

# Biology Study Guide

Name:

Date:

Block:

Create a study guide that includes the major vocabulary and concepts you learn in this unit. Include **definitions, examples, and/or relevant diagrams**. Your study guide can be a rewriting of your notes, a series of questions/answers, a brochure, a mind map showing the connections between concepts, or any other way you can think of. You can create your study guide on a regular sized piece of paper, a large piece of poster paper, or cue cards

## Biology I: Cell Theory, Organelles, DNA and Chromosomes

Vocabulary	Concepts
<ul style="list-style-type: none"> <li><input type="checkbox"/> Prokaryotic cell</li> <li><input type="checkbox"/> Eukaryotic cell</li> <li><input type="checkbox"/> Nucleus</li> <li><input type="checkbox"/> Mitochondria</li> <li><input type="checkbox"/> Cell membrane</li> <li><input type="checkbox"/> Cytoplasm</li> <li><input type="checkbox"/> Cell wall</li> <li><input type="checkbox"/> Chloroplast</li> <li><input type="checkbox"/> Ribosome</li> <li><input type="checkbox"/> Endoplasmic Reticulum</li> <li><input type="checkbox"/> Golgi body</li> <li><input type="checkbox"/> Vacuole</li> <li><input type="checkbox"/> Vesicle</li> <li><input type="checkbox"/> Lysosome</li> <li><input type="checkbox"/> Nucleotide</li> <li><input type="checkbox"/> Chromosome</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> The Cell Theory (3 main ideas)</li> <li><input type="checkbox"/> Prokaryotic vs Eukaryotic cells</li> <li><input type="checkbox"/> Cell organelles</li> <li><input type="checkbox"/> <b>Deoxyribonucleic Acid</b> (structure and function)</li> </ul>

## Biology II: Asexual Reproduction, Binary fission

Vocabulary	Concepts
<ul style="list-style-type: none"> <li><input type="checkbox"/> Asexual reproduction</li> <li><input type="checkbox"/> Offspring</li> <li><input type="checkbox"/> Genetic diversity/variation</li> <li><input type="checkbox"/> Bacteria</li> <li><input type="checkbox"/> Binary fission</li> <li><input type="checkbox"/> Parent cell</li> <li><input type="checkbox"/> Daughter cell</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Advantages of asexual reproduction</li> <li><input type="checkbox"/> Disadvantages of asexual reproduction</li> <li><input type="checkbox"/> The process of binary fission</li> </ul>

### Biology III: Types of Asexual Reproduction, Mitosis

Vocabulary	Concepts
<input type="checkbox"/> Clones <input type="checkbox"/> Cell cycle <input type="checkbox"/> Interphase <input type="checkbox"/> Centrosome <input type="checkbox"/> Mitosis: Prophase, Metaphase, Anaphase, Telophase <input type="checkbox"/> Chromatid <input type="checkbox"/> Spindle fibres <input type="checkbox"/> Sister chromatids <input type="checkbox"/> Cytokinesis	<input type="checkbox"/> Budding <input type="checkbox"/> Spores <input type="checkbox"/> Fragmentation <input type="checkbox"/> Vegetative propagation <input type="checkbox"/> Grafting <input type="checkbox"/> Why do cells undergo mitosis? <input type="checkbox"/> Stages of Mitosis

### Biology IV: Sexual Reproduction, Gametes and Fertilization

Vocabulary	Concepts
<input type="checkbox"/> Sexual reproduction <input type="checkbox"/> Genetic diversity/variation <input type="checkbox"/> Gametes <input type="checkbox"/> Haploid cells <input type="checkbox"/> Diploid cells <input type="checkbox"/> Fertilization <input type="checkbox"/> Zygote	<input type="checkbox"/> Advantages of sexual reproduction <input type="checkbox"/> Disadvantages of sexual reproduction <input type="checkbox"/> Number of chromosomes in gametes vs body cells

### Biology V: Meiosis, Stages of Meiosis

Vocabulary	Concepts
<input type="checkbox"/> Meiosis <input type="checkbox"/> Homologous chromosomes <input type="checkbox"/> Interphase <input type="checkbox"/> Meiosis I: Prophase I, Metaphase I, Anaphase I, Telophase I, Cytokinesis <input type="checkbox"/> Crossing over <input type="checkbox"/> Metaphse II: Prophase II, Metaphase II, Anaphase II, Telophase II, Cytokinesis	<input type="checkbox"/> Why do cells undergo meiosis? <input type="checkbox"/> Stages of Meiosis

### Biology VI: Human Embryonic Development

Vocabulary	Concepts
<input type="checkbox"/> Prenatal <input type="checkbox"/> Blastocyst <input type="checkbox"/> Uterus <input type="checkbox"/> Embryonic stage <input type="checkbox"/> Fetal stage <input type="checkbox"/> Internal fertilization <input type="checkbox"/> External fertilization	<input type="checkbox"/> How do human embryos develop?