



# AP Biology AP Exam Review Notebook



Assigned: 2/15

Due: 5/13 @ 8:00AM

You will be compiling a review notebook to assist you to prepare for the Ga Milestone (5/6 & 5/7) and AP Exam (5/13). This assignment will be an exam grade (250 points). The following are the items that are to be completed and placed into your review notebook. It would be a **WISE** decision to include your Race to the Slopes quizzes for extra review questions. Extra credit may be given for completion of extra items. This is a long term assignment & NO LATE SUBMISSIONS will be accepted under any circumstance! The notebook is due on **Monday, May 13, 2019 by 8:00am**.

✓	Dates	Items to be Completed
	3/4	Diagnostic Test – Barron’s PreTest (AP) – itsLearning (A)
	3/8	<b>Diagnostic Test - PreTest (Ga Milestone)</b> – USATestPrep (B)
	3/15	Lowest EOCT Section (90% mastery) – USATestPrep (D)
	3/25	Complete 1 Barron’s Practice Test (C)
	3/22	Second Lowest EOCT Section (90% mastery) – USATestPrep (D)
	3/29	<b>CHECKPOINT (50 POINTS)</b>
	3/29	Middle Lowest EOCT Section (90% mastery) – USATestPrep (D)
	4/8	Complete released exam – itsLearning (E)
	4/12	Middle Highest EOCT Section (90% mastery) – USATestPrep (D)
	4/15	Laboratory Review/Science Practices – 4 videos – PlayPosit (H & I)
	4/15	Albert.io Lab Review – 50% completed – Albert.io (J)
	4/19	Second Highest EOCT Section (90% mastery) – USATestPrep (D)
	4/22	Albert.io Practice Exam – Albert.io (K)
	4/26	Highest EOCT Section (90% mastery) – USATestPrep (D)
	4/27	<b>AP Biology Practice Exam (student choice)</b> (F)
	5/3	<b>CHECKPOINT (200 POINTS)</b>
	5/4	<b>Full-Length Practice Ga Milestone Exam</b> – USATestPrep (G)
	5/13	Completed Notebook due to Mrs. Jones by <b>8:00 am</b> <b>250 POINTS GOING IN GRADEBOOK</b>

\* additional points are either Barron Review Sections or student choice point assignments (see the student choice list)

Resource Key			
Albert.io	A	PlayPosit (Clever in ItsLearning)	P
Barron's	B	Textbook	T
ItsLearning	I	USATestPrep	U
Mastering Biology	M		

You must complete a total of 250 points!

Required Items				Student Choice			
✓		Item	Points	✓		Item	
	I	AP Diagnostic Test	5 pts			AP Biology Practice Exam	10 pts
	U	EOCT Diagnostic Test	5 pts		B	Barron's Section Review	48 pts
	U	USATestPrep EOCT Section Quizzes	30 pts		B	Barron's Practice Exam (1)	10 pts
	U	USATestPrep EOCT Practice Exam	5 pts		I	Released AP Exam (1)	10 pts
	B	Barron's Practice Exam (1)	10 pts		M	Mastering Biology	30 pts
	I	Released AP Exam (1)	10 pts		I	Numeric Response	20 pts
	P	Laboratory Review (2)	10 pts		B	Inquiry Diagrams	10 pts
	P/I	Science Practices	35 pts		A	Albert.io Practice Exam (2)	20 pts
	A	Albert.io Lab Review	20 pts		B	Barron's Practice Test	10 pts
	A	Albert.io Practice Exam (1)	10 pts		M	Solve-It (5)	10 pts
	M	Solve-It (4)	8 pts		P	Additional Lab Review (9)	18 pts
		Binder	2 pts		I	Scientific Skills MC Practice	10 pts
<b>Total Points: 150 points</b>				<b>Total Points: 206 points (choose 100 points)</b>			

Checkpoint	Pacing Required Items Completed
3/29 50 pts	<ul style="list-style-type: none"> <li>○ AP Diagnostic Test</li> <li>○ USATestPrep Diagnostic Test</li> <li>○ USATestPrep 3 Sections</li> <li>○ Barron's Practice Exam</li> </ul>
5/3 200 pts	<ul style="list-style-type: none"> <li>○ Released AP Exam</li> <li>○ USATestPrep 3 Sections</li> <li>○ Science Practice &amp; Lab (50%)</li> <li>○ Albert.io Practice Exam</li> </ul>
5/13 250 pts	<ul style="list-style-type: none"> <li>○ USATestPrep Practice Exam</li> <li>○ Science Practice &amp; Lab (100%)</li> <li>○ Solve-Its</li> </ul>

Diagnostic Test (AP Exam) – A				
5 pts	<p>You <b>must</b> complete the Barron's diagnostic test (posted on its Learning in <u>Review Notebook</u> folder). You are <u>only</u> required to answer the questions check/correct your answers with another color pen/marker and determine your scores for the following sections. Identify the 4 areas you feel you should work on from the topics below:</p> <p style="text-align: center;"><b>Due: 3/4</b></p>			
	<b>Barron's</b>	<b>Number Incorrect</b>	<b>Score: (%)</b>	<b>Work on! (✓)</b>
	Biochemistry & Enzymes			
	Cells & Cell Division			
	Cell Respiration & Photosynthesis			
	Heredity & Molecular Genetics			
	Classification & Evolution			
	Animals			
	Plants			
	Ecology			

