Grade 8 Quiz Review: Viscosity, Density and Buoyancy

You should be familiar with the following terms:

* Matter - Mass - Floating
* Particles - Volume - Sinking
* Fluids - Displacement Method - Flinking
* Viscosity (High vs Low Viscosity - Liquid Densities - Weight vs Mass
* Flow Rate - Buoyancy
* Internal Friction - Archimedes Principle
* Density - Buoyant Forces

You should know the following Theories:

* Particle Theory of Matter
* What is the difference between Solids, Liquids and Gases
* How does matter change from one state to another (eg: freezing, melting, boiling, condensing)
* What is the difference between a high viscosity and low viscosity fluid? (explain at the particle level)
* What is the relationship between viscosity and flow rate?
* How does temperature affect flow rate of a fluid (both liquid and gases)? Explain using particles.
* How do you calculate flow rate?
* How do Non-Newtonian Fluids (like Oobleck) work?
* How do you calculate density?
* You should be able to do basic volume calculations (like volume of cube or rectangle, or displacement method)
* You should be able to predict how fluids would layer given their densities.
* You should be able to predict whether an object would float or sink.
* You should know how to explain why objects “weigh less” in water.