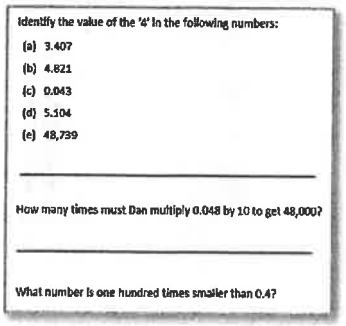


2. Tackle the questions on the **Practice Sheet**. There might be a choice of either Mild (easier) or Hot (harder)! Check the answers.

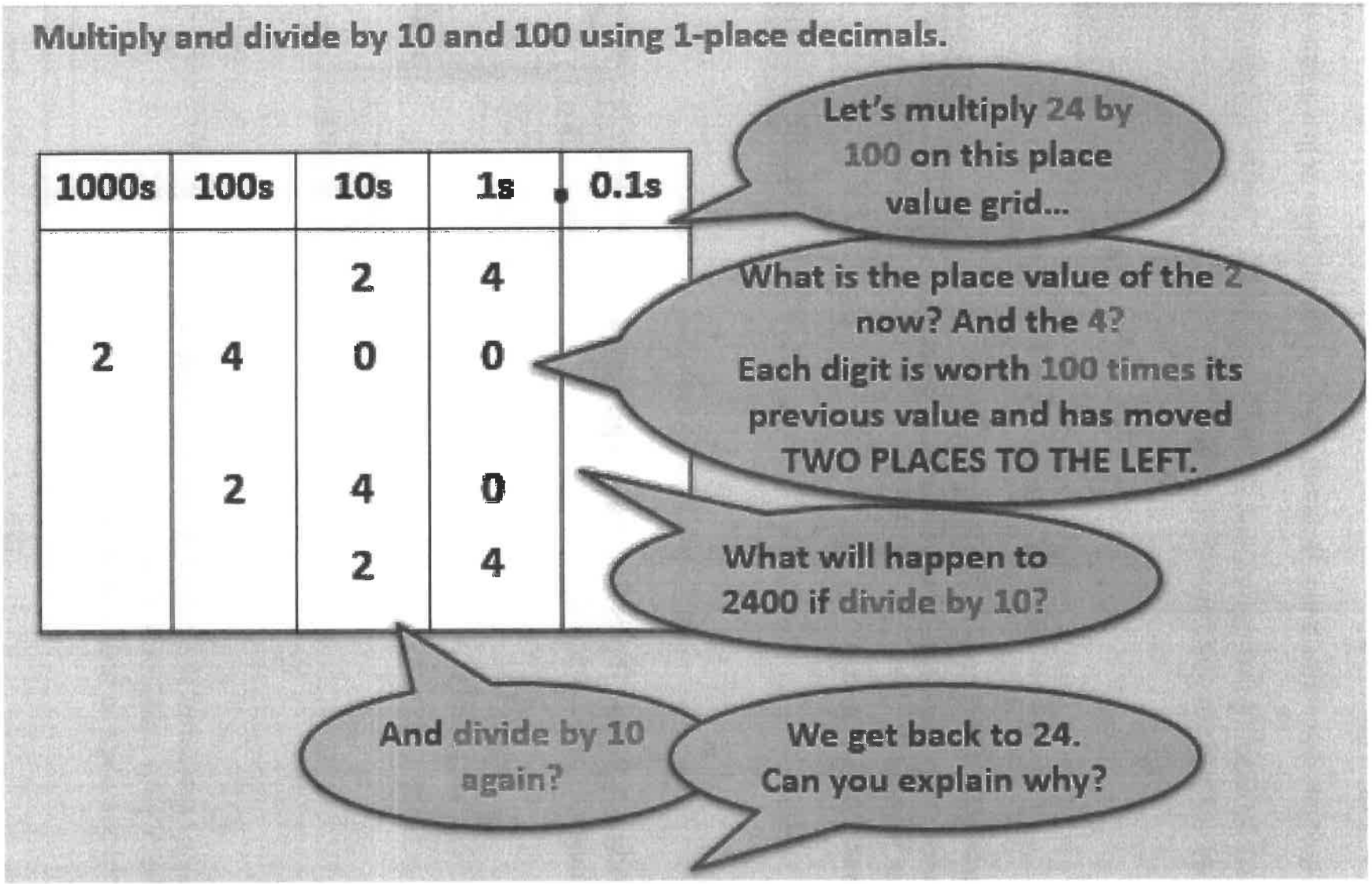


3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**

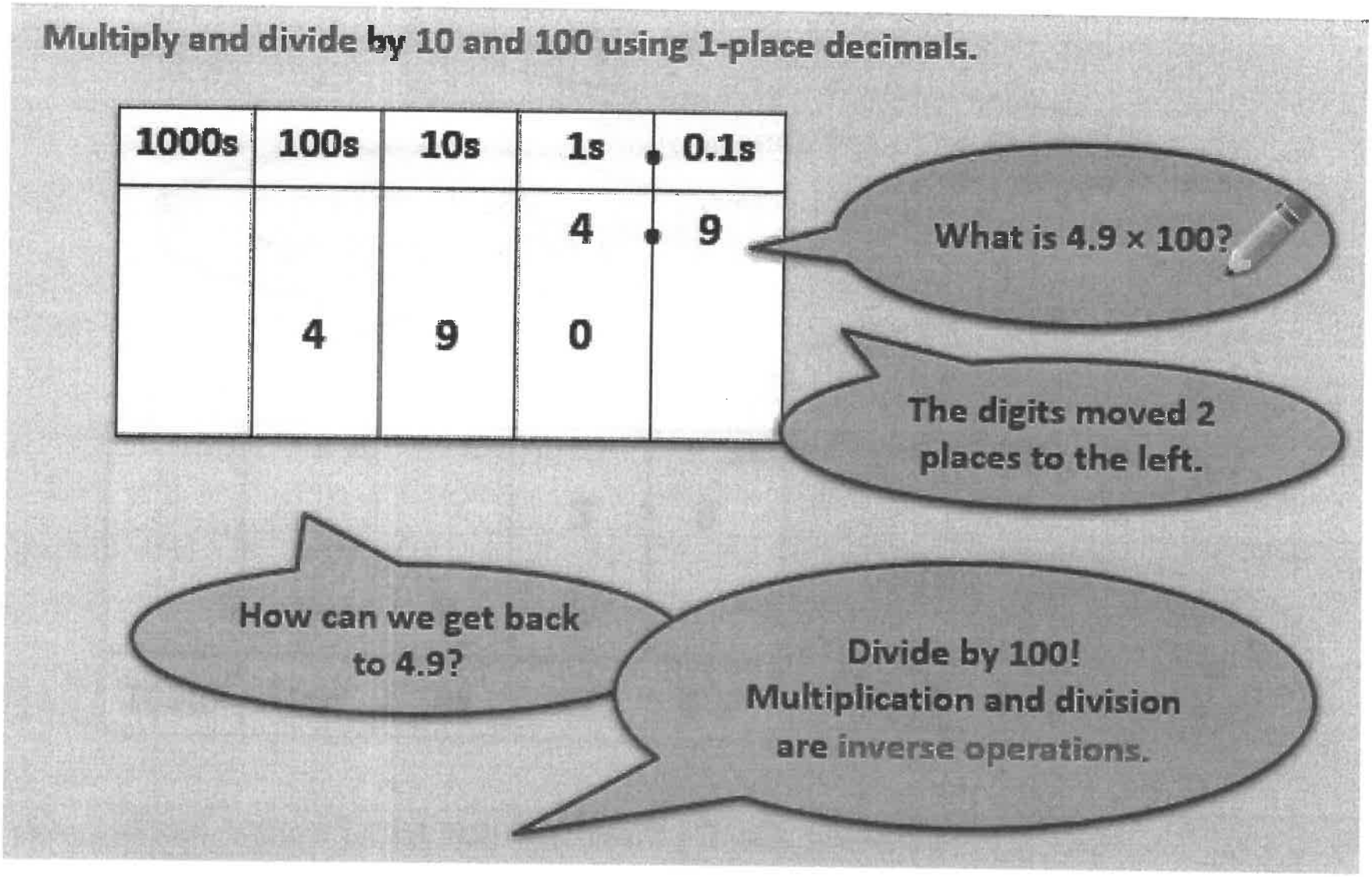
4. Have I mastered the topic? A few questions to **Check your understanding**. Fold the page to hide the answers!



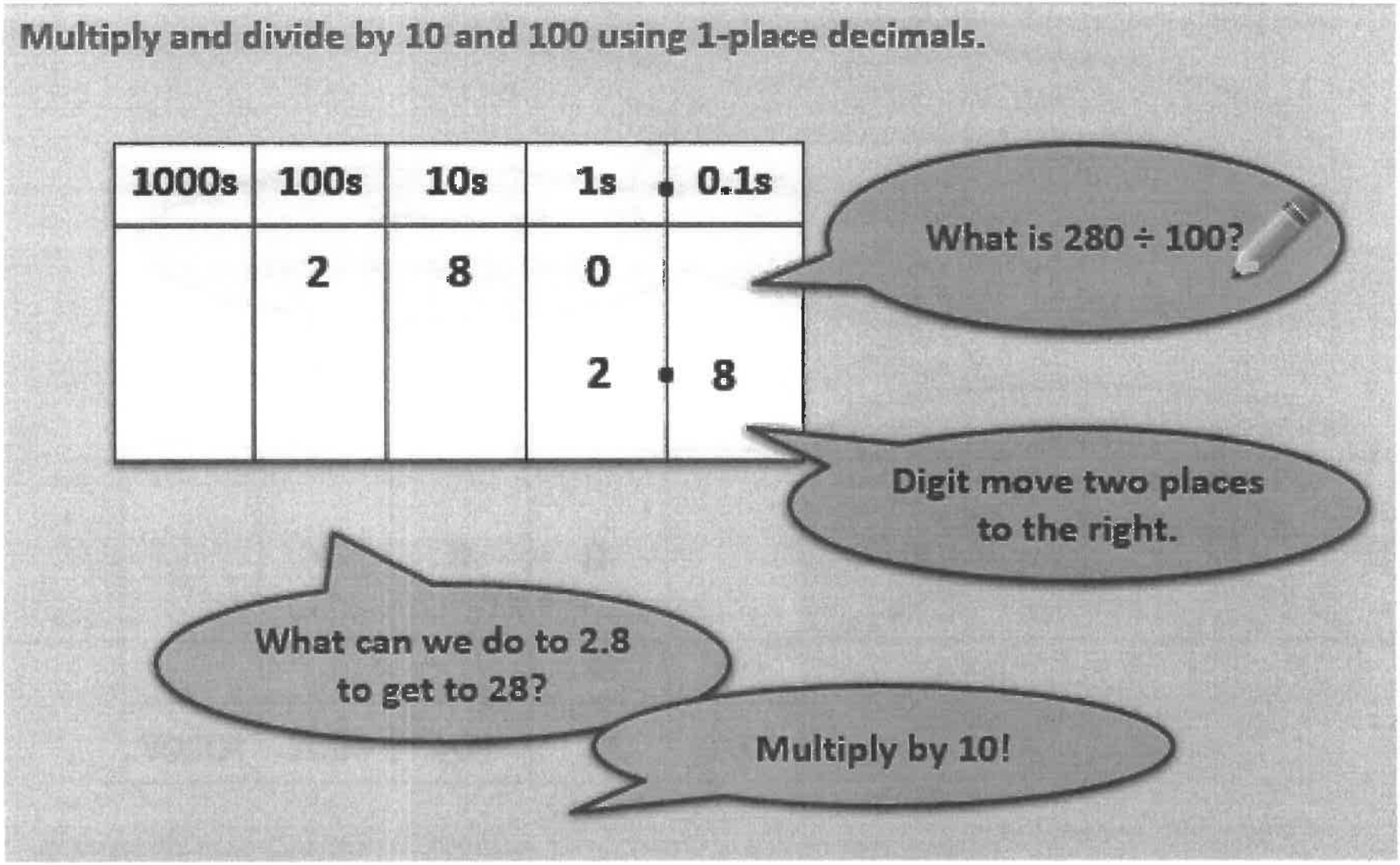
Learning Reminders



Learning Reminders



Learning Reminders



Practice Sheet Mild
Multiplying and dividing by 10 and 100

34 x 10

34 x 100

3.4 x 10

3.4 x 100

650 ÷ 10

650 ÷ 100

72 ÷ 10

7 ÷ 10

800 ÷ 100

80 ÷ 100

4.5 x ☐ = 45

4.5 x ☐ = 450

270 ÷ ☐ = 2.7

270 ÷ ☐ = 27

Challenge

3.6 x ☐ x ☐ = 360

940 ÷ ☐ ÷ ☐ = 9.4

72 x ☐ ÷ ☐ = 7.2

Practice Sheet Hot
Multiplying and dividing by 10 and 100

4.8 x 10 = ☐

36 ÷ 10 = ☐

270 ÷ 100 = ☐

0.6 x 100 = ☐

Complete these 'balancing' calculations.

4 x 10 x 10 = 4 x ☐

65 x 100 ÷ 10 = 65 x ☐

280 ÷ 10 ÷ 10 = 280 ÷ ☐

760 ÷ 100 x 10 = 760 ÷ ☐

4.5 x ☐ = 4.5 x 10 x 10

3.7 x ☐ ÷ 10 = 3.7 x 10

600 ÷ ☐ ÷ 10 = 6 ÷ 10

0.7 x 100 ÷ ☐ = 0.7 x 10

Challenge

With a partner, write some of your own balancing calculations that involve multiplying and dividing by 10 and 100.

