

**AP Biology**  
**Student Learning Plan**  
**Diversity and Immunity Unit 10 - 8 Days**

Day/Date	Topic/Objectives	Support
Day 1  <b>Origins of Life and Classification</b>	Introduction <input type="checkbox"/> Describe the contributions made by Oparin, Haldane, Miller, and Urey toward understanding the origin of organic molecules <input type="checkbox"/> Explain why not all individuals respond to a disease outbreak in the same way <input type="checkbox"/> Explain how genetic regulation by microRNAs play important roles in development <input type="checkbox"/> Explain why RNA, not DNA, was likely the first genetic material	<b>26.1-4</b>
Day 2  <b>Intro to Viruses</b>	<input type="checkbox"/> Describe the process of phenotypic acquisition in viruses <input type="checkbox"/> Describe the results of infection by different viruses in the same host <input type="checkbox"/> Explain how genetic information is transmitted during infection by viruses <input type="checkbox"/> Explain how the lytic cycle functions in viruses	<b>27.1-2</b>
Day 3  <b>AIDS and viral diseases</b>	<input type="checkbox"/> Explain how the lysogenic life cycle function in viruses and can lead to increased pathogenicity <input type="checkbox"/> Discuss the contributing factors to genetic diversity in viruses <input type="checkbox"/> Explain why RNA viruses mutate at a higher rate than other viruses <input type="checkbox"/> Describe the evolutionary history of the HIV virus	<b>27.3-5</b>
Day 4  <b>Prokaryotic Genetics</b>	<input type="checkbox"/> Describe the process of transduction <input type="checkbox"/> Explain the significance of transposons <input type="checkbox"/> Describe how homeotic genes are involved in developmental patterns <input type="checkbox"/> Explain how genetic transplantation experiments support the link between gene expression and normal development	<b>28.4</b>
Day 5  <b>Intro to Immunity</b>	<input type="checkbox"/> Describe the role of MHC proteins in cell function <input type="checkbox"/> Describe specific and nonspecific response to pathogens in vertebrates <input type="checkbox"/> Explain how specific immune responses disrupt	<b>52.1-2</b>

<b>ty</b>	dynamic homeostasis <input type="checkbox"/> Explain how cytotoxic tcells target intracellular pathogens <input type="checkbox"/> Explain how the humoral response produces antibodies	
Day 6 <b>Specific Immunity</b>	<input type="checkbox"/> Explain the role of molecular diversity of antibodies in response to antigens <input type="checkbox"/> Differentiate between cell mediated and humoral responses <input type="checkbox"/> Describe how antigens are recognized by antibodies <input type="checkbox"/> Describe the structure and function of antibodies <input type="checkbox"/> Explain how second exposure is more rapid than initial response.	<b>52.3-4</b>
Day 7	<input type="checkbox"/> review	
Day 8	<input type="checkbox"/> test	