

## Science 8

### Blackline Master

This blackline master package, which includes student worksheets and materials for teachers to make their own overhead transparencies or photocopies, is designed to accompany Open School BC's *Science 8* course. The course and blackline master were developed by BC teachers, instructional designers, graphic artists, and multimedia experts.

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The Science 8 course consists of 4 modules, Science 8 SOS Package, blackline master, and the *Science 8 Media CD*. Science 8 is available in both print and online versions. Science 8 can be purchased as individual components or as a complete resource, *Science 8 Resource Package*. The following supporting resources are required for print and online versions of the course. All are available from Open School BC.

#### **Textbooks**

*BC Science 8 or BC Science Probe 8*

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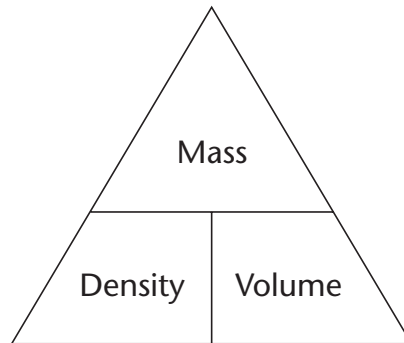
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## The States of Matter

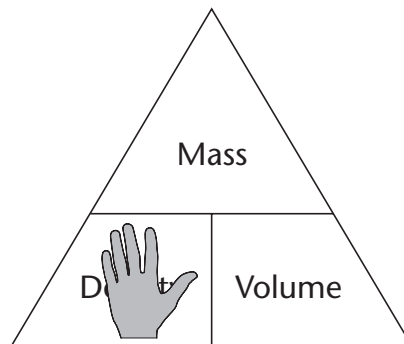


## A Math Trick—Finding the Unknown



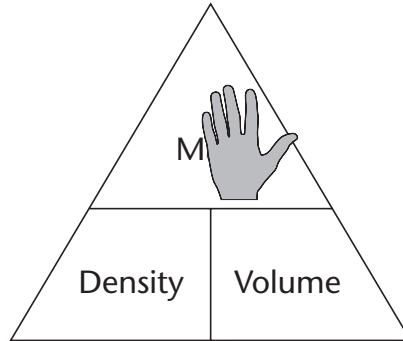
To use the formula triangle, start by covering the quantity you want to find.

Looking for Density?



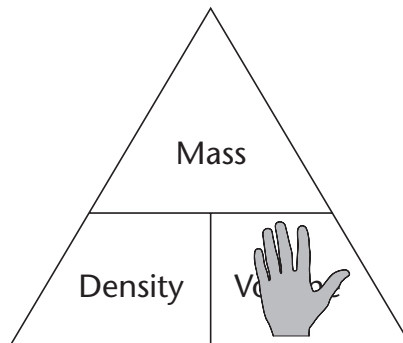
You're left with mass over volume, so density = mass/volume, just as we expect.

Looking for Mass?



