

Plastic buckets

Annotation

Tom demonstrates that he is able to use the benchmark of a 2-litre container of milk as a mental image to support his estimation of the capacity of a plastic bucket. He has knowledge of the relationship between units in the metric system and knows that 1 litre of water weighs 1 kilogram.

Problem: Plastic buckets

The teacher gives the student a plastic bucket and asks:

Can you estimate how many litres of water this bucket would hold?



Then the teacher asks:

How much does 9 litres of water weigh?

Student Response

Tom: I think it would hold about 8 litres?

Teacher: How did you estimate that?

Tom: I thought of how many 2-litre containers of milk would fit in, and I thought it would be about four, so that's 8 litres.

Teacher: That's close, but actually the bucket holds 9 litres of water. If it was full, how heavy would it be?

Tom: It'd be 9 kilograms because 1 litre weighs 1 kilogram.