

Investigating Things That Can Sink and Float

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Today I made three Cartesian Diver Systems (CDS). They are shown in Figure 1. This will help me study why things float and sink. Before making the systems, I measured parts of each, and recorded those measurements in Table 1. I think these data will be helpful to my understanding of how the CDS works. When I built each CDS. I put 3 milliliters of water in each.

Figure 1. Different Cartesian Diver Systems.

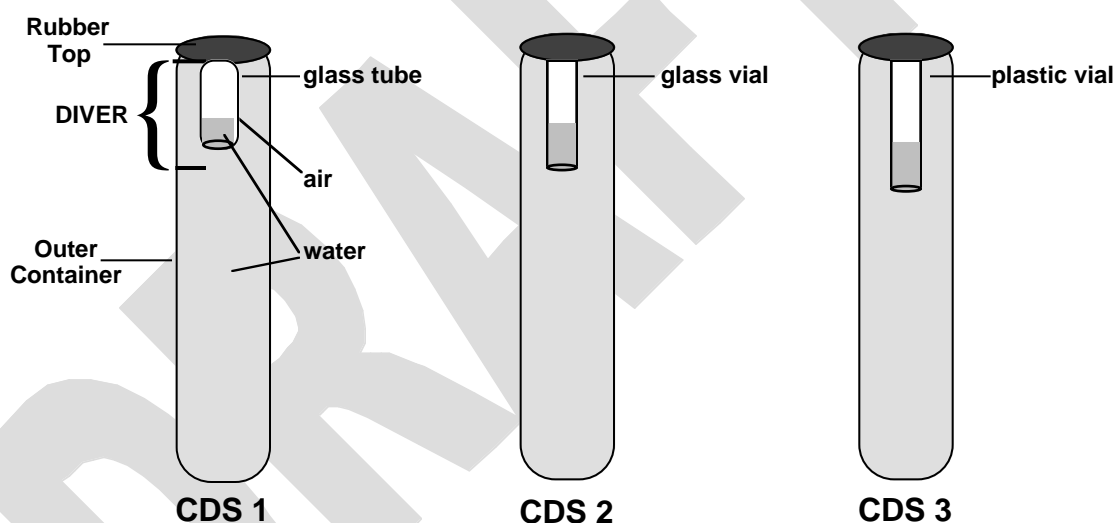


Table 1. Characteristics of different divers.

DIVER	CDS 1	CDS 2	CDS 3
MATERIAL	<i>Glass Tube</i>	<i>Glass Vial</i>	<i>Plastic Vial</i>
VOLUME (of the hollow diver)	8 milliliters	11 milliliters	14 milliliters
MASS (of diver when empty)	5 grams	3 grams	1 gram