Water bottles

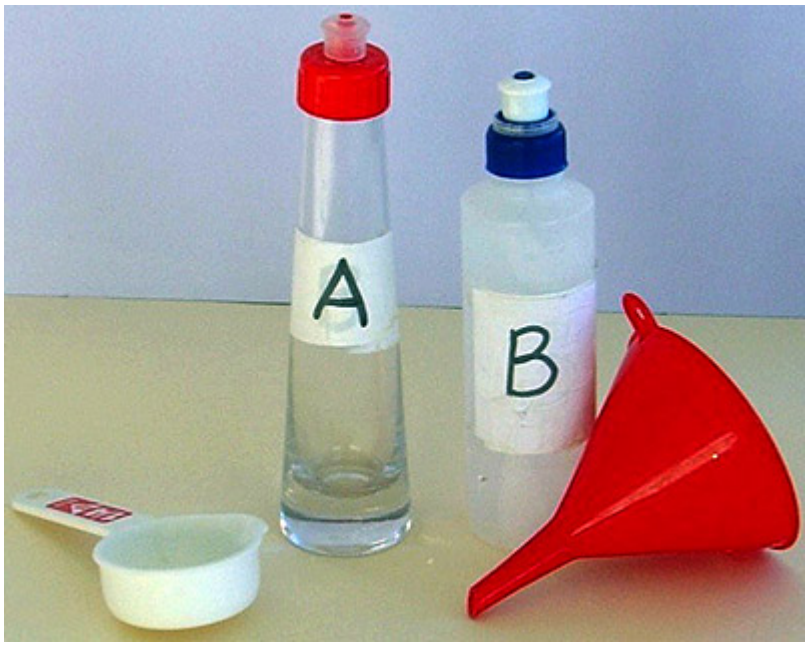
Annotation

Wiremu uses non-standard measurement units appropriately to compare the capacity of two containers. He understands that the number of scoops of water that fit into a bottle will determine the bottle's capacity, and he uses this measuring method to help him decide which bottle, from a choice of two, holds more water. When he measures, he understands that, in order to compare two containers, each scoop must be full and he must not spill any water from his measuring scoop.

Problem: Water bottles

The teacher shows the student two water bottles, gives him a scoop, a funnel and a container of water and asks:

Which bottle holds more water?



Student Response

Wiremu counts the number of full scoops of water it takes to fill bottle A. He is careful not to spill any water as he fills the bottle.

Wiremu: Bottle A has four scoops.

He then repeats the exercise, counting the number of scoops that are required to fill bottle B.

Wiremu: Bottle B takes seven scoops.
Teacher: So which bottle holds more water?
Wiremu: B because it fits more scoops of water in it.