Diagnostic Test (Ga Milestone) – B						
5 pts	<p>You <b>must</b> complete the USATestPrep diagnostic test (created as an assignment on your account). You only need to respond on the USATestPrep website. After completion of the diagnostic test, fill in the following chart with your scores.</p> <p style="text-align: center;"><b>Due: 3/8</b></p>					
<b>Overall</b>	<b>Structure of Cells</b>	<b>Interdependence of Organisms</b>	<b>Genetics</b>	<b>Genetic Information in Cells</b>	<b>Evolution</b>	<b>Organisms</b>

Barron's Practice Exams – C	
20 pts (10 pts each)	<p>Complete the practice test from the Barron's book (back of book) – complete multiple choice, numeric response, and free response. You are only required to answer the question and write an explanation for the answer. After completion, check/correct your answers with another color pen/marker.</p> <p style="text-align: center;"><b>*Note: one is required, one is student choice*</b></p> <p style="text-align: center;"><b>Due: 3/25</b></p>
✓	
	Practice Test 1
	Practice Test 2

USATestPrep Ga Milestone Review – D						
30 pts (5 pts each)	<p>Using the USATestPrep, you are to complete activities, games, and practices to improve your section scores. You need to take a 20 question Domain-Specific Exam and demonstrate mastery with a <b>90%</b> or higher.</p> <p style="text-align: center;"><b>Due: 3/15, 3/22, 3/29, 4/12, 4/19, 4/26</b></p>					
	<b>Structure of Cells</b>	<b>Interdependence of Organisms</b>	<b>Genetics</b>	<b>Genetic Information in Cells</b>	<b>Evolution</b>	<b>Organisms</b>



<b>Science Practices – I</b>	
35 pts (5 pts each)	<i>Using the PlayPosit, review the science practices. You must view the video in its entirety, complete all questions embedded in video, and the additional worksheet. <b>Huebsch Code: Isffa527</b> <b>Jones Code: h64b6b</b></i>
✓	<b>Topics</b>
	SP 1: Models & Representation
	SP 2: Using Mathematics
	SP 3: Scientific Questioning
	SP 4: Data Collection Strategies
	SP 5: Analysis & Evaluation of Evidence
	SP 6: Scientific Explanations & Theories
	SP 7: Scales, Concepts, & Representations

<b>Albert.io Lab Review - J</b>	
20 pts	<i>Complete the albert.io Lab Review assignment on Albert.io</i>
✓	
	Big Idea 1 (46 questions)
	Big Idea 2 (34 questions)
	Big Idea 3 (27 questions)
	Big Idea 4 (45 questions)

<b>Albert.io Practice Exam - K</b>	
10 pts (10 pts each)	<i>Using Albert.io, complete the AP Biology Review Notebook – Practice Exam *Note: 1 practice test is <u>required</u>, and 2 practice tests are student choice*</i>
✓	
	Practice Test #1
	Practice Test #2
	Practice Test #3

<b>Numeric Response</b>	
20 pts	<i>Complete the numeric response section found in itsLearning <u>Review Notebook</u> folder as pdfs for you. You are required to answer the question and <b>SHOW</b> work. After completion, check/correct your answers using another color pen/marker with the key located on the link or in Mrs. Jones' classroom. <b>STUDENT CHOICE ASSIGNMENT</b></i>
✓	

### Barron's (4<sup>th</sup> Edition) Section Quizzes

48 pts (3 pts each)	<p>You <b>must</b> complete the section quizzes from Barron's – complete multiple choice, numeric response, and lab questions (free response is at your discretion and is <u>not required</u>). You are only required to answer the question and write an explanation for the answer. After completion, check/correct your answers with another color pen/marker. Each section quiz should be on its <u>own page</u> with the <u>section title</u>.</p> <p style="text-align: center;">STUDENT CHOICE ASSIGNMENT</p>		
✓	<b>Reading Pages</b>	<b>Section</b>	<b>Question Start Page</b>
	9 – 25	Biochemistry	25
	33 – 49	The Cell	50
	57 – 65	Cell Respiration	66
	73 – 82	Photosynthesis	83
	89 – 96	Cell Division	97
	105 – 120	Heredity	121
	129 – 148	The Molecular Basis of Inheritance	149
	159 – 171	Classification	172
	177 – 194	Evolution	195
	203 – 218	Plants	219
	225 – 252	Human Physiology	253
	267 – 275	The Human Immune System	276
	281 – 290	Animal Reproduction & Development	291
	299 – 316	Ecology	317
	325 – 330	Animal Behavior	330
	335 – 357	Investigations	357

