

# Biology Concept Review

Review sheet

Mr. Lillibridge

Name: \_\_\_\_\_

## Unit 1 – Intro to Biology

- What is Biology?
- Scientific method
- Reading graphs & charts
- Lab safety & equipment
- Properties of life

## Unit 2 - Biomolecules

- Carbon compounds
- Molecules of life
- Energy & chemical reactions
- Water & solutions
- Acids & bases

## Unit 3 – The Cell

- History of cell biology
- Intro to the cell
- Cell organelles
- Plant vs. animal cell features
- Microscope

## Unit 4 – Cell Transport

- Homeostasis
- Passive transport
- Active transport

## Unit 5 – Cell Energy

- ATP
- Photosynthesis
- Cellular respiration
- Fermentation

## Unit 6 – Cell Cycle

- Sexual / Asexual reproduction
- Mitosis
- Chromosomes / Genes
- Cancer
- Differentiation
- Stem Cells

## Unit 7 – DNA, Protein Synthesis, Mutations & Biotechnology

- DNA
- RNA
- Protein synthesis
- Mutations
- Biotechnology

## Unit 8 – Meiosis & Inheritance

- Meiosis
- Mendelian Genetics
- Punnett squares
- Pedigrees

## Unit 9 – Evolution & Classification

- Darwinian evolution
- Natural selection
- Microevolution
- Evidence of evolution
- Macroevolution
- Classification of life
- Dichotomous key
- Taxonomy

## Unit 10 - Ecology

- Ecosystems & Biomes
- Food webs, pyramids and succession
- Populations and communities
- Geochemical cycles
- Conservation issues & solution