

## Staff Pre-Planning Template

Content: AP Biology Grade: 12

Standards	Objectives
<b>Week 1</b>	
HS-LS1-4. Construct an explanation using evidence for why the cell cycle is necessary for the growth, maintenance, and repair of multicellular organisms. Model the major events of the cell cycle, including (a) cell growth and DNA replication, (b) separation of chromosomes (mitosis), and (c) separation of cell contents	SWBAT compare and contrast mitosis and meiosis.
<b>Week 2</b>	
HS-LS3-1. Develop and use a model to show how DNA in the form of chromosomes is passed from parents to offspring through the processes of meiosis and fertilization in sexual reproduction	
<b>Week 3</b>	
HS-LS4-1. Communicate scientific information that common ancestry and biological evolution are supported by multiple lines of empirical evidence, including molecular, anatomical, and developmental similarities inherited from a common ancestor (homologies), seen through fossils and laboratory and field observations	
<b>Week 4</b>	
HS-LS4-4. Research and communicate information about key features of viruses and bacteria to explain their ability to adapt and reproduce in a wide variety of environments. Clarification Statement: • Key features include	

<p>high rate of mutations and the speed of reproduction which produces many generations with high variability in a short time, allowing for rapid adaptation.</p> <p>HS-LS4-5. Evaluate models that demonstrate how changes in an environment may result in the evolution of a population of a given species, the emergence of new species over generations, or the extinction of other species due to the processes of genetic drift, gene flow, mutation, and natural selection.</p>	

1. **Include Topic/Concept/Theme on Student Work Packets.** *(see template)*
2. **Upload to School Website:**
  - Student Weekly Work Packets
3. **Make Copy of Each and Put in Crate in Main Office of:**
  - Staff Weekly Planning Template (1 for each week total of 4 in Crate)
  - Student Work Packets (1 for each week total of 4 in Crate)

<b>Staff Weekly Work Template</b>	<b>Week (circle one) <u>1</u> 2 3 4</b>
<b>Content: _____AP Biology_____</b>	<b>Grade: <u>12</u>_____</b>

***Standard(s):***

***Objectives:***

***Topic/Theme: : Chapter 12 The Cell Cycle***

***Concept The Key Roles of Cell Division***

**Brief Introduction:**

***Most cell division results in genetically identical daughter cells.***

**Activities or Tasks (increase in difficulty)**

1. Read and Annotate Chapter 12

2. Answer Concept Check questions for 12. 1 – 12.3

4. Chapter Review p. 251-252 #1-10

**Online Resource(s)**

1. Go to the AP Biology Classroom <https://apstudents.collegeboard.org/>

Other:

<b>Student Weekly Work Template</b>	<b>Week (circle one) 1 <u>2</u> 3 4</b>
<b>Content: _____ AP Biology _____</b>	<b>Grade: <u>12</u> _____</b>

***Standards:***

HS-LS3-1. Develop and use a model to show how DNA in the form of chromosomes is passed from parents to offspring through the processes of meiosis and fertilization in sexual reproduction

***Objectives:***

***Topic/Theme: To Be Determined by the Student***

***Concept: : To Be Determined by the Student***

**Brief Introduction: The students chooses the chapter that they would like to study.**

## Activities or Tasks

1. Read and Annotate the Chapter
2. Answer Concept Check questions for the chapter
3. Do Chapter Review questions at the end of the chapter

## Online Resource(s)

2. Go to the AP Biology Classroom <https://apstudents.collegeboard.org/>

Other:

\*\*\*\*PDF Attached or Downloaded\*\*\*\*

**Student Weekly Work Template**

**Week (circle one) 1 2 3 4**

**Content:** \_\_\_\_\_ **AP Biology** \_\_\_\_\_

**Grade:** 12 \_\_\_\_\_

### ***Standards:***

HS-LS4-1. Communicate scientific information that common ancestry and biological evolution are supported by multiple lines of empirical evidence, including molecular, anatomical, and developmental similarities inherited from a common ancestor (homologies), seen through fossils and laboratory and field observations

### ***Objectives:***

***Topic/Theme: To Be Determined by the Student***

***Concept: : To Be Determined by the Student***

**Brief Introduction:** The students chooses the second chapter that they would like to study.

**Activities or Tasks**

1. Read and Annotate the Chapter
2. Answer Concept Check questions for the chapter
3. Do Chapter Review questions at the end of the chapter
4. Do AP Biology Practice Exams on AP Biology Website

**Online Resource(s)**

1. Go to the AP Biology Classroom <https://apstudents.collegeboard.org/>

Other:

\*\*\*\*PDF Attached or Downloaded\*\*\*\*

<b>Student Weekly Work Template</b>	<b>Week (circle one) 1 2 3 <u>4</u></b>
<b>Content:</b> _____ <b>AP Biology</b> _____	<b>Grade:</b> <u>12</u> _____

**Standards:**

HS-LS4-4. Research and communicate information about key features of viruses and bacteria to explain their ability to adapt and reproduce in a wide variety of environments. Clarification Statement: • Key features include high rate of mutations and the speed of reproduction which produces many generations with high variability in a short time, allowing for rapid adaptation.

HS-LS4-5. Evaluate models that demonstrate how changes in an environment may result in the evolution of a population of a given species, the emergence of new species over generations, or the extinction of other species due to the processes of genetic drift, gene flow, mutation, and natural selection.

**Objectives:**

**Topic/Theme: To Be Determined by the Student**

**Concept: : To Be Determined by the Student**

**Brief Introduction: The students chooses the third chapter that they would like to study.**

**Activities or Tasks**

1. Read and Annotate the Chapter
2. Answer Concept Check questions for the chapter
3. Do Chapter Review questions at the end of the chapter

**Online Resource(s)**

3. Go to the AP Biology Classroom <https://apstudents.collegeboard.org/>
4. Do AP Biology Practice Exams on AP Biology Website

Other:

\*\*\*\*PDF Attached or Downloaded\*\*\*\*