Practice Sheets Answers

Multiplying and dividing by 10 and 100 (mild)

34 x 10 = 340
3.4 x 10 = 34
650 ÷ 10 = 65
72 ÷ 10 = 7.2
800 ÷ 100 = 8
4.5 x 10 = 45
270 ÷ 100 = 2.7

34 x 100 = 3400
3.4 x 100 = 340
650 ÷ 100 = 6.5
7 ÷ 10 = 0.7
80 ÷ 100 = 0.8
4.5 x 100 = 450
270 ÷ 10 = 27

Challenge

3.6 x 10 x 10 = 360

940 ÷ 10 ÷ 10 = 9.4

72 x 10 ÷ 100 = 7.2

Multiplying and dividing by 10 and 100 (hot)

4.8 x 10 = 48
36 ÷ 10 = 3.6
270 ÷ 100 = 2.7
0.6 x 100 = 60

4 x 10 x 10 = 4 x 100
65 x 100 ÷ 10 = 65 x 10
280 ÷ 10 ÷ 10 = 280 ÷ 100
760 ÷ 100 x 10 = 760 ÷ 10

4.5 x 100 = 4.5 x 10 x 10
3.7 x 100 ÷ 10 = 3.7 x 10
600 ÷ 100 ÷ 10 = 6 ÷ 10
0.7 x 100 ÷ 10 = 0.7 x 10

A Bit Stuck?
Digit dance

Play in pairs

Things you will need:
- A place value grid
- 1 to 9 digit cards
- A pencil

What to do:

- Take it in turns to shuffle the 1 to 9 digit cards.
- Take two and make a 2-digit whole number.
- Put the number in your place value grid.
- Divide your number by 10. Write the division sentence.
- Now work out what multiplication is needed to move the digits back to where they started. Write the multiplication.
- How many pairs of number sentences can you write before time is up?

52 ÷ 10 = 5.2
5.2 x 10 = 52

S-t-r-e-t-c-h:

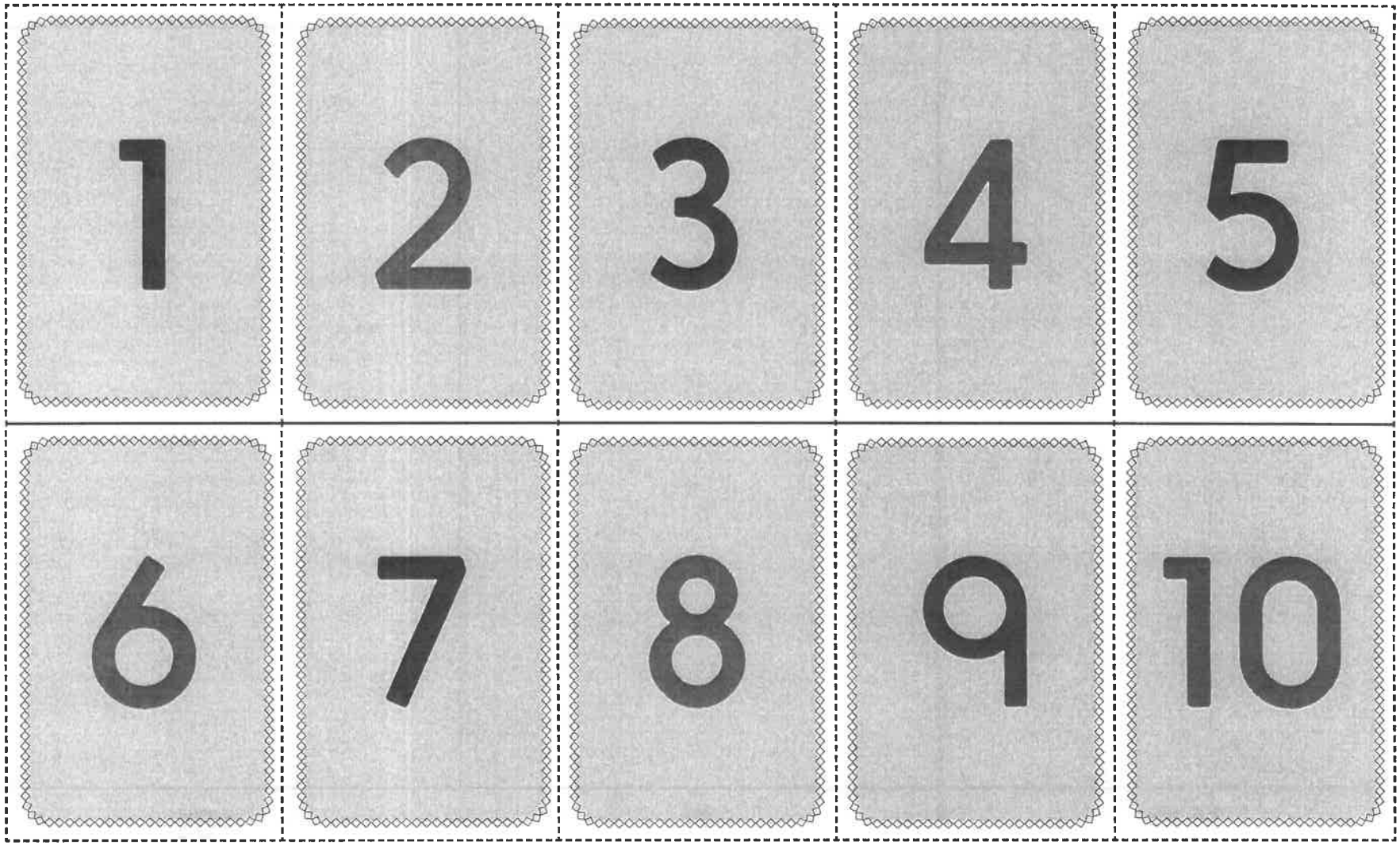
Work out these mystery decimals.

□.□ x 10 = 45 □.□ x 10 = 6

Learning outcomes:
- I can divide whole numbers by 10 to give numbers with one decimal place understanding which way digits will move.
- I can multiply numbers with one decimal place by 10.
- I am beginning to write multiplications which are the inverses of divisions.

A Bit Stuck?
Digit dance

10s	1s	0.1s



Check your understanding

Questions

Write the value of ten times each number.

(a) 3.4

(b) 6.2

(c) 0.8

(d) 1.1

Write the value of one tenth of each number.

(a) 57

(b) 84

(c) 6

(d) 13

Use this fact 56 = 7 x 8 to find the answer to:

(a) 7 x 80

(b) 7 x 0.8

(c) 7 x 800

(d) 560 ÷ 8

Fold here to hide answers

Check your understanding

Answers

Write the value of ten times each number.

(a) 3.4 34

(b) 6.2 62

(c) 0.8 8

(d) 1.1 11

Check these and subsequent questions on a place value grid. Children answering 3.40, 6.20 etc are mistakenly 'adding a zero' when multiplying by 10.

Write the value of one tenth of each number.

(a) 57 5.7

(b) 84 8.4

(c) 6 0.6

(d) 13 1.3

Use this fact 56 = 7 x 8 to find the answer to:

(a) 7 x 80 560 (10 times greater).

(b) 7 x 0.8 5.6 (10 times smaller).

(c) 7 x 800 5600 (100 times greater).

(d) 560 ÷ 8 70, since 56 ÷ 8 = 7.

Year 4: Week 1, Day 3
Fractions of amounts

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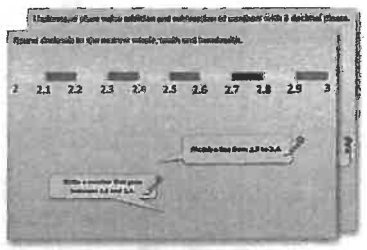

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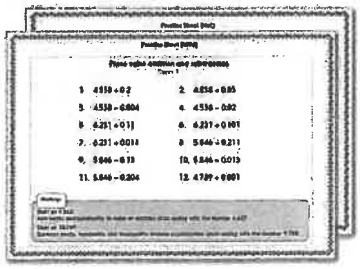

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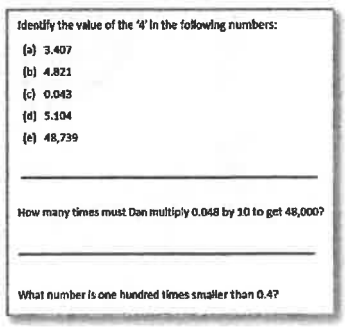
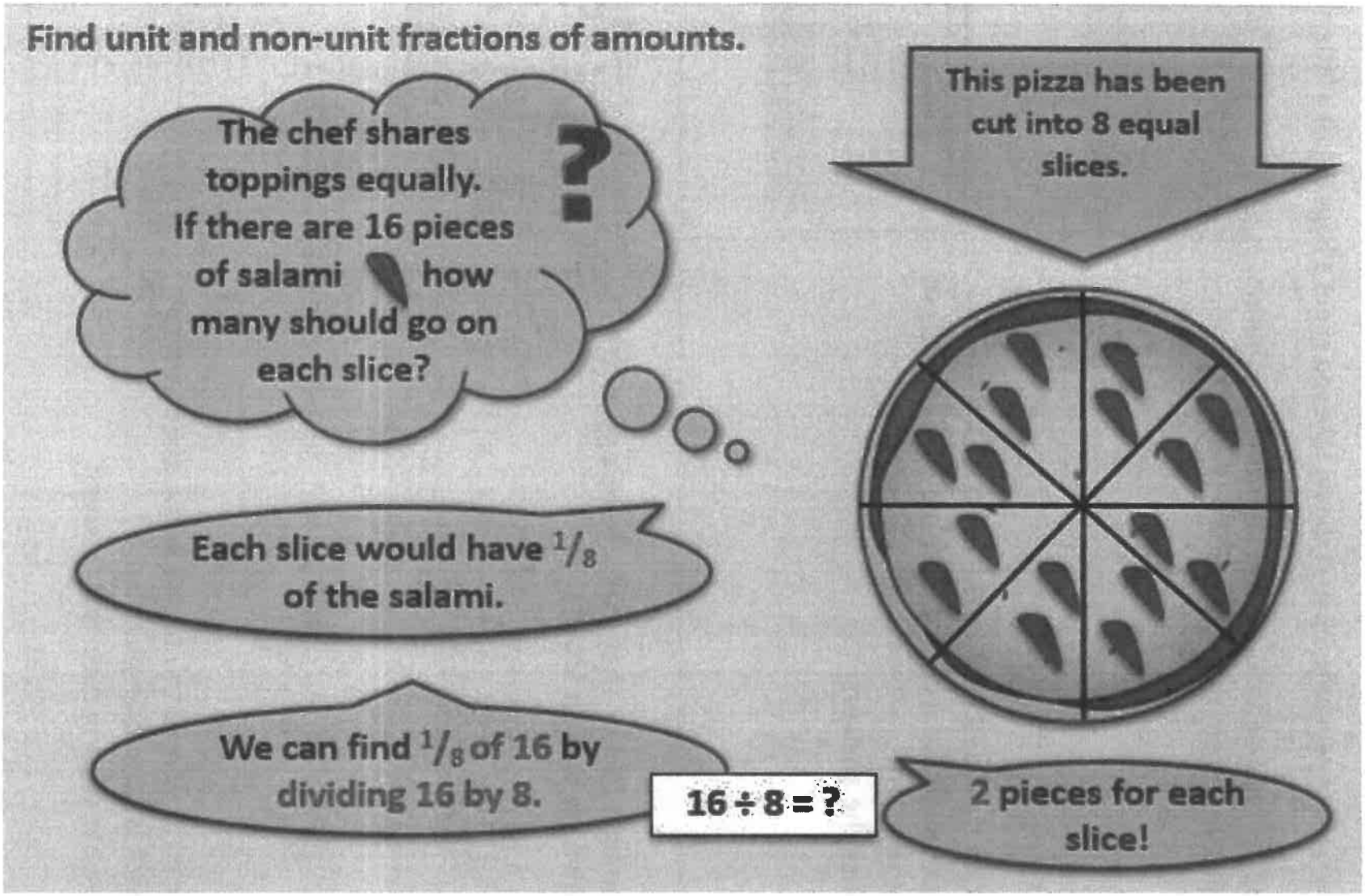
4. Have I mastered the topic? A few questions to **Check your understanding.**
   Fold the page to hide the answers!



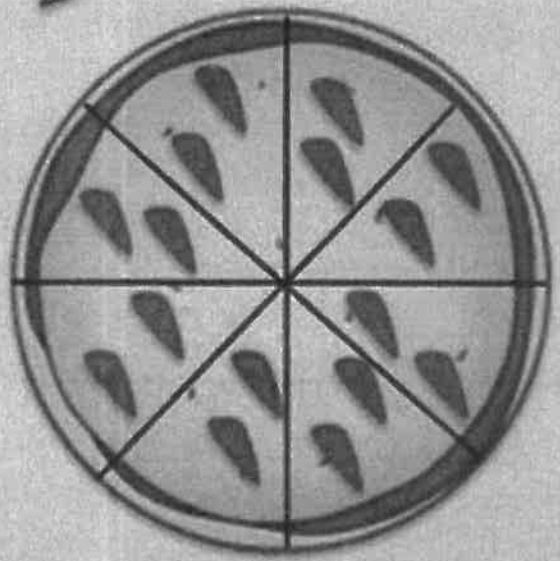
Learning Reminders



Learning Reminders

Find unit and non-unit fractions of amounts.

