

# Preview the 2021 Digital AP Exams

Course that will be Digital-at Home this year:

|              |                       |               |
|--------------|-----------------------|---------------|
| Art History  | Environmental Science | Seminar       |
| Biology      | European History      | US Government |
| Comp Gov     | Human Geography       | US History    |
| English Lang | Macro & Micro         | World History |
| English Lit  | Psychology            |               |

 CollegeBoard

**AP**<sup>®</sup>





## 2021 Digital AP® Exams

# Before Exam Day: Download the App

In early April, AP students will be able to download our new digital testing app to their desktop or laptop computers (PC or Mac).

If you're on a school-managed Chromebook, someone from your school will install the app for you.

2021  
AP  
Exams

No personal  
chromebooks,  
no ipads or  
phones

## Download the Digital Testing App

Download requires Windows 8 or later and 200 MB of available space. Once you've installed the app, login with your username and password.

[Download for Windows](#)

Already installed? [Open the app](#)

### Installation Instructions

Click the download button above, then follow these instructions to install the app on your device.

- 1 Find Your Download**  
In your Downloads folder, double-click on "cb-digital testing.exe."
- 2 Open the App**  
Double-click the Acorn icon to open the app.
- 3 Confirm**  
If you see a message asking if you're sure you want to open the app, click "Open."
- 4 Log In**

# Before Exam Day: Log In


You'll need your College Board username and password to use the app.

If you check **Remember Me**, you won't need to login each time you return.

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## 2021 Digital AP Exams

 Sign in to your account

Username

Password

Remember Me  
Don't check this box if this is a shared computer.

