<u>Tuesday 2nd February 2021</u>
<u>02/02/21</u>

Year 4 Maths - Chapter 4 Lesson 17
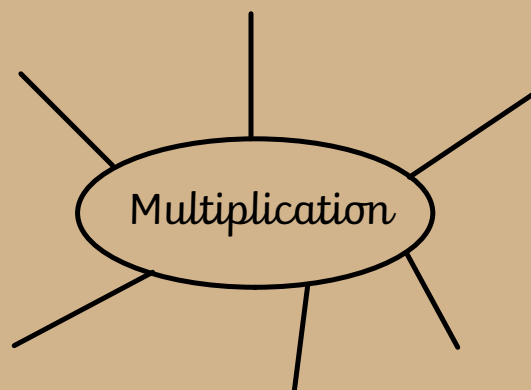
WALT: *solve word problems involving multiplication and division.*

Nov 14-14:56

Today we will be using the methods that we have been learning for multiplication and division to solve problems.

We will also be using bar models to help us understand what a problem is asking us to do.
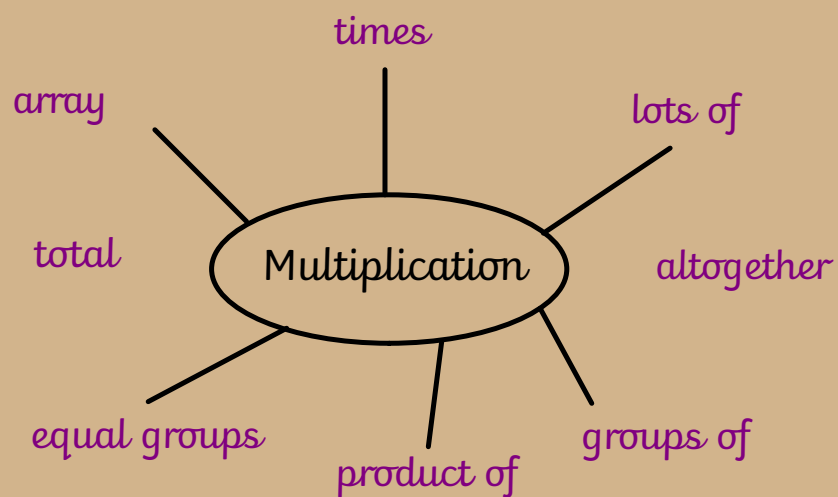
Nov 14-14:56

<u>Let's warm our brains up!</u>

You have got 1 minute to think of as many words as you can related to multiplication.

Multiplication

Jan 18-20:09

Let's warm our brains up!

You have got 1 minute to think of as many words as you can related to multiplication.

times

array

lots of

total

Multiplication

altogether

equal groups

product of

groups of

In Focus

Lulu has 155 beads.
Holly has 4 times as many beads as Lulu has.
How many beads do Lulu and Holly have altogether?

Do we need to use multiplication or division? How do you know?
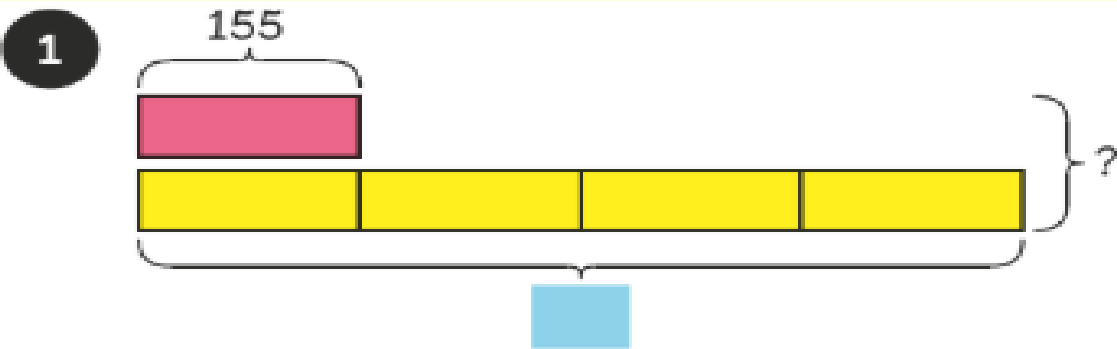
What do we know from the problem?

In Focus

Lulu has 155 beads.
Holly has 4 times as many beads as Lulu has.
How many beads do Lulu and Holly have altogether?

Let's draw it out...What would the first bar represent?
What do we already know about the other girl's beads?
What are we trying to calculate?

1

155

?

1

155

?

Method 1

$155 \times 4 =$ ☐

Holly has ☐ beads.

☐ + ☐ = ☐

Lulu and Holly have ☐ beads altogether.

$$\begin{array}{r} 1 \quad 5 \quad 5 \\ \times \qquad\quad 4 \\ \hline \\ \hline \end{array}$$

1

155

Method 2

1 unit = 155

5 units = 155 × 5

=

Lulu and Holly have ⬜ beads altogether.

$$\begin{array}{r} 1 \quad 5 \quad 5 \\ \times \qquad\qquad 5 \\ \hline \\ \hline \end{array}$$

How have these 2 methods both given the same product?
How are the methods different?
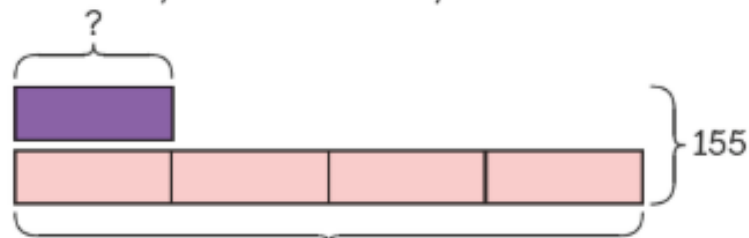*Which do you prefer and why?*

Jan 21-16:44

2 What if the story is...
Holly has 4 times as many beads as Lulu has.
Together they have 155 beads.
How many beads does Holly have?

