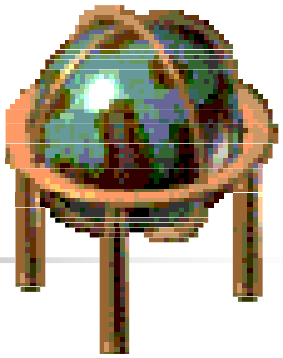
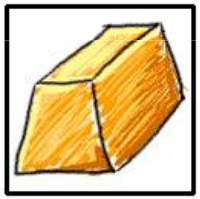
Matter:

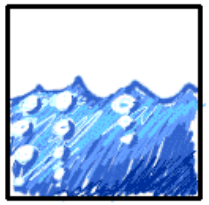


It's what the world's made of.

What do you know about matter?



Solids



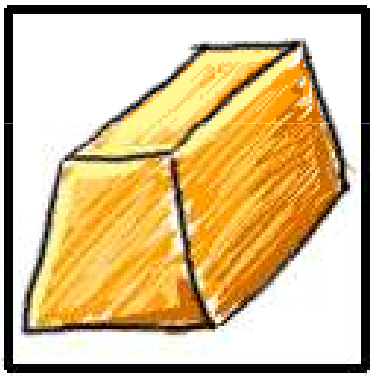
Liquids

Gasses

Plasma

Solids

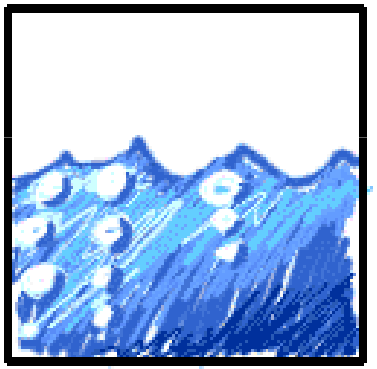
- Solids hold their own shape.
-
- Solids take up space.



Read more!

Liquids

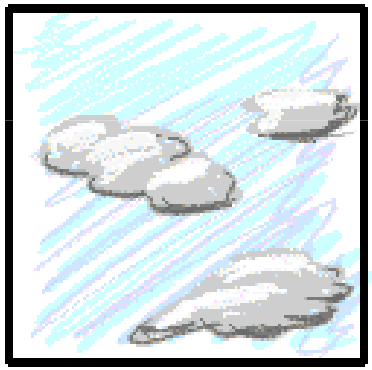
- Liquids take the shape of their container.
- Liquids have weight.
- Liquids take up space.



Read more!

Gasses

- Gasses spread out to fill the entire space given.
- Gasses have weight.
- Gasses take up space.



Read more!

Plasma

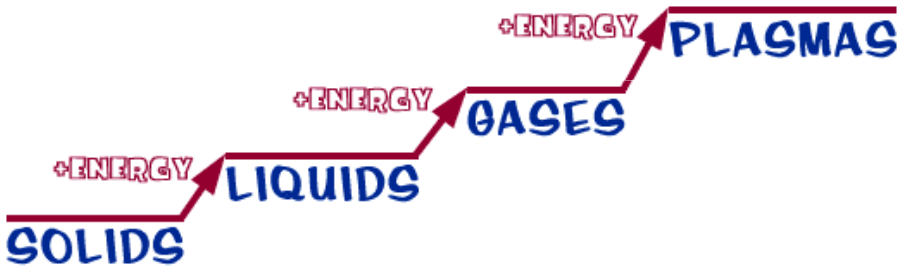
- Lightning is a plasma.
- Used in fluorescent light bulbs and Neon lights.
- Plasma is a lot like a gas, but the particles are electrically charged.

Read more!

STATES of matter?

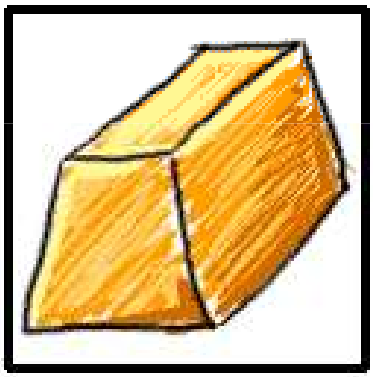
What would it take for matter to move from one state to another?

Energy determines the state!