I'm an Education Professional

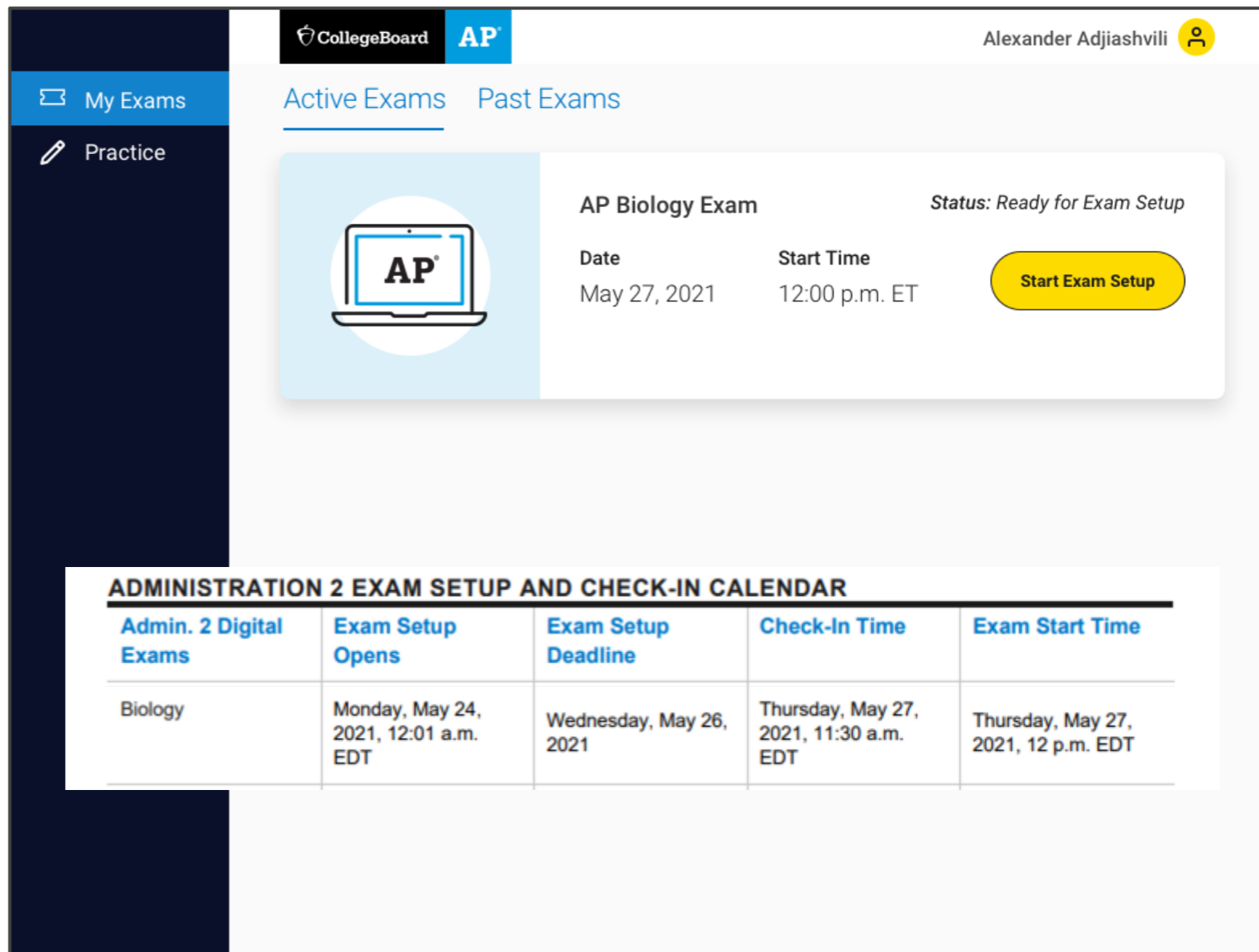
**Submit**

Forgot [Username](#) or [Password](#)?

# 3 Days Before Test Day: Complete Exam Setup

3 days before your test, you'll run through exam setup in the app where you'll confirm some information about yourself and your device.

You must **complete exam setup for every digital AP Exam you take**, and it's critical that you complete this step before test day.



The screenshot shows the CollegeBoard AP app interface. At the top, the CollegeBoard logo and 'AP' are visible. The user's name, Alexander Adjashvili, is in the top right. A navigation menu on the left includes 'My Exams' and 'Practice'. The main content area shows 'Active Exams' and 'Past Exams' tabs. Under 'Active Exams', there is a card for the 'AP Biology Exam' with a status of 'Ready for Exam Setup'. The card displays the exam date as 'May 27, 2021' and the start time as '12:00 p.m. ET'. A yellow 'Start Exam Setup' button is present. Below this, a table titled 'ADMINISTRATION 2 EXAM SETUP AND CHECK-IN CALENDAR' provides a detailed schedule for the Biology exam.

| Admin. 2 Digital Exams | Exam Setup Opens                     | Exam Setup Deadline     | Check-In Time                          | Exam Start Time                     |
|------------------------|--------------------------------------|-------------------------|--|-------------------------------------|
| Biology                | Monday, May 24, 2021, 12:01 a.m. EDT | Wednesday, May 26, 2021 | Thursday, May 27, 2021, 11:30 a.m. EDT | Thursday, May 27, 2021, 12 p.m. EDT |

# 30 Minutes Before Your Exam: Check In

30 minutes before your exam's start time, you'll launch the app and check in for your exam.

You'll review some privacy policies, type a security statement, and get ready to test.

It's important that you check in on time. **You won't be able to check in once your exam starts.**

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AP  
Exams

[Help](#) Testing Begins In: 03:02 [Exit](#)

## Digital Test Security Statement

Type the test security statement—exactly as it appears in the box on the left—into the box on the right.

**Test security statement**

I will not give or receive help during this exam. I will not share or post references to this exam during the testing window. If anyone helps me or if I help them, we will both be investigated.

My answers will be entirely my own. Plagiarism software and analyses will be used to review my responses.

