

Sink or Float

The density of mercury is 13.5 g/cm^3 . The density of water is 1.0 g/cm^3 . Using the density values given, determine whether each of the following objects will sink or float in mercury and in water. If the object floats in water, in mercury, or in both, write a plus sign (+) in the appropriate place. If the object sinks, write a minus sign (-) in the appropriate place.

Object	Density	# In Mercury	+/-	# In Water	+/-
Aluminum	2.7 g/cm^3				
Lead	11.3 g/cm^3				
Silver	10.5 g/cm^3				
Steel	7.8 g/cm^3				
Platinum	21.4 g/cm^3				
Oak wood	0.85 g/cm^3				
Water (ice)	0.90 g/cm^3				