

Review - Lesson 26 to 28

Fill in the blanks.

Vocabulary		
Cubic centimetres (cm ³)	Mass	Particles
Denser	Millilitres (mL)	Rise
Density	Fluids	Volume
Displacement	g/cm ³	Water
Float	g/mL	

1. _____ can flow because they do not have a fixed shape.
2. The _____ of an object is the amount of mass contained in a given volume.
3. The key to density is the spaces between the _____. The denser an object is, the more closely packed together the particles are in the object.
4. A less dense substance will _____ on a denser substance if the two substances do not mix together.
5. As a rule, substances will _____ in their solid states than in their liquid state. An exception to this rule is _____.
6. To calculate the density of an object, you need to divide its _____ by its _____.
7. The _____ method can be used to find the volume of an irregularly-shaped object.
8. The units for density can be by _____ or _____.

Density Detective

Use your detective skills to find the identity of the mystery objects. First calculate the density of the object. Then use the Table of Densities to decide what the object is made of.

Table of Densities			
Solids	Density (g/cm ³)	Solids	Density (g/cm ³)
Marble	2.56	Copper	8.92
Quartz	2.64	Gold	19.32
Diamond	3.52	Platinum	21.4

1. While digging in the backyard, you find an old coin. Its mass is 26.76 g and its volume is 3 cm³.

What is the density of the coin? _____

What is the coin made of? _____

2. You think you have a diamond. Its mass is 5.28 g, and its volume is 2 cm³.

What is the density of the object? _____

What did you find? _____

Fill in the blanks.

Vocabulary	
Compression	Increases
Decreases	Liquids
Explosion	Pressure
Force	Solids
Gases	volume

1. _____ is the amount of force that acts on a given area of an object.
2. _____ is a decrease in the volume of matter caused by a force. Pressure can cause a gas to be compressed. As a result, the volume of the gas _____.
3. _____ are easy to compress, because their particles are spread apart.
4. If the heated gas is trapped inside a container, the gas particles bounce against the sides faster and more often. This means that the heated gas exerts more _____ on the inside of the container. This added pressure can lead to a(n) _____.

Match the term of the left with the best descriptor on the right. Each descriptor may be used only once.

Term	Descriptor
1. _____ elastic	A. resistance to flow
2. _____ tension	B. the speed at which a fluid flows from one point to another
3. _____ friction	C. attraction or joining of two different objects to each other.
4. _____ magnetic	D. strength with which the particles of an object or fluid attract each other
5. _____ static electricity	E. property of a liquid in which the surface of the liquid acts like a thin skin
6. _____ gravitation	F. an apple falls from a tree branch
7. _____ cohesion	G. a person uses a rope to pull a friend on a sled
8. _____ adhesion	H. a magnet holds a picture on a fridge
9. _____ viscosity	I. a person pulls a bow back and shoots the arrow
10. _____ flow rate	J. a sock is stuck to a sweater as it comes out of the dryer
11. _____ surface tension	K. when a person stop pedaling, the bicycle slow down