

Student work samples (explanations)

Click on the link to *Different sized capacities* (MS2190)

Sufficient explanations

- Because half of a litre is bigger than a twentieth of a litre.
- 0.5L is larger because it's half of 1L and 50ml is just half of 100ml.
- There are 1000 millilitres to a litre, so 0.5 litres is like saying 500 millilitres.
- Milli is one thousandth so $50\text{ml} = 50/1000$ whereas $0.5\text{L} = 500/1000$.
- Because there are 1000 millilitres in a litre.

Explanations based on relationship error between litres and millilitres

- Because 1 litre is 100ml and 0.5 is 50ml, so they are both the same.
- Because 0.5 litres as a decimal is half and 50 ml is half of 100mls and 100ml is a litre so 0.5 litres is that same as 50ml.
- 5 millilitres is 5ml which is bigger than 0.5 litres.
- 50 millilitres is the largest because it can measure the biggest thing.
- Because litres equals 10 millilitres and so 0.5 litres equals 50 millilitres.
- Because 50 ml is the same as 0.5 litres but just a different way to say and write the answers.

Explanations based around place value misconception of the relationship between litres and millilitres

- They are the same [0.5L, 50ml] because when you put a zero in front of a number it doesn't make the number bigger or smaller.
- I think this is because if you add "0." [to the 50ml] you get rid of the 0 on the end [of the 50ml].
- They are the same because after the decimal point in 0.5 it becomes smaller like millilitres (turns into millilitres).

Explanation based around the fact that litres are bigger

- 0.5L is bigger because litres sounds bigger and the number looks less but I still think it is higher.
- 0.5L because millilitres are less than a litre it doesn't matter if it is 50 or 0.5 [a] litre is more.

Insufficient detail/incomplete or vague

- I think it is larger because 50ml is small.
- Because 0.5 litre is half a litre and 50ml is less.
- Because 50mls is just less than 0.5 litres and 0.5 is like one half of a litre.
- Well I kind of know that millilitres are small but if you have a lot the 0.5litres and 50 ml I think are the same.
- Because 0.5 litres is part of 1 litre so is 50ml.