We can make a list of fraction facts for eighths of 16...



$\frac{1}{8}$ of 16 = 2

$\frac{2}{8}$ of 16 = 4

$\frac{3}{8}$ of 16 = 6

$\frac{4}{8}$ of 16 = 8

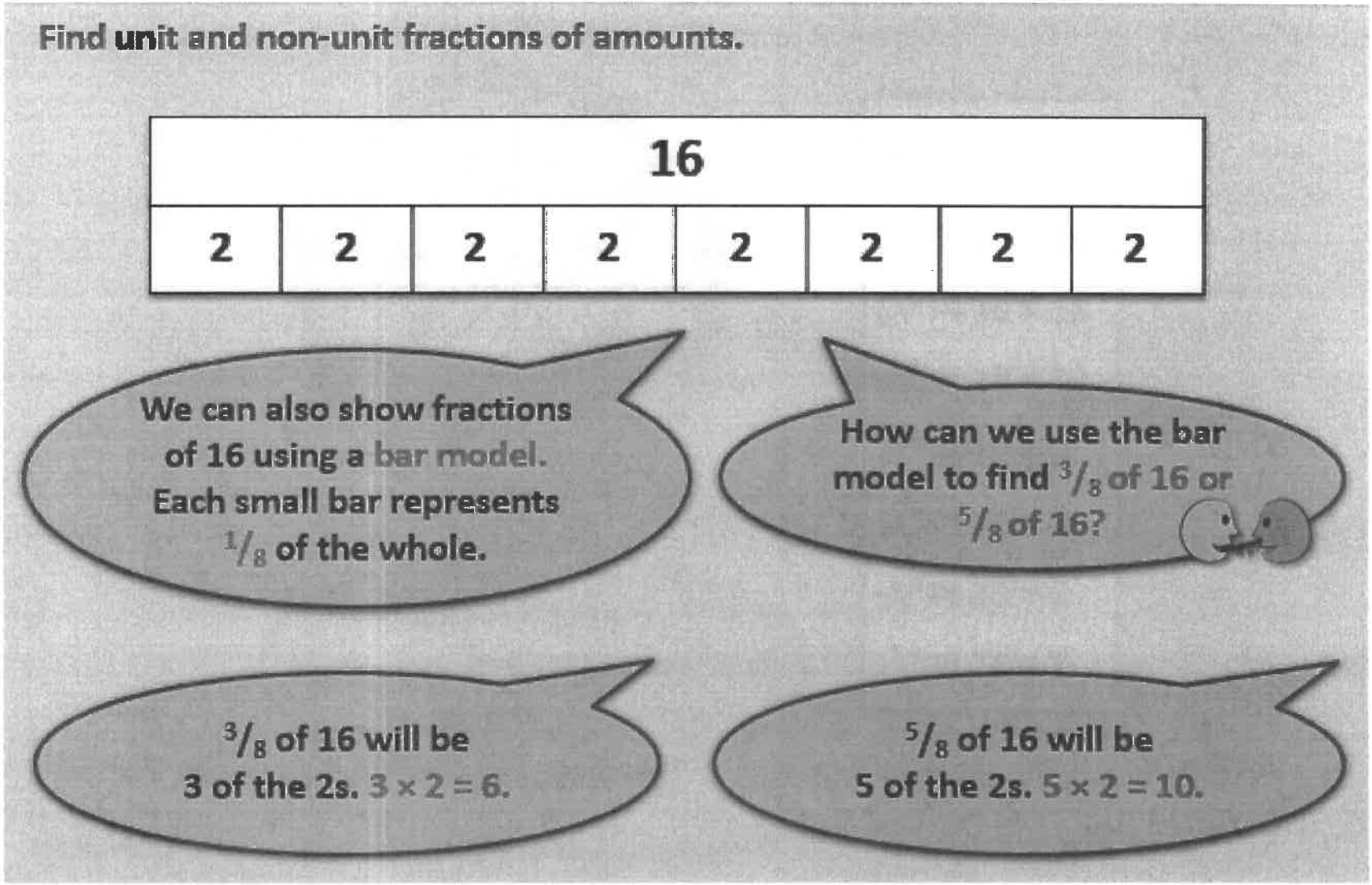
$\frac{5}{8}$ of 16 = 10

$\frac{6}{8}$ of 16 = 12

$\frac{7}{8}$ of 16 = 14

$\frac{8}{8}$ of 16 = 16

Learning Reminders



Practice Sheet Mild
Linking fractions and division

If this chocolate bar was cut into four equal pieces, how many chunks would be in each piece? ☐

$\frac{1}{4}$ of 24 is ☐

$\frac{3}{4}$ of 24 is ☐

If this chocolate bar was cut into three equal pieces, how many chunks would be in each piece? ☐

$\frac{1}{3}$ of 24 is ☐

$\frac{2}{3}$ of 24 is ☐

If this chocolate bar was cut into six equal pieces, how many chunks would be in each piece? ☐

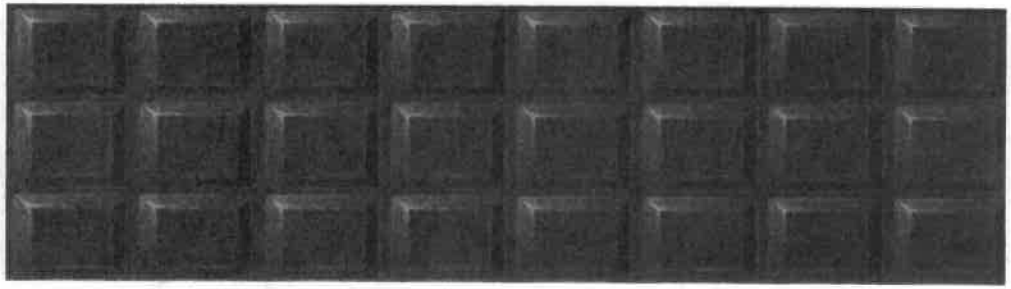
$\frac{1}{6}$ of 24 is ☐

$\frac{5}{6}$ of 24 is ☐

If this chocolate bar was cut into eight equal pieces, how many chunks would be in each piece? ☐

$\frac{1}{8}$ of 24 is ☐

$\frac{3}{8}$ of 24 is ☐



Challenge

What other fraction of this chocolate bar would give you a whole number of pieces?
List as many as you can. Write how many pieces each fraction would give you, e.g. 5/8 of 24 is 15.

Practice Sheet Hot
Linking fractions and division

$40 \div 5 =$ ☐, so

$\frac{1}{5}$ of 40 is ☐

$\frac{4}{5}$ of 40 is ☐

$40 \div 10 =$ ☐, so

$\frac{1}{10}$ of 40 is ☐

$\frac{7}{10}$ of 40 is ☐

$\frac{3}{10}$ of 40 is ☐

$40 \div 8 =$ ☐, so

$\frac{1}{8}$ of 40 is ☐

$\frac{5}{8}$ of 40 is ☐

$\frac{8}{8}$ of 40 is ☐

Challenge

True or false? $\frac{9}{5}$ of 40 is 72?

Practice Sheet Answers

Linking fractions and division (mild)

$\frac{1}{4}$ of 24 is 6
$\frac{1}{3}$ of 24 is 8
$\frac{1}{6}$ of 24 is 4
$\frac{1}{8}$ of 24 is 3
$\frac{3}{4}$ of 24 is 18
$\frac{2}{3}$ of 24 is 16
$\frac{5}{6}$ of 24 is 20
$\frac{3}{8}$ of 24 is 9

Challenge

$\frac{1}{2}$ of 24 is 12
$\frac{2}{4}$ of 24 is 12
$\frac{2}{6}$ of 24 is 8
$\frac{3}{6}$ of 24 is 12
$\frac{4}{6}$ of 24 is 16
$\frac{2}{8}$ of 24 is is 6
$\frac{4}{8}$ of 24 is 12
$\frac{5}{8}$ of 24 is 15
$\frac{6}{8}$ of 24 is 18
$\frac{7}{8}$ of 24 is 21
$\frac{1}{12}$ of 24 = 2
$\frac{2}{12}$ of 24 = 4
$\frac{3}{12}$ of 24 = 6
$\frac{4}{12}$ of 24 = 8
$\frac{5}{12}$ of 24 = 10
$\frac{6}{12}$ of 24 = 12
$\frac{7}{12}$ of 24 = 14
$\frac{8}{12}$ of 24 = 16
$\frac{9}{12}$ of 24 = 18
$\frac{10}{12}$ of 24 = 20
$\frac{11}{12}$ of 24 = 22

Linking fractions and division (hot)

40 ÷ 5 = 8, so
40 ÷ 10 = 4, so
40 ÷ 8 = 5, so
$\frac{1}{5}$ of 40 is 8
$\frac{1}{10}$ of 40 is 4
$\frac{1}{8}$ of 40 is 5
$\frac{4}{5}$ of 40 is 32
$\frac{7}{10}$ of 40 is 28
$\frac{5}{8}$ of 40 is 25
$\frac{3}{10}$ of 40 is 12
$\frac{8}{8}$ of 40 is 40

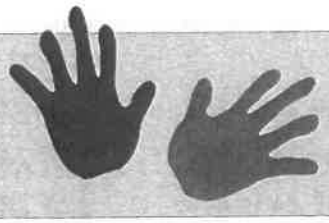
Challenge

True. $\frac{1}{5}$ of 40 is 8. $\frac{9}{5}$ lots of $\frac{1}{5}$, so 9 x 8 = 72.

A Bit Stuck?
Choccie Quarters

Work in pairs

Things you will need:
- A pencil
- Cake picture
- 40 chocolate buttons or **counters**



What to do:

Share the chocolate buttons **between the quarters on** the cake to help you to answer these questions.

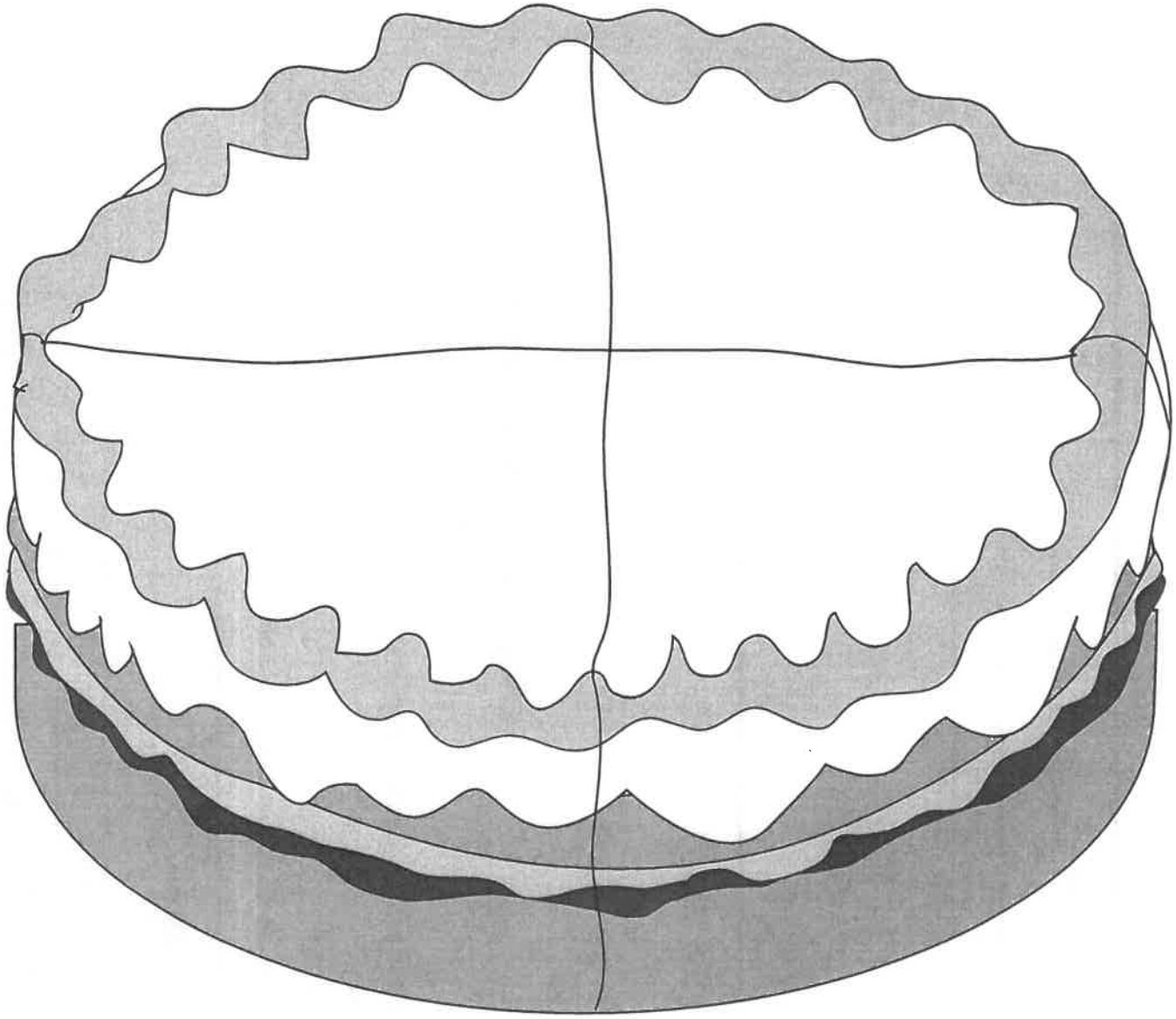
1/4 of 8 is	1/4 of 28 is
1/2 of 8 is	1/2 of 28 is
3/4 of 8 is	3/4 of 28 is
1/4 of 16 is	1/4 of 32 is
1/2 of 16 is	1/2 of 32 is
3/4 of 16 is	3/4 of 32 is
1/4 of 24 is	1/4 of 40 is
1/2 of 24 is	1/2 of 40 is
3/4 of 24 is	3/4 of 40 is

S-t-r-e-t-c-h:

Think of other numbers of chocolate buttons that you could place on the cake, so that there is the same number of buttons in each quarter.
You are not allowed to cut up any buttons!