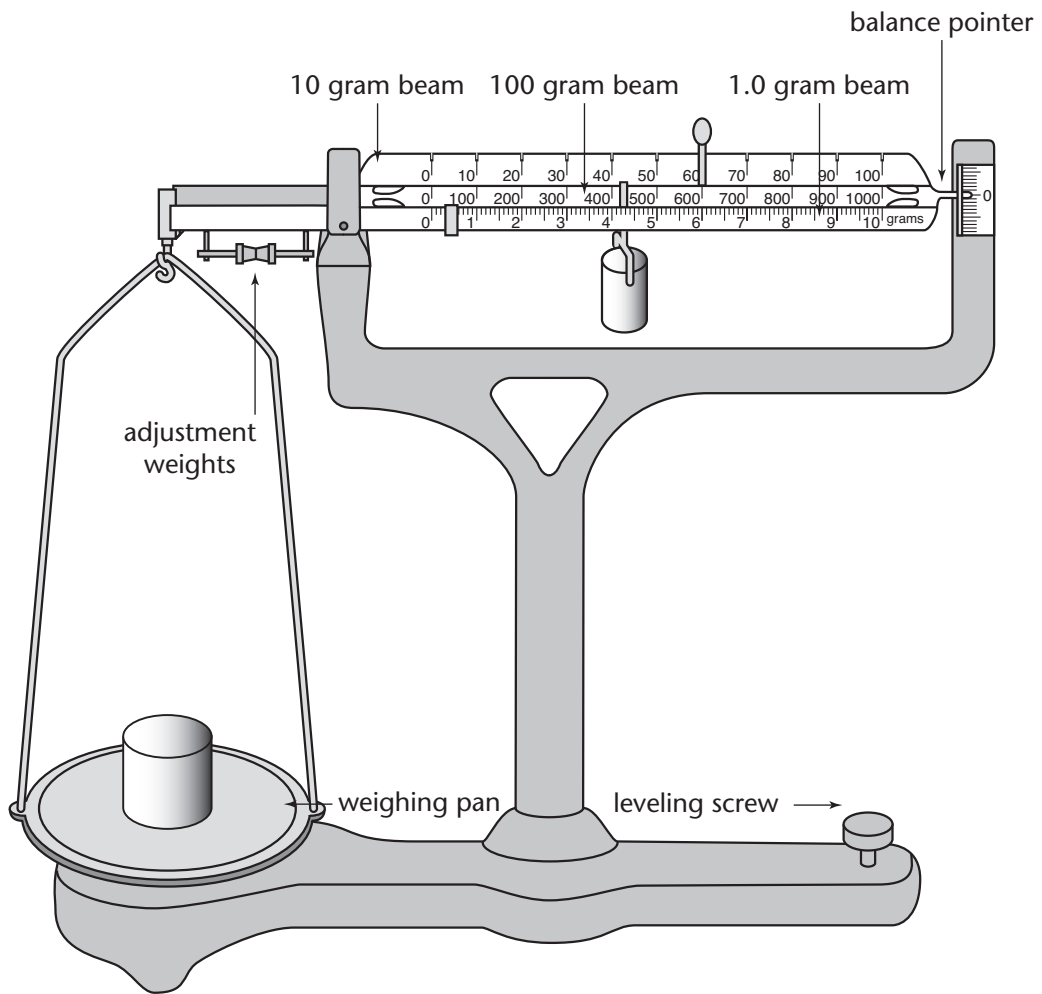
Density next to volume is left, so mass = density x volume.

Looking for Volume?

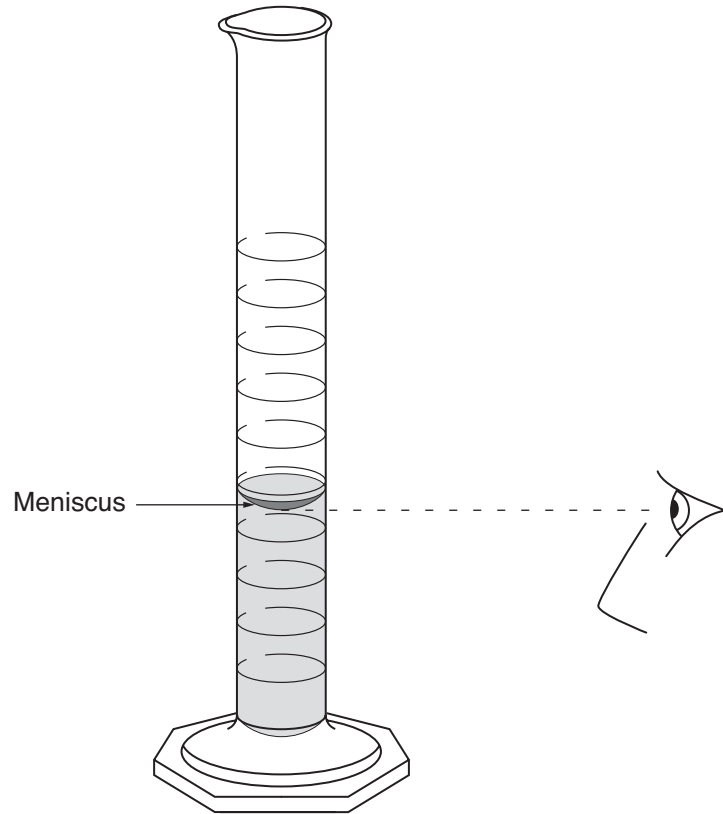


Mass over density is left, so volume = mass/density.

