



Written Division with Whole Numbers Teaching Ideas

Learning Objective: To perform long and short written division with whole numbers.

Success Criteria:

- To perform written short division.
- To perform written long division.
- To use long and short division to solve problems.

Context: This is the fourth lesson in the scheme of work on the four operations. It follows lessons on addition, subtraction and multiplication of whole numbers. Subsequent lessons cover the four operations with decimals and negative numbers. Most students will have some grasp of all of the content in this lesson pack from primary school, and the pack can be used as reinforcement.

Starter

Using mental arithmetic, the pupils should answer as many division questions as they can, giving remainders where appropriate, in a given time. The time limit you give them should depend upon the ability of the class, for example, you may wish to give them 1, 2 or 3 minutes.

Main Activities

Written Short Division

Introduce the structure (usually known as the bus stop) used for written division. Explain how numbers are placed within this. Reinforce that the number outside is the one that we are dividing by. Remind pupils that, unlike addition, subtraction and multiplication, we work from the left-hand side. Ensure that they know how to deal with the remainders at each stage. Demonstrate another example, where the final answer has a remainder then get pupils to work through some examples independently.

Written Long Division

Ensure that students understand that the method for long division is essentially the same but the questions tend to be harder because we cannot rely on known times tables. Some students may want to split the divisor into tens and units and deal with these separately; this, however, will not work. Once students have seen this in action, ask them to attempt a question independently, bearing in mind that the answer has a remainder.

Activity Sheet

Have students work independently through the [Written Division Activity Sheet](#); an answer sheet is also provided.

Plenary

Get the students to work out the answers to the calculations to find the answer to the joke. Click to reveal the letters when a few students have all of the answers, otherwise students may crack the anagram to find the answer without evaluating any of the divisions.