Learning outcomes:
- I can find ¼, ½ and ¾ of amounts (whole number answers).
- I understand that ¾ is the same as ½.
- I am beginning to see that we can share numbers in the 4 times table into quarters (whole number answers).

A Bit Stuck?
Choccie Quarters



Check your understanding
Questions

Write all the fraction facts for tenths of 60.

$^{1}/_{10}$ of 60 =

$^{2}/_{10}$ of 60 =

etc. to $^{10}/_{10}$

Use this bar diagram

48							

to help find answers

(i) $^{1}/_{8}$ of 48 =

(ii) $^{3}/_{8}$ of 48 =

(iii) $^{7}/_{8}$ of 48 =

Is $^{1}/_{10}$ of 50 the same as $^{1}/_{5}$ of 100?

Fold here to hide answers

Check your understanding
Answers

Write all the fraction facts for tenths of 60.

$^{1}/_{10}$ of 60 = 6

$^{2}/_{10}$ of 60 = 12

etc. (18, 24, 30, 36, 42, 48, 54) to $^{10}/_{10}$ = 60 Do children make the connection to 6x table facts?

Use this bar diagram

48							
6	6	6	6	6	6	6	6

to help find answers

(i) $^{1}/_{8}$ of 48 = 6

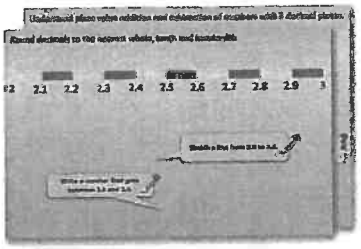
(ii) $^{3}/_{8}$ of 48 = 18

(iii) $^{7}/_{8}$ of 48 = 42

Year 4: Week 1, Day 4
Written multiplication

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

1. Start by reading through the **Learning Reminders.**
   They come from our *PowerPoint* slides.



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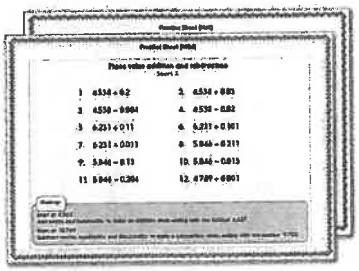
2. Tackle the questions on the **Practice Sheet.**
   There might be a choice of either Mild (easier) or Hot (harder)!
   Check the answers.



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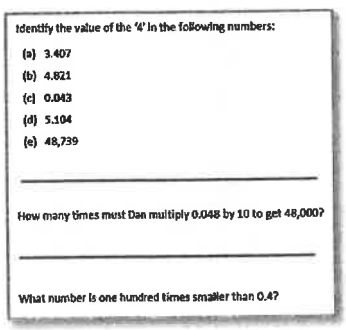
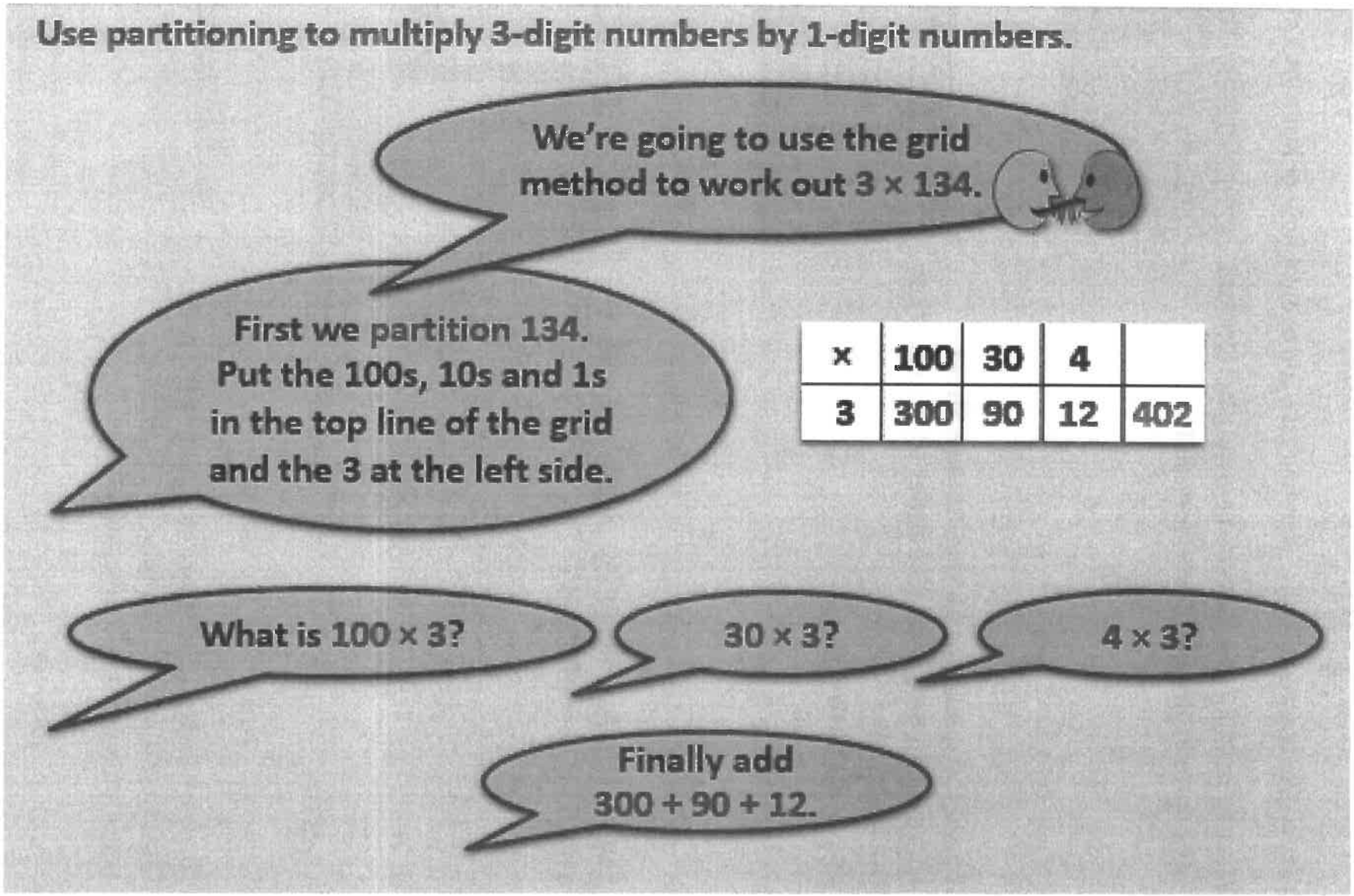
4. Have I mastered the topic? A few questions to **Check your understanding.**
   Fold the page to hide the answers!

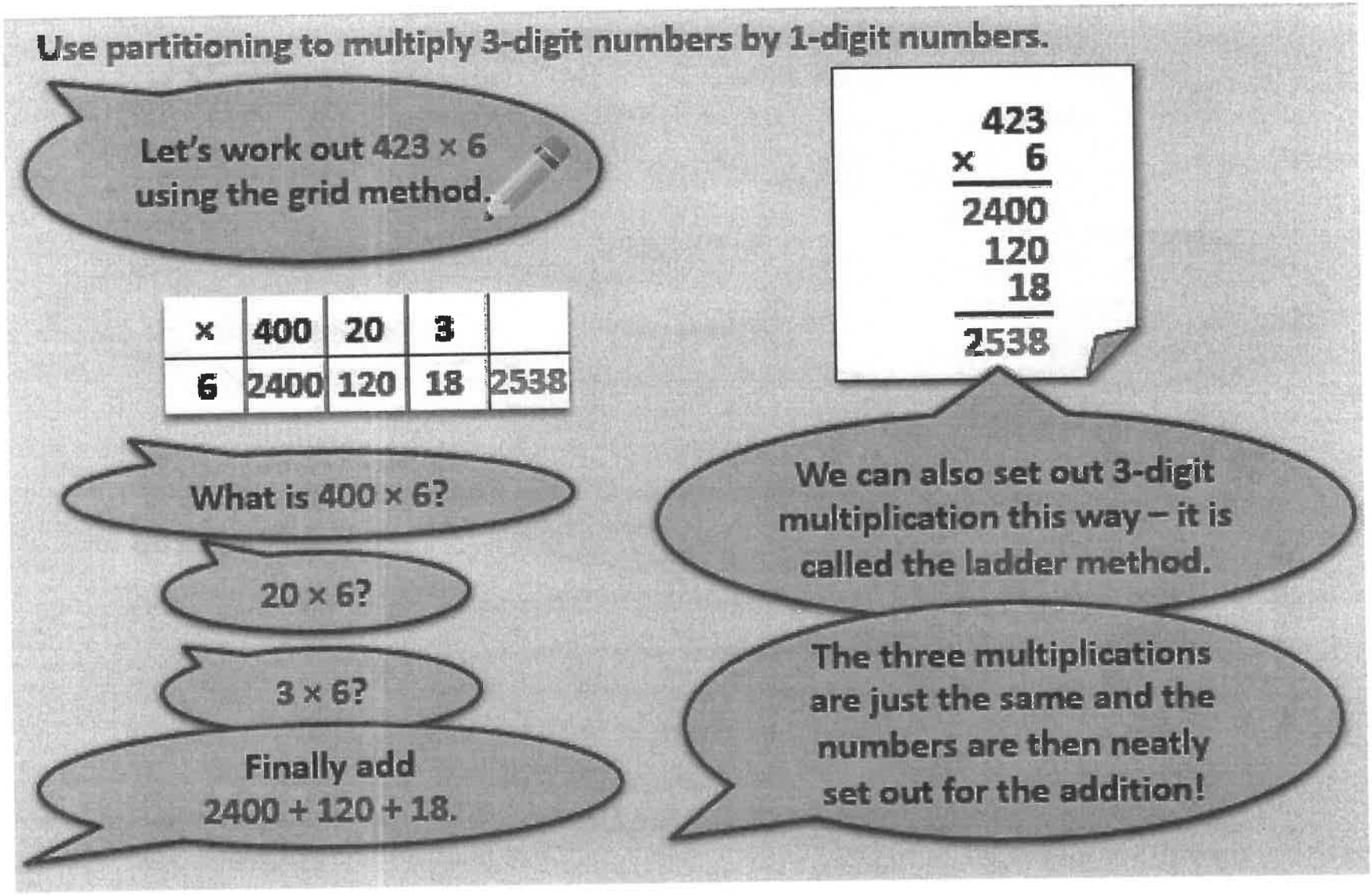


Learning Reminders

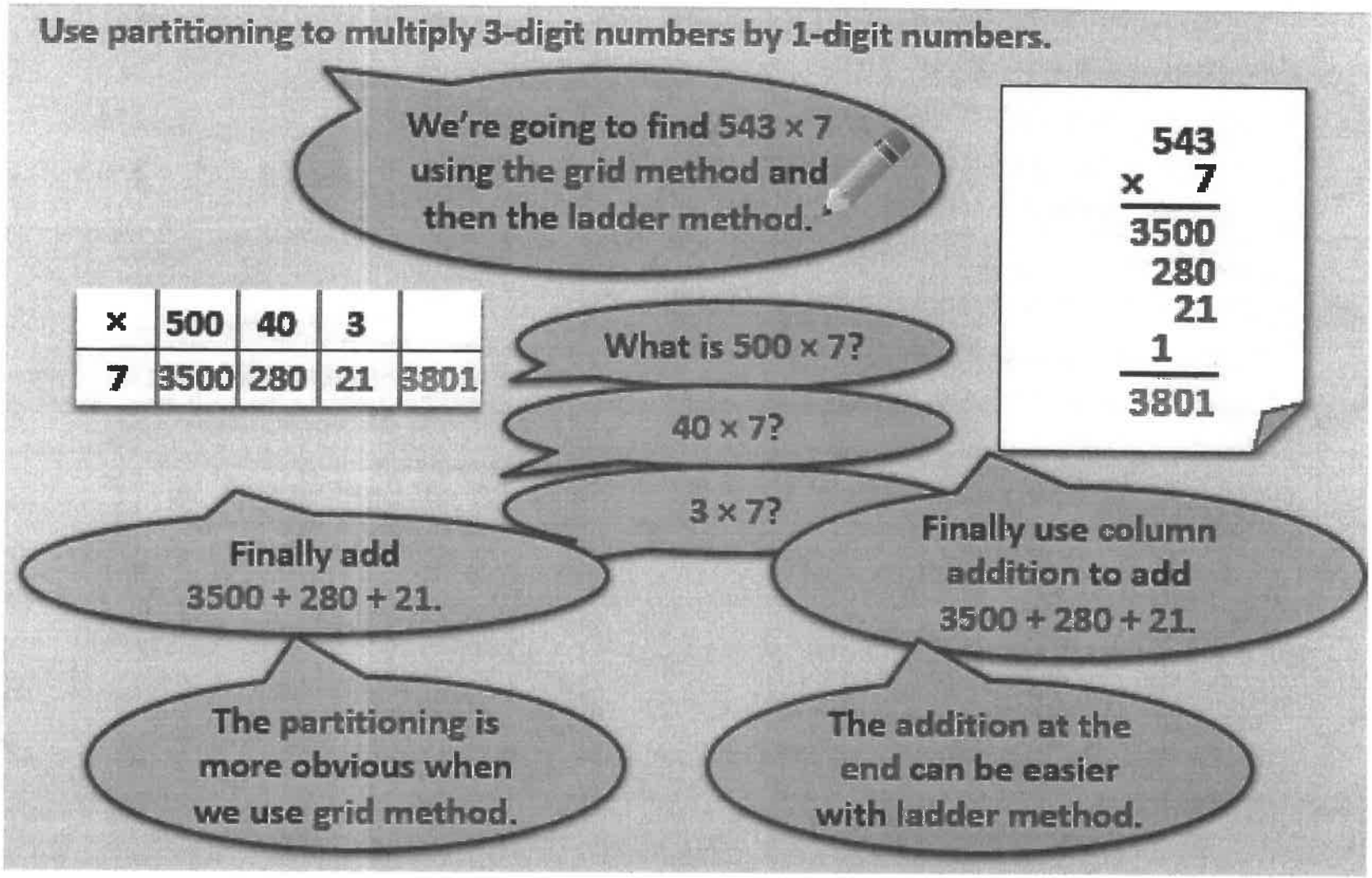


×	100	30	4	
3	300	90	12	402

Learning Reminders



Learning Reminders



×	500	40	3	
7	3500	280	21	3801

Practice Sheet Mild
Partitioning to multiply

Solve these using the grid method, or the ladder method - you choose!