### Mastering Biology

30 pts	<p>Students select from list of Mastering Biology activities, tutorial, animations, etc. under assignments "AP Biology Exam Review Project". Each item has a deemed point value. Complete the activities and questions you need to review. Grade will be based on student grade on item multiplied by the point value [Example: 90% on 1.2 pt item: <math>0.9 * 1.2 = 1.08\text{pts}</math>]. You may complete up to 30 points</p> <p style="text-align: center;">STUDENT CHOICE ASSIGNMENT</p>		
✓			

### Barron's Additional Practice Exams

10 pts (5 pts each)	<p>Using itsLearning, complete the Barron's Additional Practice Test.</p> <p style="text-align: center;">STUDENT CHOICE ASSIGNMENT</p>		
✓			
	Practice Test 1		
	Practice Test 2		

## Inquiry Diagrams

10 pts (2 pts each)	<p><i>You may complete 5 inquiry diagrams from the inquiry diagram list. Diagrams should fill a 8.5 x 11 piece of non-lined paper (preferably copy paper). Diagrams must be hand-drawn, in color, and labeled. You are to explain the experiment, discuss results/conclusion, diagram (drawing diagram or graphing data), and answering the "what if" question.</i></p> <p style="text-align: center;"><b>STUDENT CHOICE ASSIGNMENT</b></p>	
✓	<b>Diagram:</b>	
	1.21 Does Camouflage affect predation rates on two populations of mice? (17)	22.12 Does sexual selection in cichlids result in reproductive isolation? (443)
	5.4 Do membrane proteins move? (102)	22.18 How does hybridization lead to speciation in sunflowers? (448)
	8.9 Which wavelength of light are most effective in driving photosynthesis? (167)	23.21 What causes the loss of spines in lake stickleback fish? (468)
	9.9 At which end do kinetochore microtubules shorten during anaphase? (189)	24.14 Can prokaryotes evolve rapidly in response to environmental change? (483)
	9.14 Do molecular signals in the cytoplasm regulate the cell cycle? (192)	25.21 What is the root of the eukaryotic tree? (513)
	11.3 When F <sub>1</sub> hybrid pea plants self- or cross-pollinate, which traits appear in the F <sub>2</sub> generation? (216)	27.15 Did the arthropod body plan result from new <i>Hox</i> genes? (554)
	11.8 Do the alleles for one character segregate into gametes dependently or independently of the alleles for a different character? (220)	31.2 What part of a grass coleoptile senses light, and how is the signal transmitted? (641)
	12.4 In a cross between a wild-type female fruit fly and a mutant white-eyed male, what color eyes will the F <sub>1</sub> and F <sub>2</sub> offspring have? (239)	31.3 Does asymmetric distribution of a growth-promoting chemical cause a coleoptile to bend? (641)
	12.9 How does linkage between two genes affect inheritance of characters? (243)	31.4 What causes polar movement of auxin from shoot tip to base? (643)
	13.3 Can a genetic trait be transferred between different bacterial strains? (254)	31.13 How does the order of red and far-red illumination affect seed germination? (650)
	13.5 Is protein or DNA the genetic materials of phage T2? (255)	39.20 Does a digger wasp use landmarks to find her nest? (830)
	13.13 Does DNA replication follow the conservative, semiconservative, or dispersive model? (261)	40.13 Does feeding sea urchins limit seaweed distribution? (853)
	16.10 Could Bicoid be a morphogen that determines the anterior end of a fruit fly? (329)	41.3 Can a species niche be influenced by interspecific competition? (869)
	16.11 Can the nucleus from a differentiated animal cell direct development of an organism? (330)	41.15 Is <i>Pisaster ochraceus</i> a keystone predator? (876)
	16.16 Can a fully differentiated human cell be "deprogrammed" to become a stem cell? (333)	41.23 How does species richness relate to area? (882)
	19.14 Can a change in a population's food being sold as whale meat? (398)	42.7 Which nutrient limits phytoplankton production along the coast of Long Island? (891)
	20.6 What is the species identity of food being sold as whale meat?	42.12 How does temperature affect litter decomposition in an ecosystem? (895)
	21.18 Do females select mates based on traits indicative of "good genes"? (430)	43.12 What caused the drastic decline of the Illinois greater prairie chicken population? (913)
	22.7 Can divergence of allopatric populations lead to reproductive isolation? (440)	

### Solve-It Exercises

8 pts (2 pts each)	<i>Complete the solve-it assignment found on Mastering Biology. You are required to complete the online assignment questions and activities. Required to complete 4; student choice to complete other 5.</i>
✓	
	Ch. 5: Which biofuel has the most potential to reduce our dependence on fossil fuels?
	Ch. 11: Is it possible to treat bacterial infections without antibiotics?
	Ch. 17: Which insulin mutation may result in disease?
	Ch. 23: Do cockroaches evolve in response to living with humans?
	Ch. 26: Are you getting the fish you paid for?
	Ch. 38: Why are honeybees vanishing?
	Ch. 45: Does sex determination have only two possible outcomes?
	Ch. 48: What is causing episodes of muscle weakness in a patient?
	Ch. 54: How can severity of forest fires be reduced?