## Measuring Mass Triple Beam Balance Scale



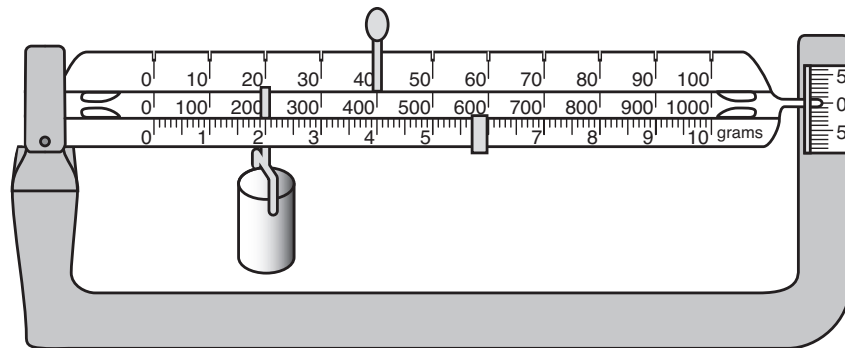
## Volume of a Liquid



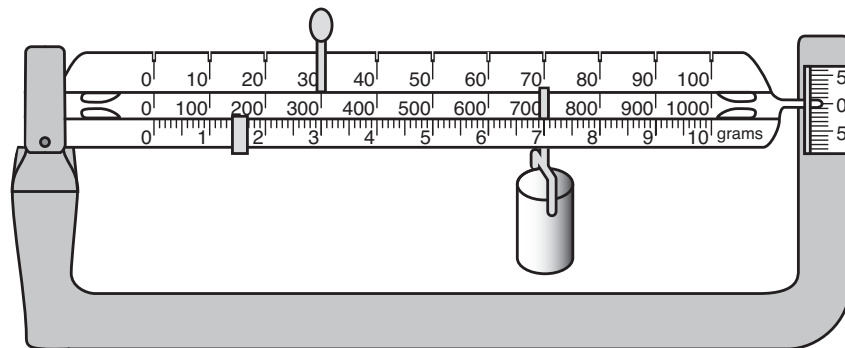


**Guided Practice 3.2B 1**  
**Measuring Mass**

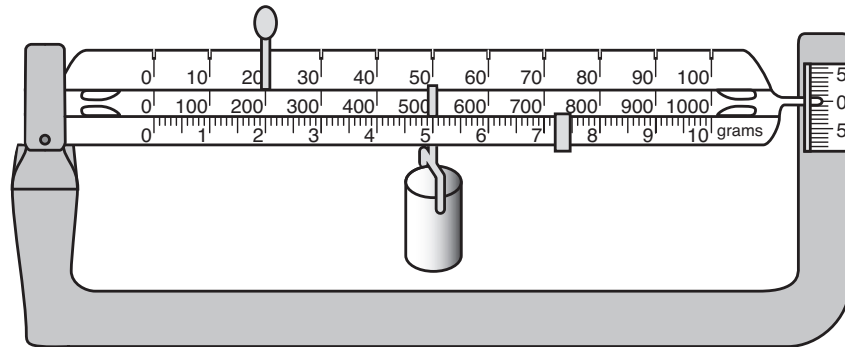
Record the measurement shown on each triple beam balance.



