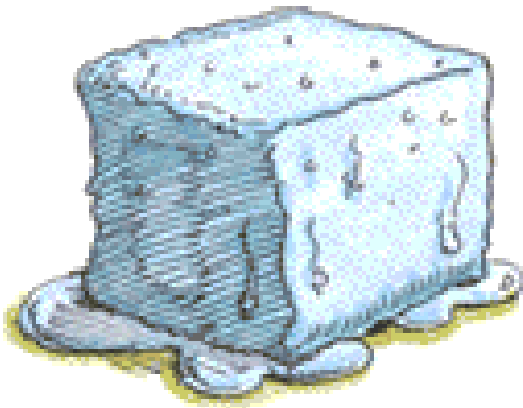


Chapter 2 - Properties of Matter

2-1

What is Matter?



SOLID



LIQUID



GAS

Don't
forget
plasma!

Properties of Matter

- Matter has mass
- Matter takes up space, or has volume



A triple-beam balance is used to measure the mass of an object.

Mass versus Weight

- MASS

- The amount of matter in an object
- Does NOT change
- Measured by a balance
- Expressed in kilograms (kg), grams (g), and milligrams (mg)



- WEIGHT

- The measure of gravitational force on an object
- Changes depending on where the object is
- Measured by using a spring scale
- Expressed in newtons (N)



Mass and Inertia



- Inertia – an object resisting a change in motion
 - Moving things want to continue moving in the same direction with the same speed
 - Objects at rest (not moving), want to remain at rest
- Mass is a measure of inertia
 - An object with a small mass is much easier to move than an object with a large mass