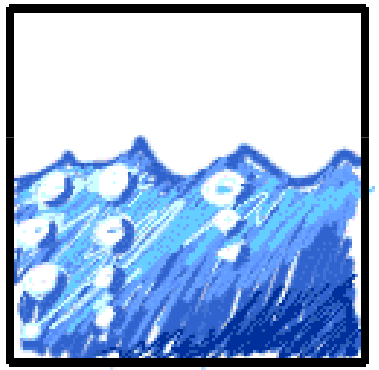
Particles in Solids:

- Are packed tightly together
- Have very little energy



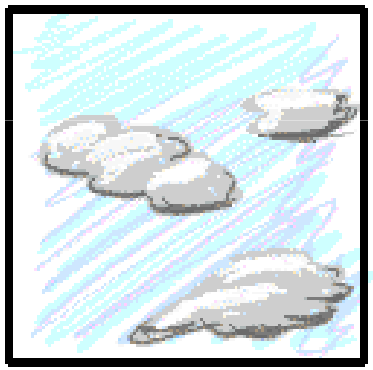
Particles in Liquids:

- Are loosely packed
- Have medium energy levels



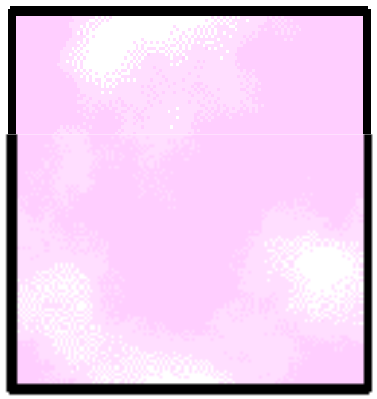
Particles in Gasses:

- Move freely
- Have LOTS of energy



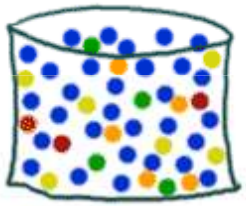
Particles in Plasma:

- Are electrically charged
- Have EXTREMELY high energy levels

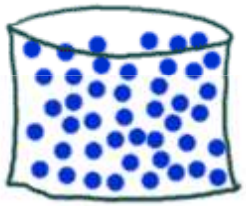


Mixtures may be in different phases

- Solid?
- Liquid?
- Gas?
- Plasma?



Tap Water



Distilled

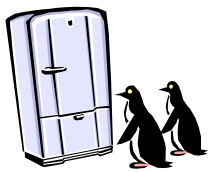
Here's how it works:

Push here for a movie!

Add or Subtract Energy. . .

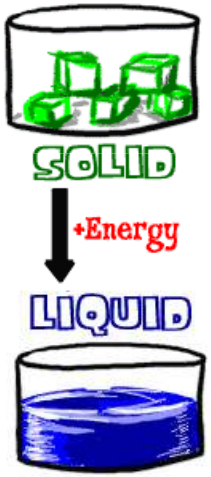
When energy is added, particles move faster!

When energy is taken away, particles move slower!



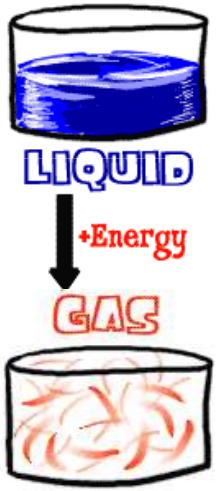
What will happen? Why?

Solid + Energy = ?



- When energy is added to solids, they become liquids!
- Examples?

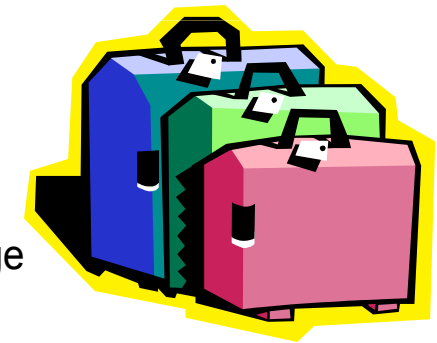
Liquid + Energy = ?



- When energy is added to liquids, they become gasses!
- What examples can you think of?

Changing States

- There are several names for matter changing states:
  - State change
  - Phase change
  - Physical change



So, did we get something ne[redacted]?

- Ice cream and melted ice cream?
- Chocolate and melted chocolate?
- Ice, water, and water vapor?
- Steel and molten steel?

The End!