1. mass = \_\_\_\_\_ grams



2. mass = \_\_\_\_\_ grams



3. mass = \_\_\_\_\_ grams

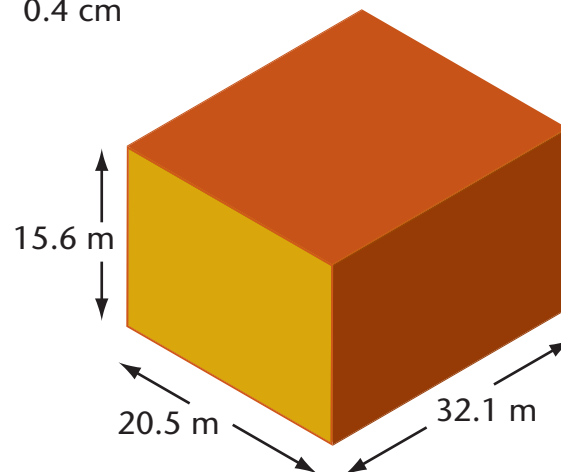
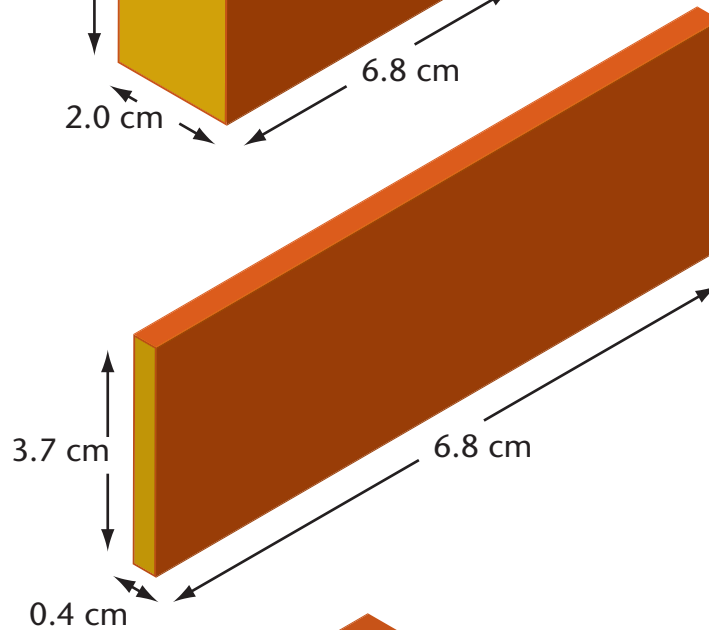
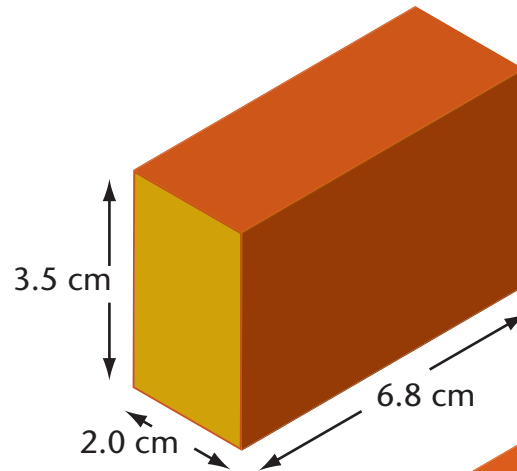




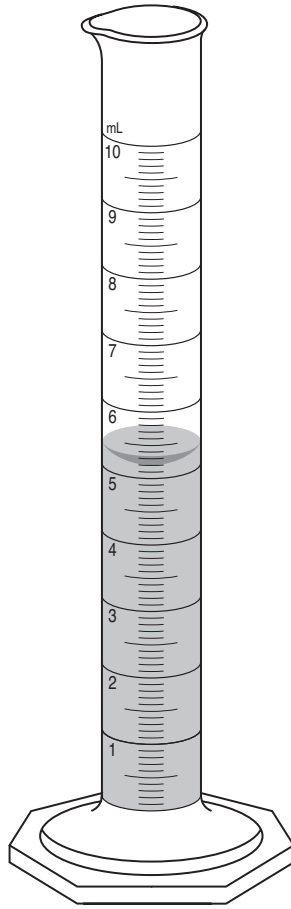
## Guided Practice 3.2B 2

**Measuring Volume**

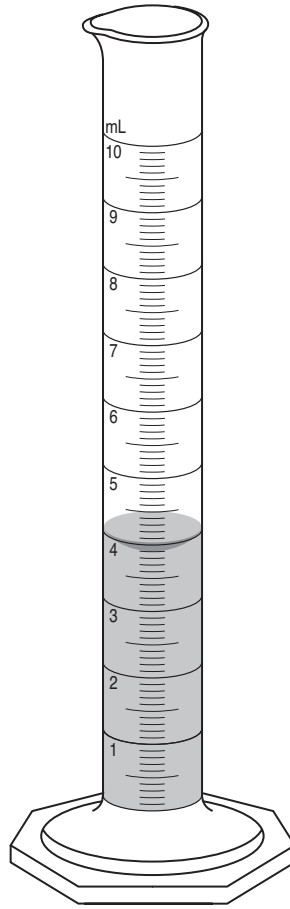
1. Calculate the volume of the following objects and round your answers to one decimal point. Remember to include units in your answers.



