Name $\qquad$ Class $\qquad$
<Show all work on calculations. Include proper units. Explanations require complete sentences.>

1) The density of the ice cube is:
A) More than the density of the water in which it floats
B) Less than the density of the water in which it floats
C) The same as the density of the water in which it floats
2) The mass of the water displaced by the ice cube (at any moment in the melting process) is:
A) More than the mass of the ice cube
B) Less than the mass of the ice cube
C) The same as the mass of the ice cube
3) Which animation(s) show the buoyancy force on the block changing as the oil is first drawn away?
A) Animation A
B) Animation B
C) Animation C
D) Animation D
4) As the ice cube melts, its mass:
A) Increases
B) Decreases
C) Remains the Same
5) When the ice cube melts it becomes water. The volume of this water (compared to the volume of the original ice cube) is:
A) More
B) Less
C) The Same
6) The animation that is "most physical" (i.e. best depicts what would happen to the water level in a real experiment is: (choose one)
A) Animation 1
B) Animation 2
C) Animation 3
