



Year 6 Maths Wednesday 10th June



Lesson Aims

- I can use short division to divide.

Success Criteria:

- I know my times tables.
- I can use my times tables to work through each part of the short division calculation.

Challenge :

- * I am able to express a remainder as a decimal.



Fluency Starter

Play the game HIT THE BUTTON.

In class take it in turns to shout out answers from your desk.

At home play on the computer.

<https://www.topmarks.co.uk/maths-games/hit-the-button>



Main Teaching

Yesterday we looked at multiplication and how to multiply. Today we are going to remind ourselves about division.

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

Example: $69 \div 3 = 23$



The way we write this is as follows:

$$\begin{array}{r} 23 \\ 3 \overline{)69} \end{array}$$

3 will go into 6, 2 times so we put the 2 above the line (keeping our columns in line).

3 will go into 9, 3 times so we put the 3 above the line (keeping our columns in line).

We now look at the **outside** number and see how many times it will go into the **following digits**.

Example: $17 \div 5 = 3.4$



The way we write this is as follows:

$$\begin{array}{r} 03 \text{ R } 2 \\ 5 \overline{) 17} \end{array}$$

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

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

Look at the **outside** number and see how many times it will go into the **following digits**.

$$03 \text{ R } 2$$

This is equal to $3\frac{2}{5}$ which is equivalent to 3.4

Example: $17 \div 5 = 3.4$



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

$$\begin{array}{r} 03.4 \\ 5 \overline{) \cancel{17}^1 .0} \end{array}$$

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!

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

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



Fluency Activity

Now complete the calculations involving short division. Choose from the documents on the website.

Mild – Dividing a 3 digit number

Medium – Dividing a 4 digit number by 1 digit.

Spicy – Dividing a 4 digit by 1 or 2 digit numbers.

There is an extra challenge activity also included in the attachments.



Fluency Activity Answers

The answers to all the questions are on the final pages of the activity sheets.



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?

$$248 \div 5 = 49.6 \text{ or } 49 \text{ r}3$$

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?

$$248 \div 6 = 41.3 \text{ or } 41 \text{ r } 2$$

This means 41 boxes can be made because



Problem Solving

We will look at problems like these again tomorrow. For now to finish the lesson can you create a few more division problems where you need to either ROUND UP or ROUND DOWN the answer.

Share the problems with someone else.



Review

- Can you review your learning?
- Can you explain to others how to solve division calculations?