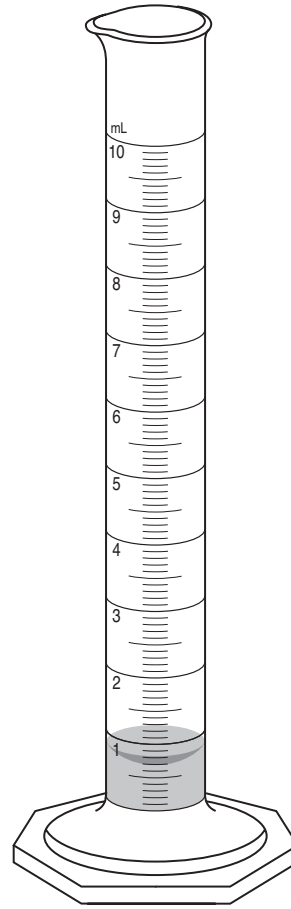
2. Read the volume of the following liquids:



1.  
volume = \_\_\_\_\_ mL

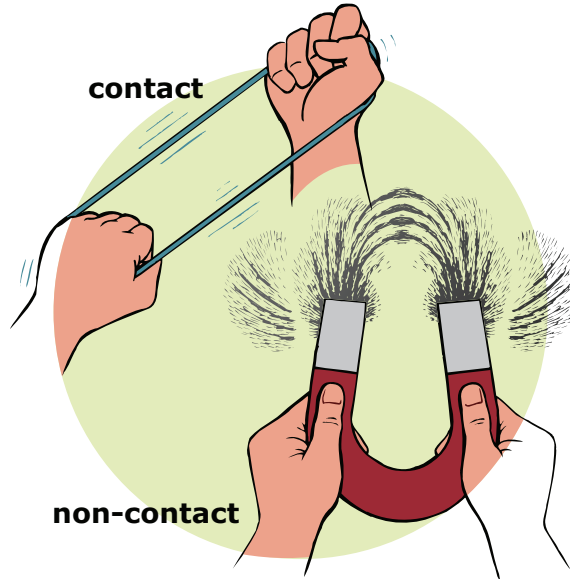


2.  
volume = \_\_\_\_\_ mL



3.  
volume = \_\_\_\_\_ mL

## What Is a Force?

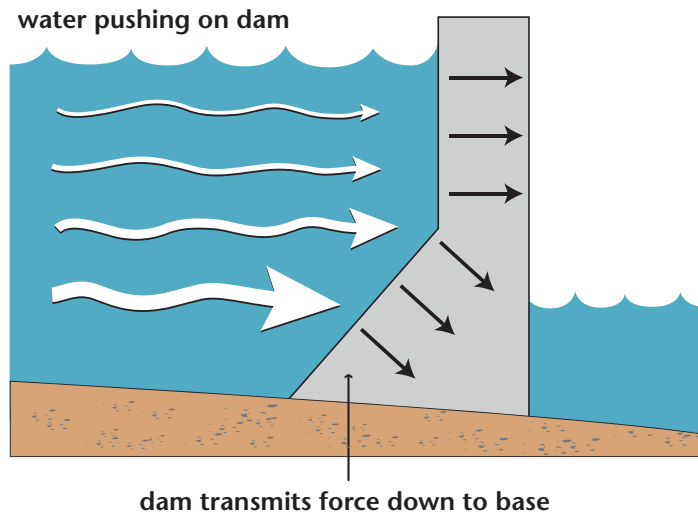


