Year 6
Maths
Thursday 11th June

Lesson Aims

- I can solve problems involving division.

Success Criteria:

- I read the problem carefully.
- I solve the calculation.
- I think carefully about whether I need to round up or down to answer the final question.

Fluency Starter

Play social distance

Times Table tennis.

Times Table Ping Pong.

Main Teaching

Yesterday we looked at how to divide using short division. Let's start with one example.

Remember – to successfully divide you need to know your times tables.

Example: 17÷5

=3.4

This time we are going to change our 17 to its' decimal form 17.0 (this is the same number)

$$5\overline{)17.0}$$

$$\begin{array}{r} 03.4 \\ 5\overline{)17^{2}.0} \end{array}$$

5 does not go into 1… so we have to cross it off and move it next to the 7

Instead, we carry the 2 with our next nearest digit… the 0

DON'T FORGET YOUR DECIMAL!

So now, we can ask, how many 5's go into 17… 3 would make 15… remainder 2.

Finally, we can ask how many 5's will go into 20, the answer is 4.

Problems

Today we are going to solve word problems on division thinking carefully about when to round up and when to round down.

Problem Solving

What would the answer be to this problem and why?

248 children are going on a school trip. 5 children go in each tent. How many tents are needed?

Problem Solving

What would the answer be to this problem and why?

248 children are going on a school trip. 5 children go in each tent. How many tents are needed?

248 ÷ 5 = 49.6 or 49 r3

This means 50 tents are needed because ….

Problem Solving

What would the answer be to this problem and why?

248 eggs are put in boxes of 6. How many complete boxes can be sold?

Problem Solving

What would the answer be to this problem and why?

248 eggs are put in boxes of 6. How many complete boxes can be sold?

248 ÷ 6 = 41.3 or 41 r 2

This means 41 boxes can be made because ….

Problem Solving

There are 12 crayons in each packet.
How many packets are needed for 200 crayons?
$200 \div 12 = 16$ rem. 8 (round up)
Answer: *17 packets are needed.*

Explain why the answer is 17.

Problem Solving

There are 12 crayons in each packet.
How many packets can be made from 200 crayons?
$200 \div 12 = 16$ rem. 8 (round down)
Answer: *16 packets can be made.*

Explain why the answer is 16

Activity

Now have a go at solving the word problems on the activity sheet. Choose a section to complete.

A = Mild

B = Medium

C = Spicy

Activity Answers

The answers to the activity are on an attachment titled ANSWERS.

Review

Think of one of your own round up / round down problems.

Read it out and see if others in the class can solve it.