Continuation of major science concepts to be familiar with for Elementary Education WEST-E:

Molecular formation

Atomic model

Compounds

Periodic table

Matter

Conservation of matter and atomic theory

Mass, weight, volume, density and specific gravity

Physical and chemical properties

Elements, compounds, solutions and mixtures

Chemical reactions

Most abundant elements

Past atomic models and theories

Heat, energy, work, thermal energy, and heat engine

Thermal contact, entropy, conservation of energy and perpetual motion

Kinetic and potential energy

Laws of thermodynamics

Energy

Energy transformations

Heat and temperature

Motion and force

Gravitational force

Newton’s laws of motion

Simple machines

Friction

Electrical charges

Circuits and potential

Examples of circuits

Electrical charge

Magnet

Magnetic fields

Waves

Sound

Pitch, loudness, sound intensity, timbre, oscillation

Electromagnetic spectrum

Visible light

Doppler effect

Kinetic theory of gases

Inorganic compounds

Organic compounds

Reading chemical equations

Balancing equations

Water

Hydrogen bonds

Solutions

Mixtures, suspensions, colloids, emulsions, foams

Acids

Bases

Salt

pH

Eather’s life-sustaining system

Earth system science

Earth science disciplinces

Geological eras

Development of life on earth

Planets

Terrestrial and Jovian Planets

Hydrosphere

Aquifers

Freshwater biomes, estuaries, intertidal zones, subtidal zones

Euphotic, bathyal, abyssal zone

Biosphere

Ecological system and biome

Erosion

Climates

Layers of the earth

Earth’s atmosphere

Paleontoloogy

Rock record

Matching rocks and geologic events

Fossil and rock record

Mountains

Volcanoes

Major subdivisions of rock

Glaciers

Planet definition

Moon

Sun

Comets, asteroids, and meteroids

Subfields of biology

Kingdoms of life forms

Inveterbrates

Vetebrate groups

Hunters and prey animals

Life processes

Organisms that interfere with cell activity

Autotrophs, producers, herbivores, carnivores, omnivores, decomposers

Abiotic and biotic factors

Hydrocarbons and carbohydreates

Lipids, proteins and nucleic acids

How plants manufacture food

Role of a cell

Eukaryotic cells

Chloroplasts

Passive and active transport

Miotic cell replication

Microbes

Roots, stems, and leaves

Gymnosperms, cycads and conifers

Angiosperms

Arthropods

Reptiles

Reproduction in mammals

Respiratory system

Skeletal system

Nervous system

Producers, consumers, decomposers

System of classification of living organisms

Genetics, genes, chromosomes

Interactions among humans, natural hazards, and the environment

Personal and social perspectives

Personal health

Risk and benefit analysis

Science and technology

Inquiry-based science

Components of scientific experimentation

Scientific processes

Drawing a conclusion