## Measuring Force

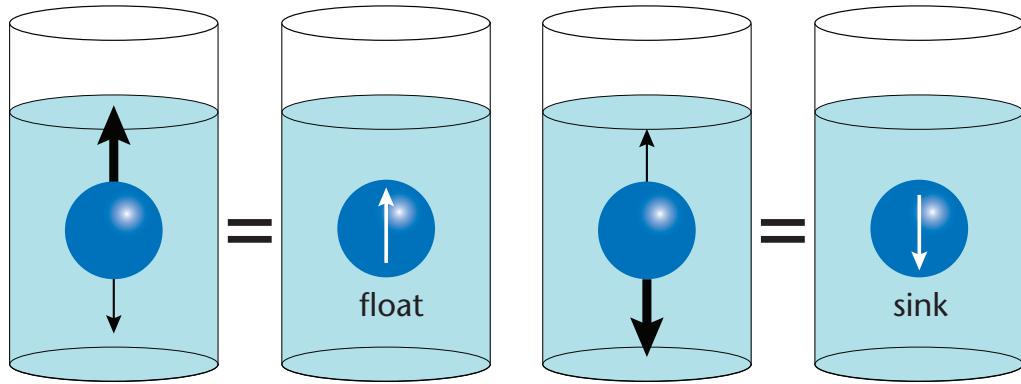


## Did You Know...?

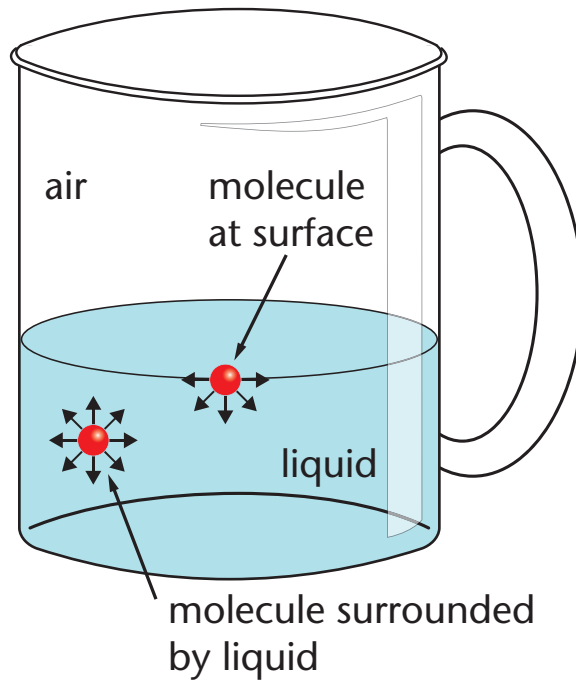
Underwater dams are built much thicker at the bottom than at the top due to the increase in water pressure at the bottom.



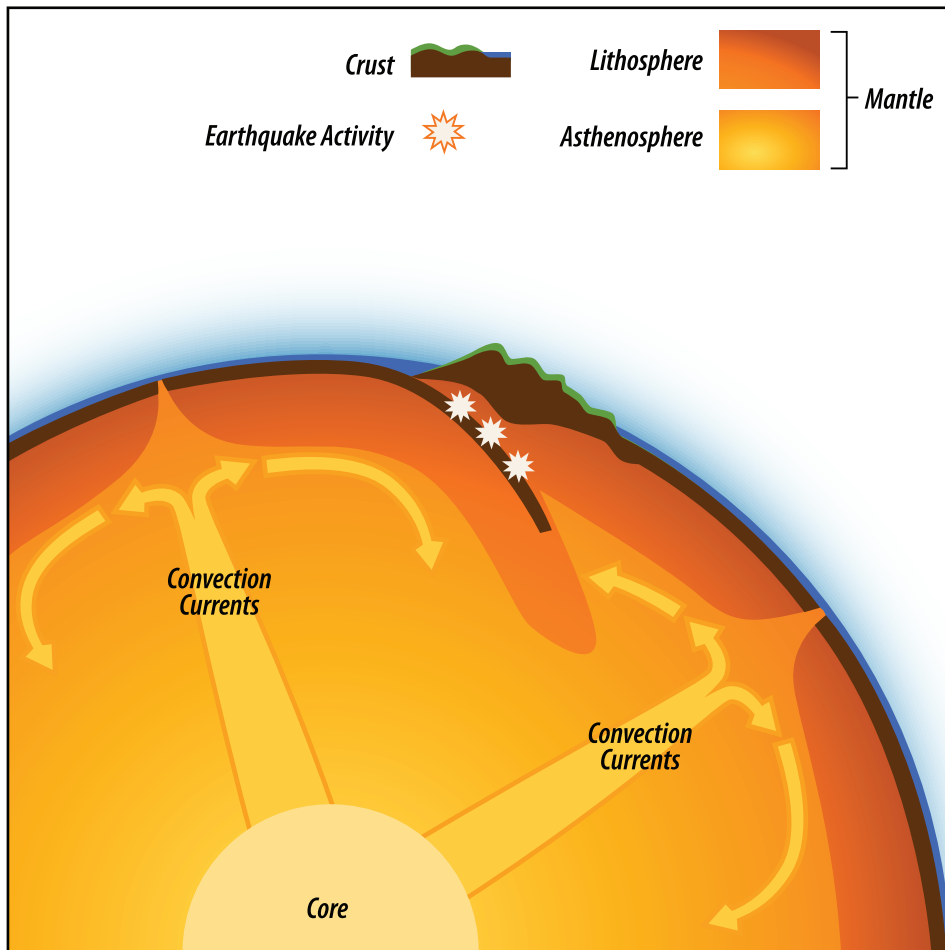
## Float, Sink, or Suspend?