3 x 121	6 x 531
352 x 4	454 x 5
3 x 235	4 x 512
244 x 6	423 x 3
5 x 113	4 x 345

Challenge

Find the missing numbers:

x	300	☐	7
☐	☐	240	56

= ☐

Practice Sheet Hot
Practising the ladder method

Solve these using the ladder method.

324 x 3	365 x 6
437 x 5	463 x 4
4 x 582	8 x 508
6 x 206	3 x 213
132 x 8	5 x 145

Challenge

Will 354 x 6 have a larger or smaller answer than 654 x 3? How do you know?
Will 315 x 4 have a larger or smaller answer than 415 x 3? How do you know?

Practice Sheet Answers

Partitioning to multiply (mild)

3 × 121 = 363	6 × 531 = 3186
352 × 4 = 1408	454 × 5 = 2270
3 × 235 = 705	4 × 512 = 2048
244 × 6 = 1464	423 × 3 = 1269
5 × 113 = 565	4 × 345 = 1380

Challenge

x	300	30	7
8	2400	240	56

= 2696

Practising the ladder method (hot)

324 × 3 = 972	365 × 6 = 2190
437 × 5 = 2185	463 × 4 = 1852
4 × 582 = 2328	8 × 508 = 4064
6 × 206 = 1236	3 × 213 = 639
132 × 8 = 1056	5 × 145 = 725

Challenge

354 x 6 will have a larger answer than 654 x 3.
315 x 4 will have a smaller answer than 415 x 3.

A Bit Stuck?
Grid genius

*Work in pairs, but record **your work on your own** sheet.*

Things you will need:
- A pencil

What to do:

- Use the grid method to work **out the answer to the** multiplications:

3 x 12

x	10	2	
3			

5 x 13

x	10	3	
5			

4 x 15

x	10	5	
4			

- **Next choose at least two multiplications and draw your own grid to keep track of your steps. Now you are a grid genius!**

7 x 13 **6 x 14** **8 x 12** **5 x 15**

S-t-r-e-t-c-h:
Use the grid method to work out 3 x 24 and 4 x 24. Remember that to work out 3 x 20, we can multiply the answer to 3 x 2 by 10.

Learning outcomes:
- I can use the grid method to multiply numbers from 11 to 15 by 1-digit numbers.
- I am beginning to multiply numbers 21 to 25 by 1-digit numbers.

Check your understanding
Questions

Use grid method to complete each of these:
424 x 6 =

3 x 848 =

What do you notice? Why does this happen?

Use grid AND ladder to solve 354 x 6.
Say which method you prefer and why.

Write the missing numbers:

x	300		
4		160	24

What is the final product?

Fold here to hide answers

Check your understanding
Answers

Use grid method to complete each of these:
424 x 6 = 2544

x	400	20	4
6	2400	120	24

3 x 848 = 2544

x	800	40	8
3	2400	120	24

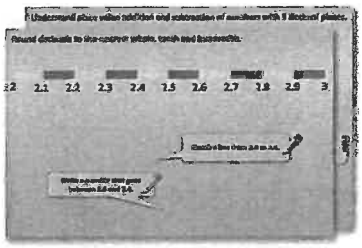
What do you notice? Why does this happen? The answers are the same since 848 is double 424 and it is being multiplied by 3 which is half of 6.

Use grid AND ladder to solve 354 x 6. 2124.
Say which method you prefer and why. Children should be referring to aspects such as place value, clarity of what the method shows, possible number of steps etc., rather than just saying "It's easier!"

Year 4: Week 1, Day 5
Written division

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

1. Start by reading through the **Learning Reminders**. They come from our *PowerPoint* slides.



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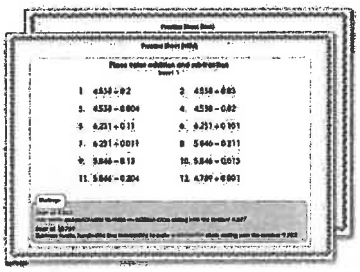
2. Tackle the questions on the **Practice Sheet**. There might be a choice of either Mild (easier) or Hot (harder)! Check the answers.



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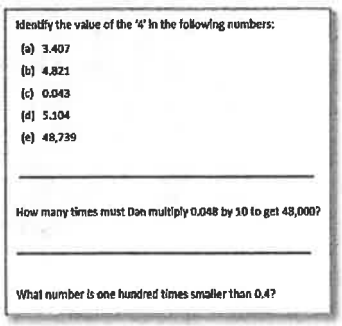
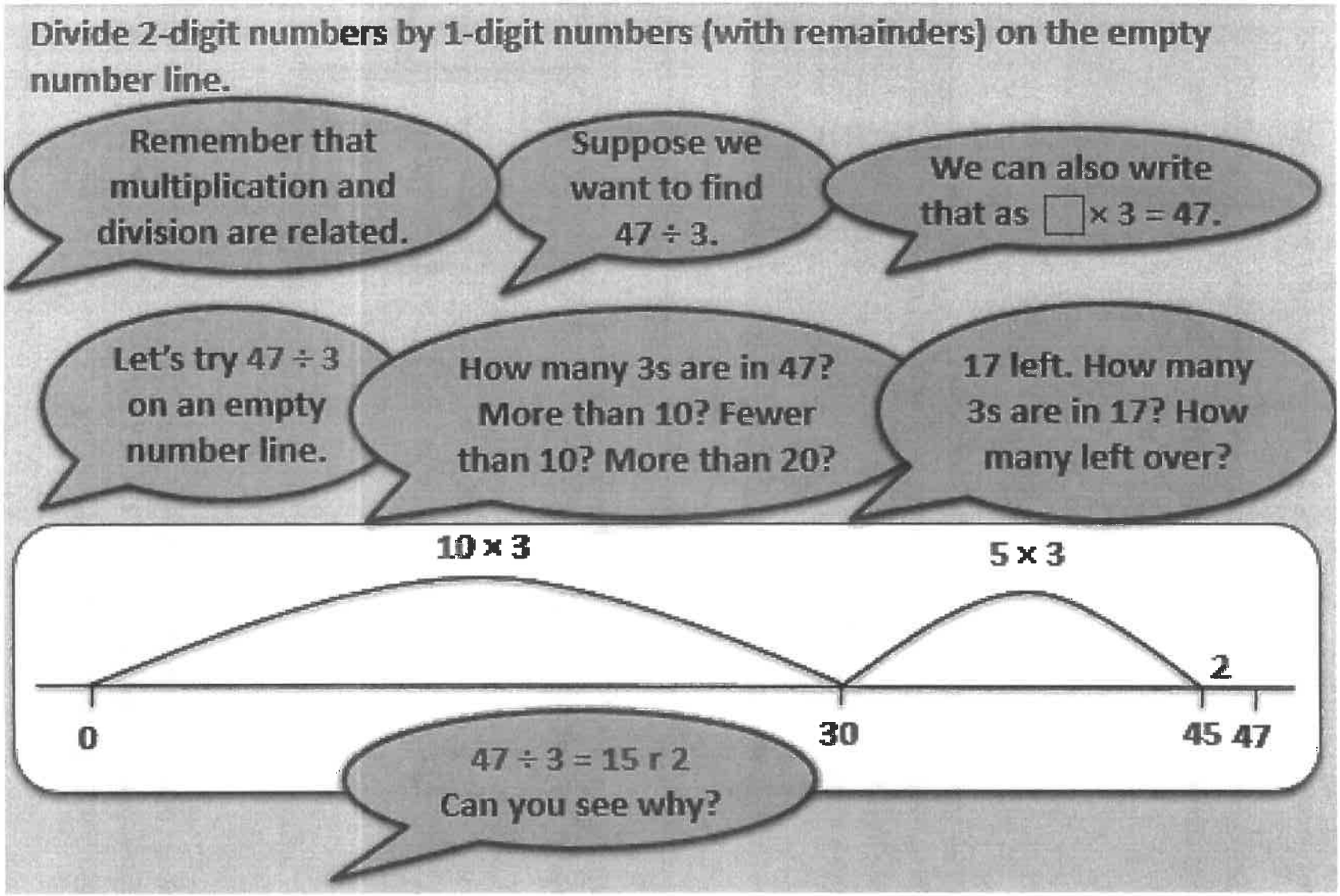
3. Finding it tricky? That's OK... have a go with a grown-up at **A Bit Stuck?**

---

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

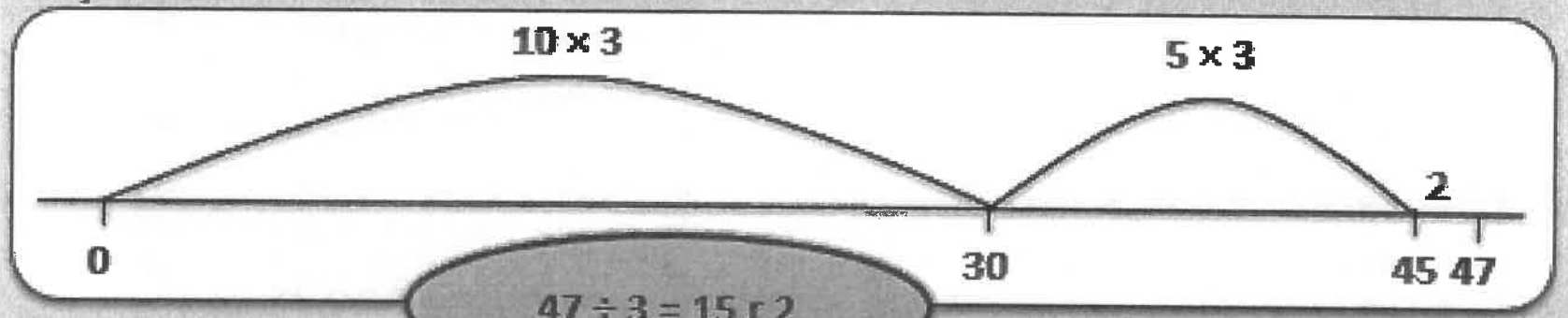


Learning Reminders



Learning Reminders

Divide 2-digit numbers by 1-digit numbers (with remainders), using a vertical layout.



47 ÷ 3 = 15 r 2

This is another way to record the same steps in the division.

