SCIENCE: Chemistry

Physical Properties of Matter

- anything that can be measured or observed without making a new substance
- original substance do not change

Examples:

- 1. Physical solid, liquid, gas
- 2. Colour green, blue, clear
- 3. Clarity how well light can pass through the substance
- transparent: can see through clearly
- translucent: can see through slightly, cloudy
- · opaque: cannot see through at all
- 4. Texture fine, coarse, rough
- 5. Odour odourless, strong, burnt
- 6. Taste sour, spicy, bitter
- 7. Lustre shiny, or dull
- 8. Malleability able to bent (malleable), shatter easily (plastic)
- 9. Ductile drawn into long wire i.e. copper wire
- 10. Form crystalline (cubed shape like grain salt), amorphous (has an irregular shape)
- 11. Solubility will dissolve in a liquid (soluble), will not dissolve in a liquid (insoluble)
- 12. Melting and Boiling Point melt (solid to liquid), boil (liquid to gas)
- 13. Viscosity viscous (very thick liquid) i.e maple syrup, oil
- 14. Density amount of matter per unit

Chemical Change and Properties

- Jotesale.co.uk opstances and the production of on for more new a change in the starting substance substances
- alters the composition the original matter
- difficult to Prive the process
- ex. cooking, rusting, burning, tarnish

Evidence:

- 1. Energy/ Heat is given off ex. bunsen burner
- 2. A colour change original colour of two liquids react to make a new colour i.e. ammonia mixed with vinegar, and water
- 3. A new solid is from (precipitate)
- 4. A gas is produced bubbles forming
- 5. An odour is produced i.e. rotten egg, when a gas is produced, odour is removed

Particle Theory of Matter

- 1. Matter is made up of tiny particles (atoms).
- 2. Different substances are made up of different kinds of particles.
- 3. There is space between atoms and molecules
- 4. Temperature affects the speed of particles.
- 5. Particles attract each other due to strong force.