

Pearson Functional Skills Maths | Numberless Problem-Solving Guide

What is numberless problem solving?

Numberless problem solving involves taking the numbers out of problems. This technique allows the learners to focus on what the problem is and what they have to do to solve it rather than the maths.

Here is a Functional Skills problem-solving question:

Sam and Lewis work in sales.
Lewis sells 21 cars in a month
Sam sells 14 cars in a month
How long would it take them to sell 250 cars?

Here is a numberless version:

Sam and Lewis work in sales.
Lewis sells some cars in a month
Sam sells less cars in a month
How long would it take them to sell a certain number of cars?

The numberless version allows the learners to focus on what needs to be done, rather than on doing it. It means that they could then follow this formula and answer the question regardless of the numbers in there.

Numberless problem-solving helps learners focus on understanding the language of the question, a common issue in Functional Skills.

Numberless problem-solving is also ideal for facilitating discussion among learners about how they would solve problems.

When introducing it into the classroom for the first time it might be best to start with some scaffolded questions and discussions to ensure that the learners understand what is expected of them.

The Resources

We have created five resources to use with learners:

- [Entry 3](#)
- [Level 1](#)
- [Level 2](#)
- [Level 1 Area, Perimeter and Volume](#)
- [Level 2 Area, Perimeter and Volume](#)

What an answer might look like

While designing these questions, we asked a group of learners to trial the Entry 3 ones. This is an example of a successful answer:

Question 3

Ria has bought a DVD.

She gives the shop assistant some money.

How would she work out how much change she should get?

take away the price from the money she has give the assicane

With the following answer, it might be worth having a discussion with the learner about how this might cause them some confusion.

how much a DVD cost, minus that money she gave to a assistant shopper.

Thanks to Rebecca Atherfold for trialling the questions and her feedback.