|  |  |  |
| --- | --- | --- |
| Name: | Class: | Date: |

**Science 7 Course Outline:**

**Chapter 1 Summary:**

Key terms: (organisms, micro-organisms, species, population, community, ecosystem, habitat, limiting factor, predator, prey, adaptation, natural selection, speciation)

Main Ideas of the Chapter:

* Ecosystems: What are they? What are they composed of?
* Ecosystems within ecosystems: What is the significance of this?
* What are some different interactions that can exist between individuals in an ecosystem?
* Limiting factors: What are they? What are non-living limiting factors? What are living limiting factors?
* The Needs of Living Things: What are they?
* Adaptations: What are they? How do they develop? Why are they important?
* Natural selection: What is it? What are the 4 main components? What is its significance?

**Chapter 2 Summary:**

Key terms: (symbiosis, parasitism, commensalism, mutualism)

* Symbiosis occurs when organisms that have a very close relationship. We studied three types of symbiosis: mutualism, commensalism, and parasitism

**Chapter 4 Summary:**

Key terms: (property, states, melting point, freezing point, boiling point, density, matter, mass, and volume)

Main Ideas of the Chapter:

* Matter is anything that has mass and volume
* Matter can be described using observable and measureable properties such as mass and volume, and density
* There are three states of matter
* Density is calculated by dividing a substance’s mass by its volume.

**Chapter 5 Summary:**

Key terms: (Particle model, solid, melting, freezing, liquid, evaporation, condensation, gas, sublimation, physical change, chemical change, reversible changes, non-reversible changes)

Main Ideas of the Chapter:

* The behaviour of matter can be explained using the particle model
* All matter occurs in three different states and can change between them by adding or removing heat
* The particles in matter at different states have specific characteristics
* Reactions can be classified as physical or chemical
* Reactions can be classified as reversible or non-reversible
* There are observable clues to help distinguish if a reaction is chemical or physical
* Chemical reactions happen in both the living and non-living parts of the environment

**Chapter 6 Summary:**

Key terms: (Pure substance, Mixture, Elements, Compounds, Mechanical mixture, Suspension, Emulsion, Solution, Dissolve, Concentration, Dilute, Saturated, Unsaturated, Solubility, Supersaturated, Acids, Bases, pH, Neutral, Acidic, Basic)

Main Ideas of the Chapter:

Matter can be classified as pure substances and mixtures

* Pure substances can be either elements or compounds
* Mixtures can be mechanical mixtures, suspensions (emulsions are special suspensions), and solutions
* Mixtures can be separated by 6 different methods

Solutions are a combination of solutes and solvents

* The ratio of solute to solvent determines the concentration of a solution
* Solutions can be classified as acidic, basic, or neutral

**Chapter 16 Summary:**

Main Ideas of the Chapter:

* Organisms that lived on Earth in the past have been preserved as fossils
* Fossils show how life has changed on Earth
* There are three main ways that fossils formed
* Geological time shows us Earth is very old
* The layers of sediment show that the history of Earth has occurred in three major eras
* Organisms have adapted to live in different environments over time