

Tuesday Snorkelling

Division to solve problems

White Rose Maths

- 1 There are 1,360 children in a school.
A quarter of the children walk to school.
How many children walk to school?

$$4 \overline{) 1360}$$

340

- 2 Huan has saved his pocket money for 5 weeks.
He gets the same pocket money every week.
He has saved £16.65



$$5 \overline{) 16.65}$$

£3.33

- 3 Tom is running a 6-kilometre race.
He has run one-third of the race so far.
How many more kilometres does Tom have left to run?

$$6 \div 3 = 2$$

He has run 2 km, so
4 km to run.

4

- 4 Dora, Ron and Teddy are making paper chains.



Dora

My paper chain is 1.1 m long.

Dora's paper chain is twice as long as mine.

0.55



Ron



Teddy

My paper chain is three times longer than Ron's.

$$\begin{array}{r} 1.10 \\ 0.55 \\ \hline 1.65 \end{array}$$

- a) How long is Ron's paper chain?

0.55 m

- b) How long is Teddy's paper chain?

1.65 m

- 5 A water bottle holds 2 litres.
A leak in the bottle means 25 ml drips out each day.
How many days will it take until the bottle is empty?

$$25 \overline{) 2000}$$

10

$$\begin{array}{r} 250 \\ 500 \\ 750 \\ 1000 \end{array}$$



8 days

- 6 a) A school bus can hold 30 people.

There are 726 children going on a school trip.



How many buses are needed?

- 30
- 60
- 90
- 120
- 150
- 180
- 210
- 240
- 270
- 300

24 126 30) 726

024 * can't leave
6 children
behind...

60 ↓

126

120

6

25

- b) A cake needs 4 eggs.
How many cakes can be made from 345 eggs?



86.25

4) 345.00

* Can't make $\frac{1}{4}$ of a cake. 86

- 7 Shop A sells 5 tins of paint for £23.40
Shop B sells 3 tins of the same paint for £14.01



Which shop should Aisha buy her paint from? B
Explain your reasoning.

(A) $\frac{4.68}{5}$ per tin (B) $\frac{4.67}{3}$ per tin

$5 \overline{) 23.40}$ $3 \overline{) 14.01}$

shop B is 1p cheaper per tin, so Aisha should shop there.

- 8 $146 \div 5 = 29$ remainder 1
 $117 \div 4 = 29$ remainder 1

29.2

5) 146.10

29.25

4) 117.100

This means that
 $117 \div 4 = 146 \div 5 = 29r1$

Do you agree with Whitney? ~~Yes~~ NO

Explain your thinking.

~~117 ÷ 4 = 29.25 but 146 ÷ 5 = 29.20, so 117 ÷ 4 > 146 ÷ 5.~~

- 9 I'm thinking of a 3-digit number.
When I divide it by 5, I am left with a remainder of 3
When I divide it by 10, I am left with a remainder of 8
It rounds to 200 to the nearest 100
It has one hundred.
What could my number be?



H	T	O
1	6	8
1	7	8
1	8	8

178

Create your own problem like this for a partner.

1	9	8
1	5	8