$155 \div 5 = \boxed{}$

Lulu has $\boxed{}$ beads.

$\boxed{} \times \boxed{} = \boxed{}$

Holly has $\boxed{}$ beads.

What is the same and what is different?

What do we know?

How should we label the bars?

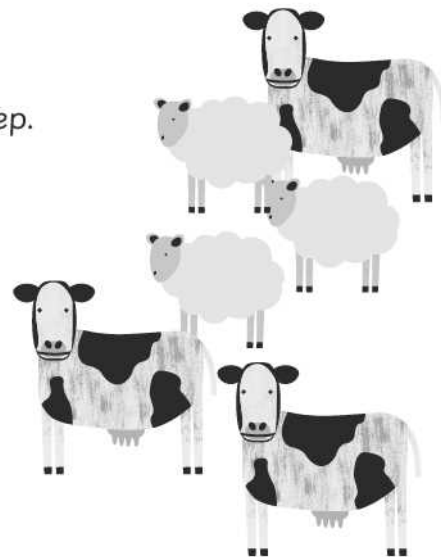*What calculation do we need to carry out?*

Jan 21-16:44

Now try Worksheet 17 on pages 129-130.
If you would like some more practice first, continue to work with the teacher.

Name: _____ Class: _____ Date: _____

Worksheet 17

Solving Word Problems

Solve.

1 There are 156 sheep on a farm.
The farm has 3 times as many cows as sheep.
(a)   How many cows are on the farm?

(b)   What is the combined number of sheep and cows on the farm?

Further Multiplication and Division   Page 129

Jan 28-10:07

2 A farmer picked 173 apples on Monday.
On Tuesday, he picked 4 times as many apples as he did on Monday.
How many apples did the farmer pick altogether on the two days?

3 There are 5 times as many boys as girls in a school.
Together the school has 810 pupils.
How many boys are there?

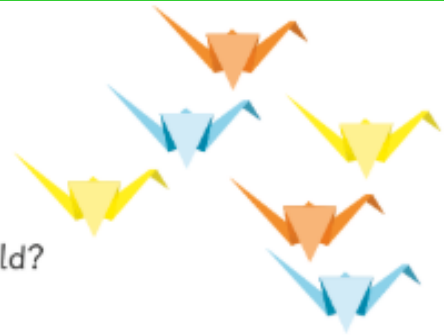Further Multiplication and Division   Page 130

Guided Practice

Emma spent 6 days folding some paper cranes.
She folded 32 paper cranes each day.
She needs to fold 250 paper cranes altogether.
How many more paper cranes does she need to fold?

▢ × ▢ = ▢

Emma folded ▢ paper cranes in 6 days.

▢ − ▢ = ▢

Emma needs to fold ▢ more paper cranes.

1. Have a go at these in your journal:

   a) 295 ÷ 3
   b) 538 ÷ 2
   c) 837 ÷ 4
   d) 209 ÷ 5
   e) 129 ÷ 3
   f) 294 ÷ 4
   g) 295 ÷ 3
   h) 582 ÷ 8
   i) 938 ÷ 9
   j) 948 ÷ 7

2. Mary downloaded the same number of apps for her phone each week. She downloaded 54 apps over a period of 9 weeks. How many apps did she download each week?

3. Frances is very good at hurdles. She can jump 9 hurdles in a 200 metre race. However, Johnathon can jump twice as many. How many hurdles can he jump?

4. My teacher decided to reward us with a pizza party at the end of the week. There are 21 people in my class, and each person is allowed 2 pieces of pizza. A pizza has 7 slices. How many pizzas does he need to buy?

5. There are 35 rows of 24 dominoes. How many dominoes are there altogether?

6. In a garden there is space for 20 rows of 14 seeds in a flower bed. How many seeds are in a flower bed?

Jan 17-22:27

Answers

Name: _____   Class: _____   Date: _____

Worksheet 17

Solving Word Problems

Solve.

1. There are 156 sheep on a farm.
   The farm has 3 times as many cows as sheep.
   (a)   How many cows are on the farm?

   156

   156 x 3 = 468

   There are 468 cows on the farm

   (b)   What is the combined number of sheep and cows on the farm?

   156

   156 x 4 = 624

   There are 624 cows and sheep combined on the farm

Jan 28-10:07

Answers

2 A farmer picked 173 apples on Monday.
On Tuesday, he picked 4 times as many apples as he did on Monday.
How many apples did the farmer pick altogether on the two days?

Monday [173]

Tuesday [| | |]

173 x 5 = 865

The farmer picked 865 apples altogether on the two days

3 There are 5 times as many boys as girls in a school.
Together the school has 810 pupils.
How many boys are there?

810 { Girls [   ]
      Boys [| | | |]

810 ÷ 6 = 135

135 x 5 = 675

There are 675 boys in the school

Jan 28-10:07

17

<u>Plenary.</u>

Knowing the times tables helps us with multiplication and division word problems, so let's learn the 7 times table.