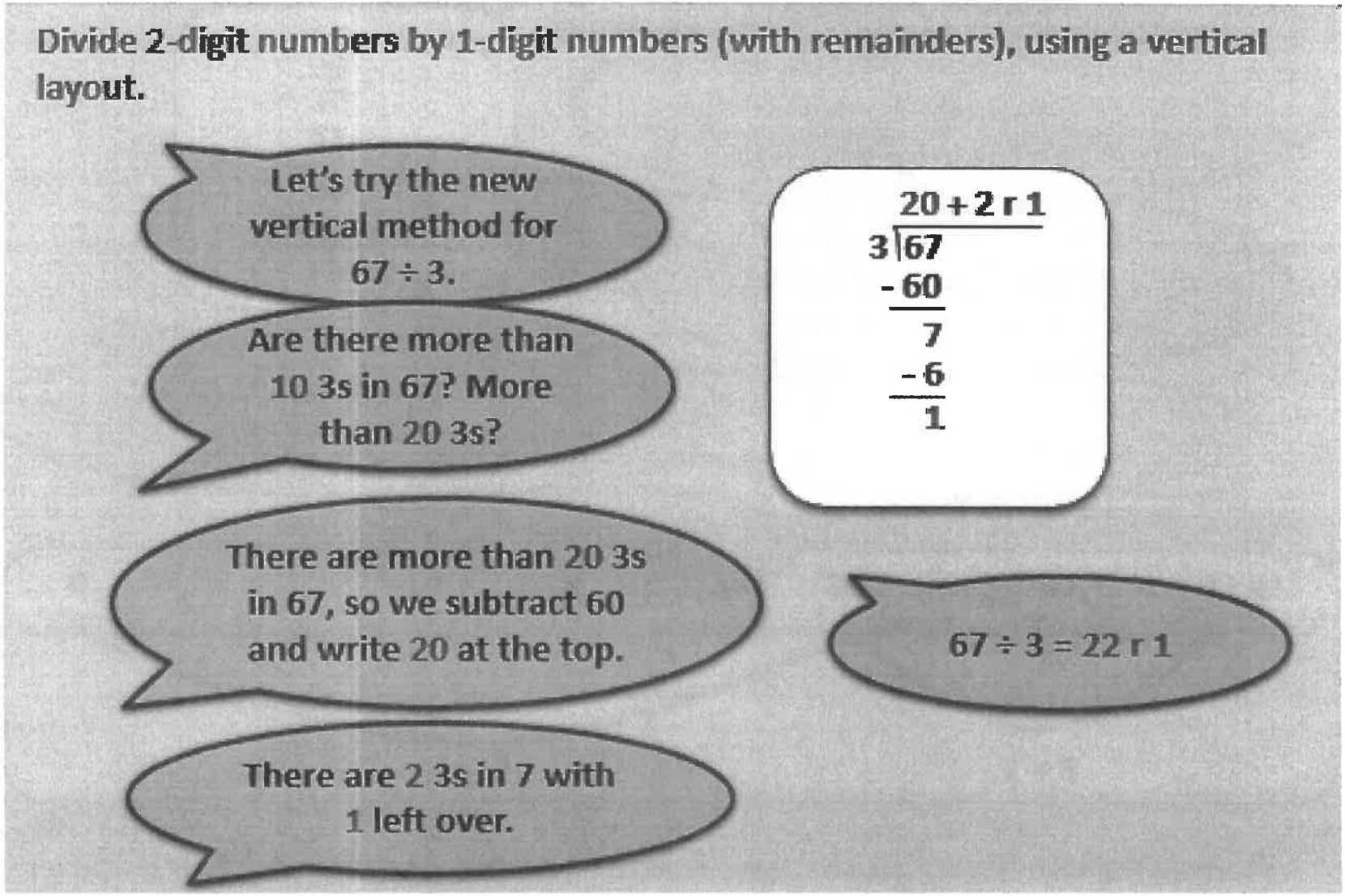
Are there more than ten 3s in 47? Yes.

More than 20? No, so we can subtract 10 lots of 3, 30. We write 10 at the top.

What's left? 17. How many 3s are there in 17? 5 and 2 left over, We write 5 r 2 at the top.

```
  10 + 5 r 2
3 | 47
  -30
   17
  -15
    2
```

Learning Reminders



Practice Sheet Mild
Dividing with remainders

$38 \div 3$	$43 \div 3$	$56 \div 3$
$47 \div 4$	$54 \div 4$	$59 \div 4$
$53 \div 5$	$61 \div 5$	$74 \div 5$

Challenge

Write three different divisions where these statements are true:

- A 2-digit number is divided by 3
- The answer is more than 15
- The remainder is 2

Practice Sheet Hot
Dividing with remainders

1. $77 \div 5$
2. $113 \div 5$
3. $53 \div 4$
4. $75 \div 6$
5. $70 \div 3$
6. $93 \div 4$
7. $86 \div 6$
8. $100 \div 9$
9. $80 \div 3$
10. $97 \div 5$
11. $107 \div 4$
12. $137 \div 5$
13. $98 \div 6$
14. $117 \div 6$
15. $120 \div 9$

Challenge

Write three different divisions where these statements are true:

- A 2-digit number is divided by 3
- The answer is more than 15
- The remainder is 2

Practice Sheet Answers

Dividing with remainders (mild)

38 ÷ 3 = 12 r2	43 ÷ 3 = 14 r1	56 ÷ 3 = 18 r2
47 ÷ 4 = 11 r3	54 ÷ 4 = 13 r2	59 ÷ 4 = 14 r3
53 ÷ 5 = 10 r3	61 ÷ 5 = 12 r1	74 ÷ 5 = 14 r4

Challenge

Write three different divisions where these statements are true:

- A 2-digit number is divided by 3
- The answer is more than 15
- The remainder is 2

e.g. 59 ÷ 3 = 19 r2 71 ÷ 3 = 23 r2 89 ÷ 3 = 29 r2 23 ÷ 3 = 7 r2 74 ÷ 3 = 24 r2 65 ÷ 3 = 21 r2

Dividing with remainders (hot)

1. 77 ÷ 5 = 15 r2
2. 113 ÷ 5 = 22 r3
3. 53 ÷ 4 = 13 r1
4. 75 ÷ 6 = 12 r3
5. 70 ÷ 3 = 23 r1
6. 93 ÷ 4 = 23 r1
7. 86 ÷ 6 = 14 r2
8. 100 ÷ 9 = 11 r1
9. 80 ÷ 3 = 26 r2
10. 97 ÷ 5 = 19 r2
11. 107 ÷ 4 = 26 r3
12. 137 ÷ 5 = 27 r2
13. 98 ÷ 6 = 16 r2
14. 117 ÷ 6 = 19 r3
15. 120 ÷ 9 = 13 r3

Challenge

Write three different divisions where these statements are true:

- A 2-digit number is divided by 3
- The answer is more than 15
- The remainder is 2

e.g. 59 ÷ 3 = 19 r2 71 ÷ 3 = 23 r2 89 ÷ 3 = 29 r2 23 ÷ 3 = 7 r2 74 ÷ 3 = 24 r2 65 ÷ 3 = 21 r2

A Bit Stuck?
Left overs

*Work in pairs, but record **your work on your own** sheet.*

Things you will need:
- 0 to 100 beaded lines
- A pencil

What to do:

- Use chunking to work out the answers to these divisions.
- Remember to draw a big jump of 10 times the number you are dividing by. Then look to see how much is left.
- Work out at least five answers.

38 ÷ 3

64 ÷ 5

50 ÷ 4

76 ÷ 5

43 ÷ 3

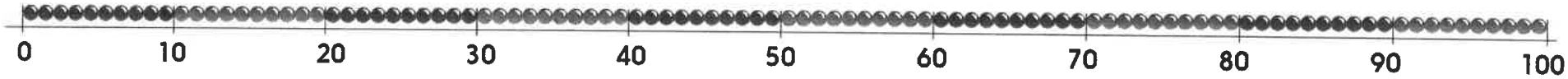
72 ÷ 5

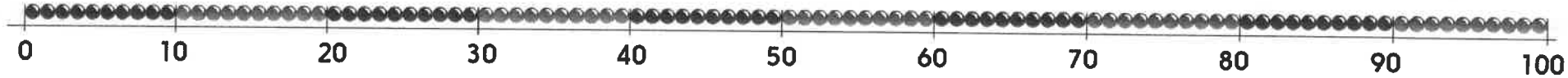
61 ÷ 4

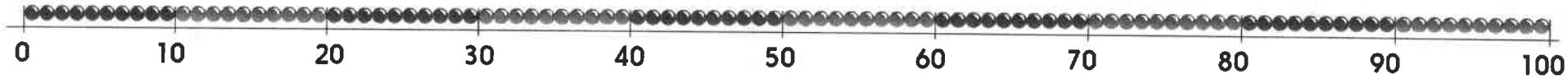
S-t-r-e-t-c-h:
Draw your own number line jottings to work out the answers.

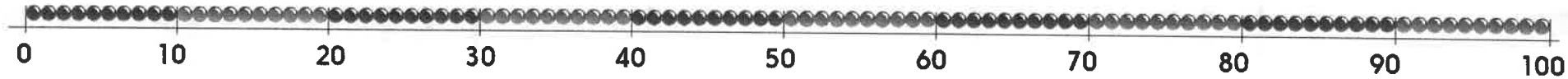
Learning outcomes:
- I can use chunking on a beaded line to divide numbers just beyond the times tables (with remainders).
- I am beginning to draft my own number line jottings when using chunking (with remainders).

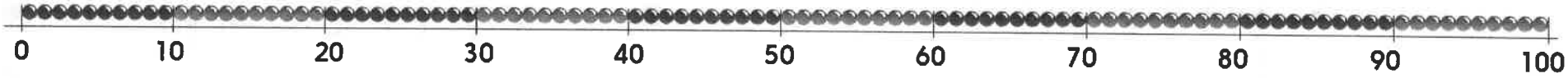
A Bit Stuck?
Left overs











Check your understanding
Questions

Draw a number line to solve these two divisions.

(i) 115 ÷ 5

(ii) 65 ÷ 5

What is the relationship between the 2nd hop on the two lines?

Look at the remainders in each of these divisions.

Compare the remainder with the divisor.

(a) 54 ÷ 4

(b) 99 ÷ 6

(c) 100 ÷ 8

Can you write another division where the remainder is half the divisor?

Fole here to hide answers

Check your understanding
Answers

Use a number line to solve these two divisions.

(i) 115 ÷ 5 23 (Jumps of 20 and 3).

(ii) 65 ÷ 5 13 (Jumps of 10 and 3)

What is the relationship between the 2nd hop on the two lines? In each case it is how many 5s in 15.

Look at the remainders in each of these divisions.

Compare the remainder with the divisor.

(a) 54 ÷ 4 13 r 2

(b) 99 ÷ 6 16 r 3

(c) 100 ÷ 8 12 r 4

Can you write another division where the remainder is half the divisor? Many possible answers – in each case the number divided will be halfway between two multiples of the divisor.

What to do today

IMPORTANT Parent or Carer – Read this page with your child and check that you are happy with what they have to do and any weblinks or use of internet.

1. Read 'The Princess and the Pea' by Hans Christian Anderson

- Read the story in your head and the practise reading it out loud. Can you read with good expression?

2. Answer Princess and the Pea Questions

- Read the ten *Princess and the Pea Questions* and then write a sentence answer for each one.

Brilliant! Well done. Work with a grown-up to check the answers. *Discuss any wrong answers. Can you see what went wrong?*

3. Make a storyboard

- Use the *Storyboard* to make a version of the story in six parts. Use a mixture of words and drawings to tell the story.

Try these Fun-Time Extras

- Find someone to read the story to – read it to them with good expression.
- Watch these two versions of the story. What is different in the second version? Which of the two versions do you prefer?

https://www.youtube.com/watch?v=waw0U9tKpW0

https://www.youtube.com/watch?v=lPytbUghpJM

The Princess and the Pea by Hans Christian Anderson

Once upon a time there was a prince who wanted to marry a princess; but she would have to be a real princess. He travelled all over the world to find one, but nowhere could he get what he wanted. There were princesses enough, but it was difficult to find out whether they were real ones. There was always something about them that was not as it should be. So he came home again and was sad, for he would have liked very much to have a real princess.

One evening a terrible storm came on; there was thunder and lightning, and the rain poured down in torrents. Suddenly a knocking was heard at the city gate, and the old king went to open it.

It was a princess standing out there in front of the gate. But, good gracious! what a sight the rain and the wind had made her look. The water ran down from her hair and clothes; it ran down into the toes of her shoes and out again at the heels. And yet she said that she was a real princess.

"Well, we'll soon find that out," thought the old queen. But she said nothing, went into the bed-room, took all the bedding off the bedstead, and laid a pea on the bottom; then she took twenty

mattresses and laid them on the pea, and then twenty eider-down beds on top of the mattresses.

On this the princess had to lie all night. In the morning she was asked how she had slept.

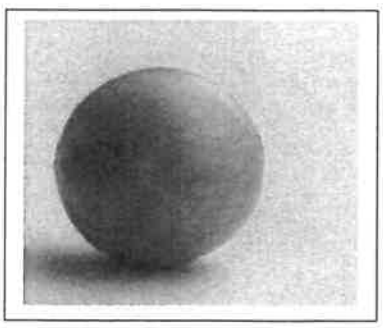
"Oh, very badly!" said she. "I have scarcely closed my eyes all night. Heaven only knows what was in the bed, but I was lying on something hard, so that I am black and blue all over my body. It's horrible!"

Now they knew that she was a real princess because she had felt the pea right through the twenty mattresses and the twenty eider-down beds.

Nobody but a real princess could be as sensitive as that.

So the prince took her for his wife, for now he knew that he had a real princess; and the pea was put in the museum, where it may still be seen, if no one has stolen it.

There, that is a true story.



Princess and Pea Questions

1. What had the prince done to find a princess?
2. Why was the prince left sad?
3. What phrases show how bad the storm was?
4. Where was the knocking sound heard?
5. Why wasn't the king sure that this was a real princess?
6. What test did the queen set up?
7. What did the princess say that made the others sure that she was a princess?
8. What happened to the prince?
9. What happened to the pea?
10. Do you think this is really a true story? Why/why not?

Storyboard

1	2	3
4	5	6

The Princess and the Pea – Possible Answers

1. What had the prince done to find a princess?

The prince had travelled all over the world to find a princess.

2. Why was the prince left sad?

The prince was sad because he couldn't find a princess and he wanted to very much.

3. What phrases show how bad the storm was?

The phrase 'poured down in torrents' show how bad the storm was.

4. Where was the knocking sound heard?

The knocking sound was heard at the city gate.

