

Solving single-stage problems 2

A running track is 400 metres around. If your friends want to run 2,000 metres, how many times will they need to go round the track?

	Step 1		What
	Read and understand the problem.	>	What
		-	Will a
			What

What is it about? What are you being asked to do? Will a diagram help? What units are involved?

It is a problem about running a distance, with metres. You need to work out how many times they have to go round the track to run 2,000 metres.

Step 2		Do you need to add, subtract, multiply, divide?
Work out what calculations you need to do.	>	Have you done a similar problem?
		Underline any key words to help you.

You could do this sum in lots of ways, but try it with division. Find out the number of laps (400 metres a lap) by seeing **how many 400s there are in 2,000**.

Step 3		Try to find the easiest way of working it out - use mental or written methods.			
Carry out the calculations and answer the problem.	>	Make sure you do all the steps needed to answer the question.			
2,000 ÷ 400 = 5					
Step 4		Have you answered the question?			
Check your answer works.	>	Use estimation to see if your answer is about right.			
		Can you use a different method to check your answer (eg working backwards)?			

Your friends will need to go round the track 5 times.

Check your answer by working backwards: $400 \times 5 = 2,000$. This works.