

## Density Identities

### Enrichment Activity

**Skills:** *interpreting a table, applying*

The table below lists the densities of common substances. An object with a lower density floats in a liquid or gas that has a higher density. Use this idea and the table below to name the substances described.

DENSITIES OF COMMON SUBSTANCES			
Substance	Density (g/cm <sup>3</sup> )	Substance	Density (g/cm <sup>3</sup> )
Air	0.0013	Ice	0.92
Alcohol	0.8	Iron	7.9
Aluminum	2.7	Lead	11.35
Cork	0.2	Marble	2.7
Corn syrup	1.38	Mercury	13.6
Diamond	3.5	Rubber	1.34
Gasoline	0.7	Silver	10.5
Glycerine	1.26	Steel	7.8
Gold	19.3	Water	1.00

1. I am a liquid. If you mix me with water, I float on top, but if you mix me with gasoline, I sink. What am I? \_\_\_\_\_
2. I am a 1-cm cube. My mass is just 0.10 g less than the mass of a 1-cm cube of iron. What am I?  
\_\_\_\_\_
3. Although I am a solid, I am so light that I can float in any liquid listed on the chart. What am I?  
\_\_\_\_\_
4. In a liquid mixture with water and corn syrup, I'll always be in the middle. What am I? \_\_\_\_\_  
\_\_\_\_\_
5. I am a solid. I float in water, but not in alcohol. What am I? \_\_\_\_\_
6. An object made of me is light enough to float in corn syrup, but not in water. What am I?  
\_\_\_\_\_
7. My density is one. What am I? \_\_\_\_\_
8. Although we are not related, 1 kg of me will take up the same space as 1 kg of aluminum. What am I?  
\_\_\_\_\_