## Surface Tension

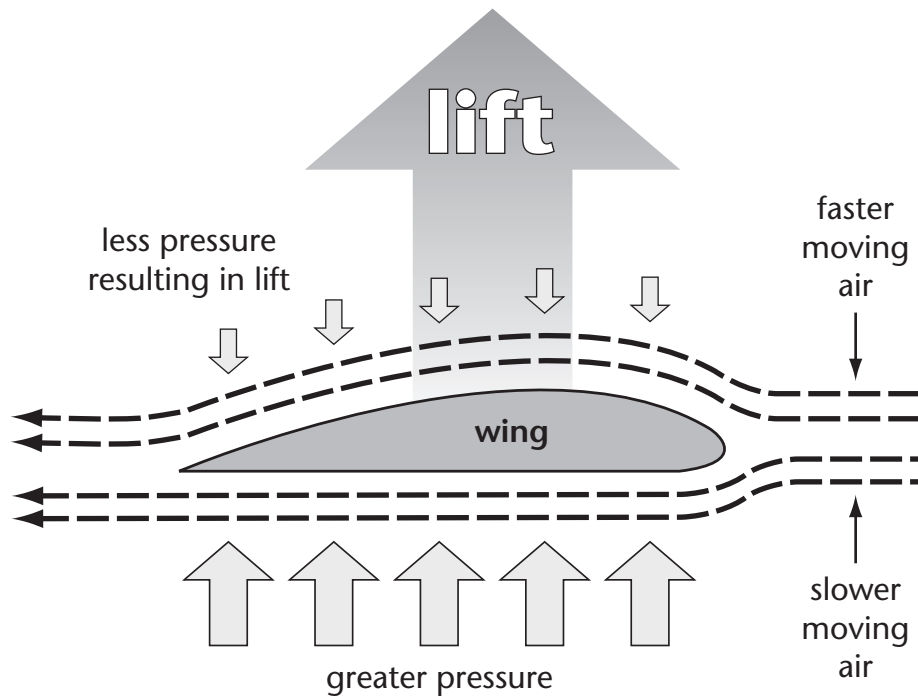


## Natural Fluid Systems on Earth





## Bernoulli's Principle



### Section Assignment 3.4 Part D: Fluids and Force: Matching

Write the letter of the term from Column A beside the correct definition in Column B. (10 marks)

Column A	Column B	
A. newton	1. a solid has changed shape without a change in volume	
B. compression	2. a term to describe anything involving movement	
C. kilopascal	3. basic unit of force	
D. deformation	4. any material that can flow freely	
E. negative buoyancy	5. decrease in volume caused by force	
F. positive buoyancy	6. most commonly used unit of pressure	
G. viscosity	7. the property of fluids to resist flow	
H. flow rate	8. type of buoyancy when an object sinks	
I. dynamic	9. the time it takes for a fluid to flow from one point to another	
J. fluid	10. type of buoyancy when an object floats	