

Chapter 2 Study Guide

Vocabulary List For Chapter 2

Possible Questions

What makes some atoms stable and other atoms not stable?

What makes an isotope radioactive? How do geologists use radioactive isotopes to their benefit?

Give two examples of van der Waals forces at work.

What happens to different elements physical properties when they form compounds?

How do hydrogen bonds create some of the physical properties of water that make it essential for life?

What are the three properties of water that make it essential for life?

How does water's ability to retain heat help keep the planet's temperature regulated?

What happens to an atom's charge if it loses an electron? Gains an electron?

What type of substances will water dissolve? Not dissolve?

What do acids and bases form when dissolved in water? What are the pH numbers associated with each on the pH scale?

What is a buffer?

What is a typical fat made of (on the molecular level)?

Visually recognize the difference between a saturated and unsaturated fat.

Why are fats so rich in NRG?

What determines the function of a protein? What determines a protein's shape? How many levels of structure do proteins have and what are they?

What is a nucleotide?

What are two differences between DNA and RNA?

How is NRG released from ATP?

Recognize the reactants and products in a chemical reaction.

Know the difference between exothermic and endothermic reactions.

Visually identify exothermic and endothermic reactions using graphs.

Explain how an enzyme reacts with a substrate.

What 3 things affect enzyme action?

Essay

Explain how a solution forms using the following vocabulary terms correctly: Ionic Bond, Solvent, Solute, Hydrogen Bonds, Polar Molecule, Saturation, Hydrogen Shell, Free Water.