

TEST on everything so far

Ch 1(sections 1-1 – 1-3 only. Why study chemistry, Scientific Method, Safety)

Ch 2, Chem and Physical Properties/Changes, Elements ,Compounds and mixtures

Methods of separation. Intro to energy and energy change, temperature.

Know simple examples of reactions observed.

1-1

- chemistry=study of all substances and the changes that they can undergo
=>called the “central science” because it overlaps with so many sciences
- why study chemistry:
-chemistry plays a role in many different areas of life; why leaves change color, why icebergs float, how food you eat turns into muscle and sometimes fat in your body.

1-2

- scientific method
- English chemist and physicist Michael faraday=electric motor
- Scientific method=orderly and systematic approach, a way of answering questions about the world we live in
- Order/steps:
observation
question
hypothesis
experiment
conclusion

1-3

- Safety logos

Chapter 2

2-1

- Energy=capacity to do work or to produce heat
- 3 types of energy(classifications): radiant, kinetic, potential
- law of conservation of energy: in any process, energy is neither created nor destroyed

2-2

- $C = K - 273$
- $K = C + 273$

2-3

- Matter: anything that has mass and volume
- Mass=amount of material
- Volume=amount of space

2-4

- Element: substance that cannot be separated into simpler substances by a chemical change
- Compound: when 2 or more elements combine in a chemical reaction
=>combined in a *fixed proportion*
- Ex. Magnesium + Oxygen= compound magnesium oxide (MgO)