## Skill Building

1. An object with a mass of 17.0 kg displaces 2.5 L of water when placed in a large overflow container. Calculate the density of the object.
2. Calculate the mass of a liquid with a density of $2.2 \mathrm{~g} / \mathrm{mL}$ and a volume of 35.0 mL
3. A 600 mL bottle of a liquid has a mass of 678.22 g .
(a) What is the density of the liquid? (Answer to 3 decimal places)
(b) What volume container would be required to store 3 kg of the liquid from question? (answer to the nearest mL )
4. The data table gives the mass and volume of different blocks.

Make a line graph, using the data, by placing volume on the $x$-axis and mass on the $y$-axis
Mass and Volume of Blocks

| Block | Mass (g) | Volume (mL) |
| :---: | :---: | :---: |
| 1 | 4.9 | 10.2 |
| 2 | 20.4 | 41.0 |
| 3 | 145.8 | 292.6 |
| 4 | 200.0 | 398.9 |


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What is the mass of the block when the volume is 50 mL ?
(1 mark)