5. Why wasn't the king sure that this was a real princess?

The king was not sure that she was a real princess because of the way that she looked.

6. What test did the queen set up?

The queen hid a single pea under many mattresses and eider-down beds.

7. What did the princess say that made the others sure that she was a princess?

The princess said that she had not slept well, because something was making her uncomfortable.

8. What happened to the prince?

He married the princess.

9. What happened to the pea?

It got put into a museum.

10. Do you think this is really a true story? Why/why not?

Even though it says that it is a true story, this story has no names or dates, so I do not think it is really true.

What to do today

IMPORTANT Parent or Carer – Read this page with your child and check that you are happy with what they have to do and any weblinks or use of internet.

1. Re-read 'The Princess and the Pea' by Hans Christian Anderson

- Read the story again, in your head and out loud. What can you spot new, when you read it this second time?
- Look at the picture called 'Garden Scene'. This is from a version of the story by a writer called Lauren Child. The Prince is talking to the King and Queen. What do you think they could all be saying?

2. Write some speech

- Look at '*Dialogue Scenes*' – these are scenes from the story. Make up some speech for each of the speech bubbles. Write it in 'Dialogue Ideas'.
- Now try writing some of your ideas as direct speech with punctuation. Use the *Revision Card* and *Dialogue Checklist* to remind you how to do this.

Try this Fun-Time Extra

- Make your own miniature world, like the pictures in Lauren Child's book. This website will show you how:

www.booktrust.org.uk/globalassets/resources/childrens-laureate/lauren-child/staring-into-space/staring-into-space-make-your-own-miniature-world

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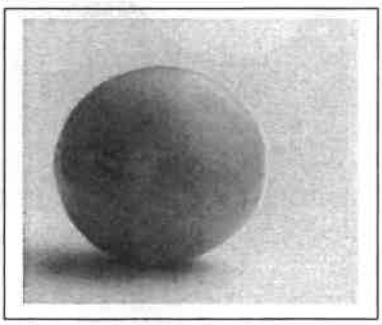
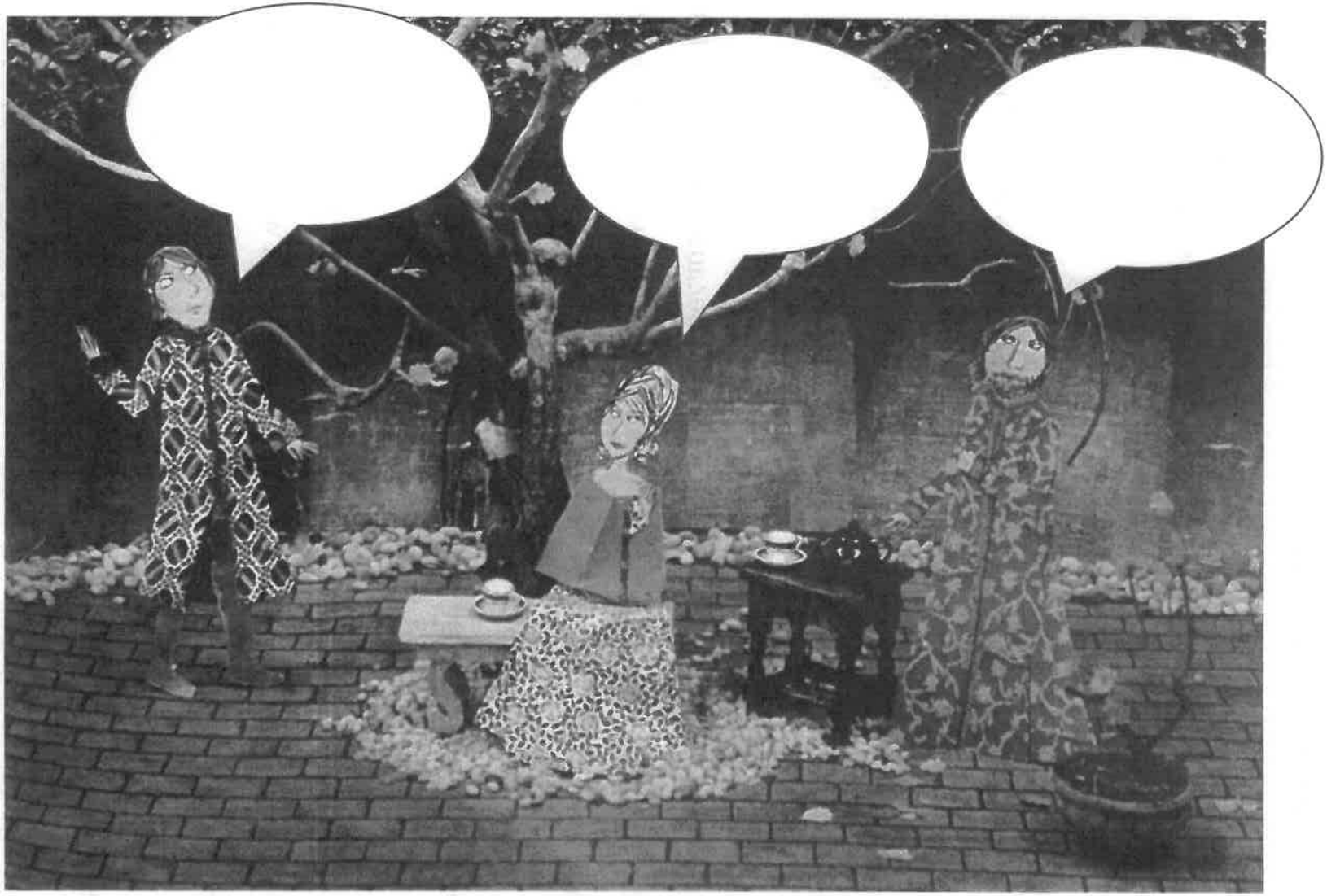
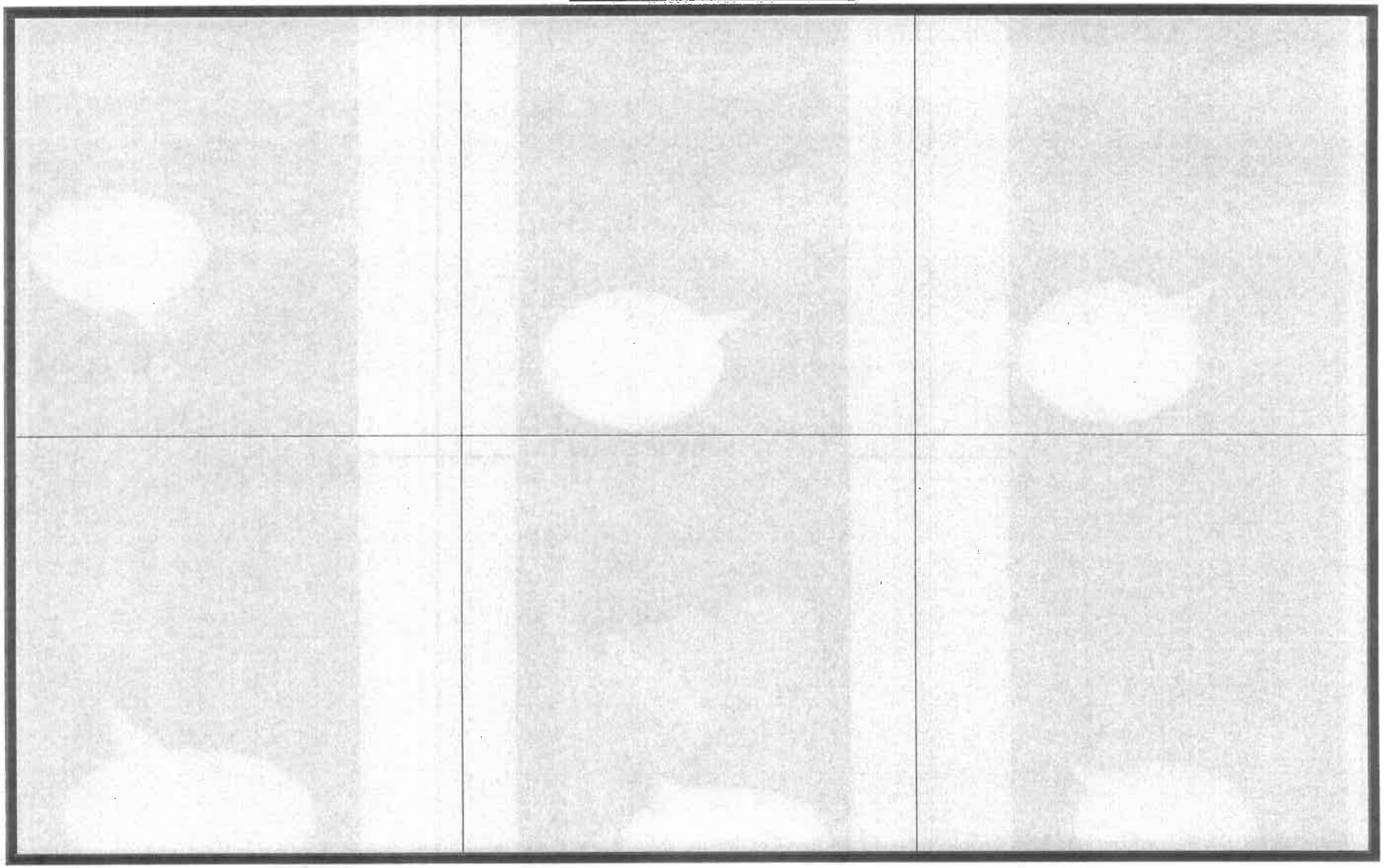


Garden Scene



Dialogue Scenes

Dialogue Ideas



Revision Card

Direct Speech

Summary of Rules

Speech marks 'hug' the spoken words

Each new speaker starts on a new line

A comma usually separates the direct speech from the reporting clause

Unless the speech ends in ! or ?

Direct speech begins with a capital letter.

Unless the sentence is interrupted by a reporting clause.

Dialogue Checklist

1. **Hug** the direct speech with speech marks:
"I am a princess," explained the girl.

2. Add a **reporting clause** to say who is speaking:
" I am a princess," **explained the girl**.

3. Begin direct speech with a **capital letter**:
" **I** am a princess," explained the girl.

4. Separate dialogue from reporting clauses with a **comma:**
" I am a princess," explained the girl.
The queen asked, "What sort of princess?"

5. Don't use a comma for speech ending in **? and !:**
"You live in a tree house**!**" exclaimed the king.
"Why**?**" asked the queen.

6. Start a **new line** for each change of speaker:
" I am a princess," explained the girl.
The queen asked, "What sort of princess?"
"Oh, a real princess, of course," she answered.

7. Continue an **interrupted dialogue** sentence with a lower case letter:
"I was outside admiring the moon," the girl explained, "**when** it started to rain."

What to do today

1. Read 'The Princess and the Pea' by Lauren Child

- This is the first part of Lauren Child's version of the story. How is it different to Hans Christian Anderson's version? Which do you prefer?

2. Practise dialogue punctuation

- Choose either *Dialogue Practice 1* or *Dialogue Practice 2*. (Version 2 is a little more tricky – challenge yourself!) Use the *Revision Card* and *Dialogue Checklist* to help you.

Finished? Wow! Great stuff. Check your answers with a grownup. Discuss any mistakes you made.

3. Now for some writing

- Write a version of part of the story. Include some dialogue as you do and practise punctuating it perfectly.

Try these Fun-Time Extras

- Make a comic-strip version of The Princess and the Pea.
- Act the story out with toys. You could maybe ask an adult to film it for you.

The Princess and the Pea – by Lauren Child

One day when the prince was old enough, his parents decided that it was time for him to be married. You know what parents are like and a prince's parents are no different.

The prince didn't object to the idea but he did make one condition – he wanted to marry for love.

He was just that kind of romantic boy.

He told his father and his mother, "I would gladly marry tomorrow but, whoever she is she must be more mesmerising than the moon and I must find her more fascinating than all the stars in the sky. And there must be a certain... something about her."

"What something?" asked the queen.
"Just... something," replied the prince.
"Yes, yes," agreed the king, "That's all very lovely but our condition is that she must be a princess of blue blood and equal in royalness to you."
The prince wasn't all that interested in these details but knew he wouldn't get any peace until he agreed. So he did.

Now you may think finding yourself a suitable princess would be easy to do if you are a handsome prince but you would be wrong – just how many mesmerising and fascinating princesses do you imagine there are out there?
Well, the king and queen did all the traditional fairy-tale things in order that their son might be bowled over by the right girl.

Lauren Child

Dialogue Practice - 1

*Rewrite these sentences so that **speech marks hug** the spoken words.*

1. I've decided that you should be married, said the King.

2. Whoever I marry must be more mesmerising than the moon, replied the Prince.

3. There has to be a certain...something about her, he went on.

4. What something? asked the Queen.

5. Just ... something, said the Prince.

6. Yes, yes, agreed the king, that's all very lovely but our condition is that she must be a princess of blue blood.

7. I'm not all that interested in that, responded the Prince.

8. Well, we are! retorted the Queen.

9. Fine then, shrugged the Prince, if that's the way it has to be.

10. It absolutely is! said the King.

Dialogue Practice 2

Hug the direct speech with speech marks and then separate it from the reporting clause with a comma.

