

Part Ia: Original Research Question

Q: Is a flask that is 2x bigger by volume also 2x bigger by mass?

Item	Mass (g)
125ml Erlenmeyer flask	
250ml Erlenmeyer flask	

Part Ib: Go over Sample CER Statement

Q: Is a flask that is 2x bigger by volume also 2x bigger by mass?

Item	Mass (g)
125ml Erlenmeyer flask	97.43g
250ml Erlenmeyer flask	121.69g

(1) No.

(2) According to my data, the 125mL flask has a mass of 97.43g while my 250mL flask was 121.69g in mass.

(3) This is because doubling volume does not mean the amount of material used to make the larger flask is doubled since a flask is mostly empty space.

3 parts to a strong conclusion

Part II: Follow-Up Research Question

Q: Is the mass of 100ml of water measured in a small beaker the same as the mass of 100ml of water measured in a large beaker?

	Mass (g)
small beaker	
small beaker + H ₂ O	
H ₂ O	
large beaker	
large beaker + H ₂ O	
H ₂ O	