

5.3 Changes in Matter

Understanding how matter can change is key to understanding Chemistry.

Last section we discussed _____ and _____ properties. You can also have matter change _____ or _____

A _____ change may cause a change in form or state, but not in substance. The _____ remains the same before and after the change.

Changes in the state of matter are examples of a _____ change. You will need to know the list of terms describing this (pg 21 in text)

Solid to liquid → _____ (heat added)

Solid to gas → _____ (heat added)

Liquid to solid → _____ (heat removed)

Liquid to gas → _____ (heat added)

Gas to liquid → _____ (heat removed)

Gas to solid → _____ (heat removed)

Another interesting form of physical change is _____. Putting table salt into water causes the crystals to disappear, but if you evaporate the water the salt will be _____

A _____ change occurs when a substance changes into one of more new substances with different properties.

A chemical change is more likely to be _____ since many chemical reactions are not _____. Even in the reactions that are _____, you need one reaction to change the substance and another to change it back.

But how can you tell just by observing?

Clues that it's a physical change: _____ (usually), no new substance forms, _____ do not change, _____ change may occur but may not be noticed.

Clues that it's a chemical change: _____ (usually), _____ forms (ex: a gas or solid), new set of _____ (ex colour) _____ change may occur (ex heat or light is given off or energy is absorbed)

CYU p. 27 # 1-4, 11-14