

Observing Matter

Chemistry is the observation of matter and how it behaves.

Matter: anything that has mass, volume and made up of elements.

Qualitative Observation: Physical characteristics or description of a substance.

Quantitative Observation: properties that require numerical measurements or calculations.

Table 1.2 in text pg. 12

Physical Properties		Chemical Properties
Qualitative	Quantitative	Reacts with?
state	melting point	water
colour	boiling point	air
odour	density	O ₂
crystal shape	solubility	acid
malleability	electrical conductivity	pure substances
ductility	thermal conductivity	flammability
hardness		toxicity
brittleness		decomposition