1. I'll go and answer the door then grumbled the King.
2. I wonder who it could be at this time of night he went on.
3. I must tell Hobbs to oil the lock he said as he turned the key.
4. Oh! he exclaimed as the door swung open Who are you?
5. I'm a very wet and very cold princess answered the princess.
6. Who was hoping that she might, just maybe might, come in from the cold she hinted.
7. Well said the King you really must.
8. That's very kind of you said the Princess.
9. You're really sure it's OK? she questioned.
10. I am very wet she said, pointing out the obvious.

Revision Card

Direct Speech

Summary of Rules

Speech marks 'hug' the spoken words

Each new speaker starts on a new line

A comma usually separates the direct speech from the reporting clause

Unless the speech ends in ! or ?

Direct speech begins with a capital letter.

Unless the sentence is interrupted by a reporting clause.

Dialogue Checklist

1. **Hug** the direct speech with speech marks:
"I am a princess," explained the girl.

2, Add a **reporting clause** to say who is speaking:
" I am a princess," **explained the girl**.

3. Begin direct speech with a **capital letter**:
" **I** am a princess," explained the girl.

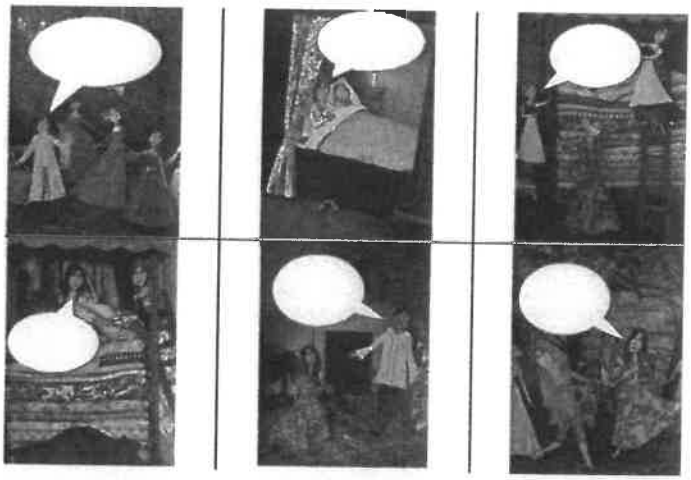
4. Separate dialogue from reporting clauses with a **comma:**
" I am a princess," explained the girl.
The queen asked, "What sort of princess?"

5. Don't use a comma for speech ending in **? and !:**
"You live in a tree house!" exclaimed the king.
"Why?" asked the queen.

6. Start a **new line** for each change of speaker:
" I am a princess," explained the girl.
The queen asked, "What sort of princess?"
"Oh, a real princess, of course," she answered.

7. Continue an **interrupted dialogue** sentence with a lower case letter:
"I was outside admiring the moon," the girl explained, "**when** it started to rain."

Princess and the Pea – Writing



Try writing one part of the story of the Princess and the Pea. Include some perfectly punctuated dialogue in your writing.

Dialogue Practice – 1 - Answers

*Rewrite these sentences so that **speech marks hug** the spoken words.*

1. "I've decided that you should be married," said the King.

2. "Whoever I marry must be more mesmerising than the moon," replied the Prince.

3. "There has to be a certain...something about her," he went on.

4. "What something?" asked the Queen.

5. "Just ..something," said the Prince.

6. "Yes, yes," agreed the king, "that's all very lovely but our condition is that she must be a princess of blue blood."

7. "I'm not all that interested in that," responded the Prince.

8. "Well, we are!" retorted the Queen.

9. "Fine then," shrugged the Prince, "if that's the way it has to be."

10. "It absolutely is!" said the King.

Dialogue Practice 2 - Answers

Hug the direct speech with speech marks and then separate it from the reporting clause with a comma.

1. "I'll go and answer the door then," grumbled the King.
2. "I wonder who it could be at this time of night." he went on.
3. "I must tell Hobbs to oil the lock," he said, as he turned the key.
4. "Oh!" he exclaimed, as the door swung open, "Who are you?"
5. "I'm a very wet and very cold princess," answered the princess.
6. "Who was hoping that she might, just maybe might, come in from the cold," she hinted.
7. "Well," said the King, "you really must."
8. "That's very kind of you," said the Princess.
9. "You're really sure it's OK?" she questioned.
10. "I am very wet," she said, pointing out the obvious.

What to do today

IMPORTANT Parent or Carer – Read this page with your child and check that you are happy with what they have to do and any weblinks or use of internet.

1. Read 'Younger Brother' by Trevor Millum

- Practise reading the poem in your head and then out loud.
- Does the poem remind you of anybody you know? How many different objects does the younger brother collect? The words for these objects are nouns. (Nouns are a person, place or thing).
- Use the *Revision Card* to help you remember about nouns, verbs and adjectives.

2. Search for nouns, verbs and adjectives: 'In the Cave'

- Read the poem '*In the Cave*'. Try highlighting the nouns in this poem in one colour. Now search for verbs and highlight those a different colour. Finally search for and highlight adjectives.

3. Making up new lines: 'The Teacher's Day in Bed'

- Read the poem '*The Teacher's Day in Bed*'.
- Highlight the nouns and verbs in this poem.
- Make some more lines – other animals and what they could do in the classroom. Can you think of three more?

Try these Fun-Time Extras

- Choose your favourite poem and illustrate it.

Younger Brother

He collects bottle tops,
Toilet roll holders,
Dead insects,
Bits of rock and stones
Of interesting shapes and colours,
Half-made models,
Stickers, badges, pencils,
Feathers, germinating seeds,
Used socks (under the bed),
Broken saucers that he never mends,
Torch batteries, glass marbles,
Oh – and friends.

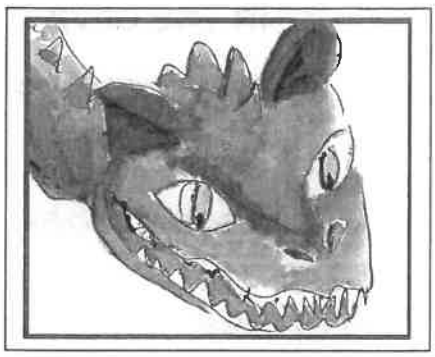
Trevor Millum

The Teacher's Day in Bed

Our teacher's having a day in bed –
She's sent her pets to school instead!

There's . . .

A parrot to read the register,
A crocodile to sharpen the pencils,
A canary to teach singing,
An adder to teach maths,
An octopus to make the ink,
An elephant to hoover the floor,
An electric eel to make the computer work,
A giraffe to look for trouble at the back,
A tiger to keep order at the front,
A reed bunting (can't you guess?
to help with reeding, of course!),
A secretary bird to run the office,
A piranha fish to give swimming lessons
(Glad I'm off swimming today!),
A zebra to help with crossing the road,
Oh, and a dragon to cook the sausages.



I bet that none of you ever knew
Just how many things a teacher can do!

David Orme

p263, The Works

In the Cave

When we went to explore
the cave on the shore,
here's what we found . . .

a rusty tin,
a bottle with a message in,
an old and crumpled treasure map,
a brass badge from a sailor's cap,
strips of canvas from a sail,
planks from a ship wrecked in a gale,
slimy seaweed, polished stones,
shiny shells and whitened bones.

In the cave that's what we found,
scattered on the sandy ground.

Sean Forbes

p172, The Works 8

Revision Card

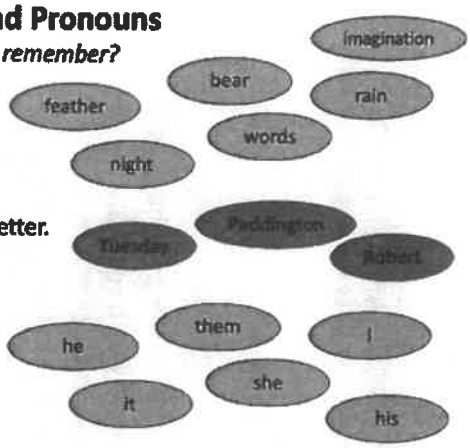
Nouns and Pronouns

Can you remember?

A noun is... a person, place or thing.

Proper nouns start with a ... capital letter.

A pronoun... can replace a noun.

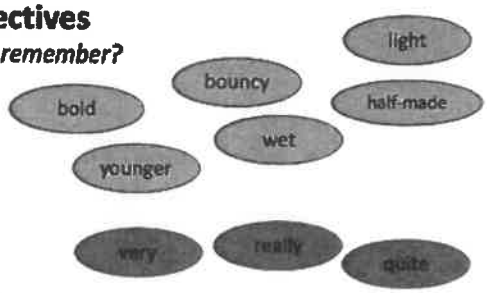


Adjectives

Can you remember?

An adjective describes... a noun.

An adjective can be modified.



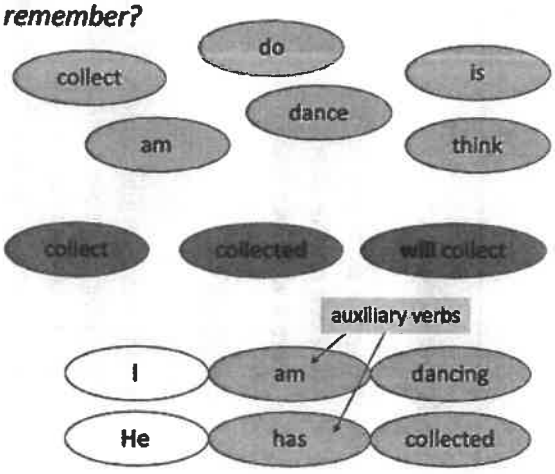
Verbs

Can you remember?

A verb is a... *doing* or *being* word.

Verbs usually have <u>tense</u>.

Some verbs help the main verb.



Word Classes – ANSWERS

noun, adjective, verb

In the Cave

When we went to explore
the cave on the shore,
here's what we found . . .

a rusty tin,
a bottle with a message in,
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Oh, and a dragon to cook the sausages.

I bet that none of you ever knew
Just how many things a teacher can do!

David Orme

What to do today

1. Read 'Things I have been doing lately' by Allan Ahlberg

- Practise reading the poem in your head. Then try reading it out loud.
- Write a bit about this poem on the sheet *What do you like? Or dislike?*

2. Make up your own ideas

- Think of some items for a poem called: Things I did last week. Make these as imaginative as you can, e.g. Last week, I battled a ferocious dragon. Last week, I discovered long-lost treasure. Last week, I invented a contraption for travelling through time.
- Look at the nouns, verbs and adjectives that you have used and try to improve some so that they are really vivid and memorable. Use the *Revision Card* to help you remember the types of words.

3. Present your poem

- Choose your favourite items and carefully handwrite a version of your poem.
- When you have finished, add an illustration.

Try these Fun-Time Extras

- Find someone that you can perform your poem to. Make actions for the verbs so that your performance is dramatic.
- Make a new poem: Things I will do in the future. Be as imaginative as you can.

Things I Have Been Doing Lately

Things I have been doing lately:
Pretending to go mad
Eating my own cheeks from the inside
Growing taller
Keeping a secret
Keeping a worm in a jar
Keeping a good dream going
Picking a scab on my elbow
Rolling the cat up in a rug
Blowing bubbles in my spit
Making myself dizzy
Holding my breath
Pressing my eyeballs so that I become temporarily blind
Being very nearly ten
Practising my signature . . .

Saving the best till last.

Allan Ahlberg

p269, The Works

What do I like? Or Dislike?

- What do you like about this poem?

- Is there anything that you dislike about it?

- Can you spot any patterns?

- Which is your favourite phrase or line?

- Are there any puzzles or surprises?

Revision Card

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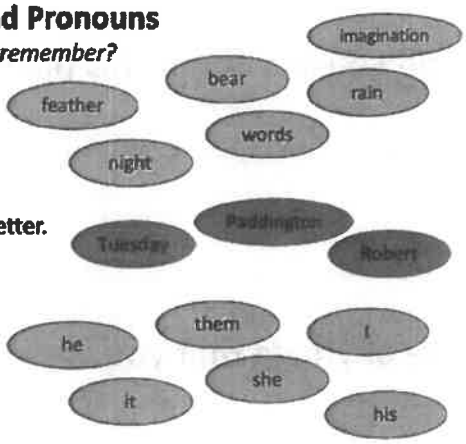

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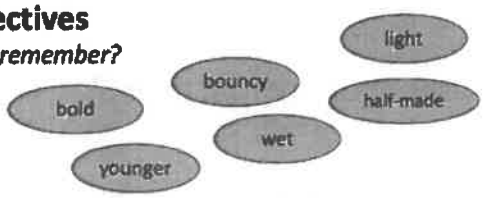

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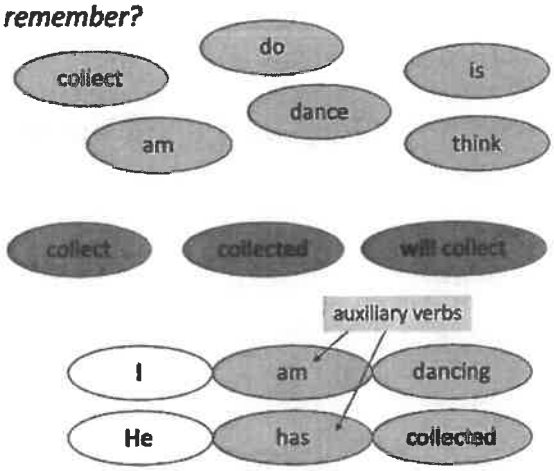

Things I did Last Week Ideas

- Think of surprising and unusual things.
- Choose powerful verbs, precise nouns and descriptive adjectives.