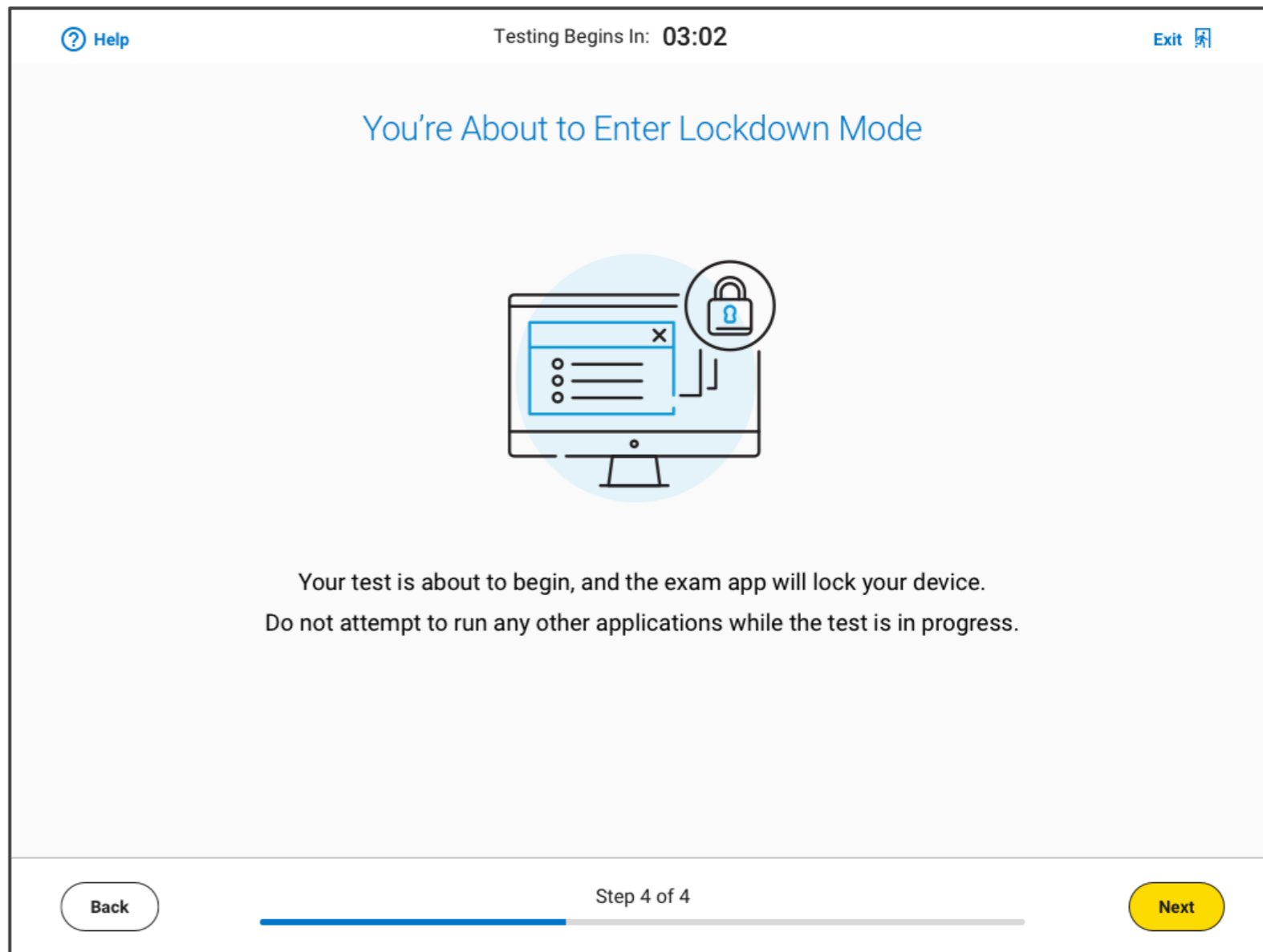
If I attempt to cheat, my score will be canceled, and college admissions offices can be notified. I will also be disqualified from taking future AP or SAT exams in high school and CLEP exams in college.

Type the test security statement here.

[Back](#) Step 2 of 4 [Next](#)

# Lockdown Mode

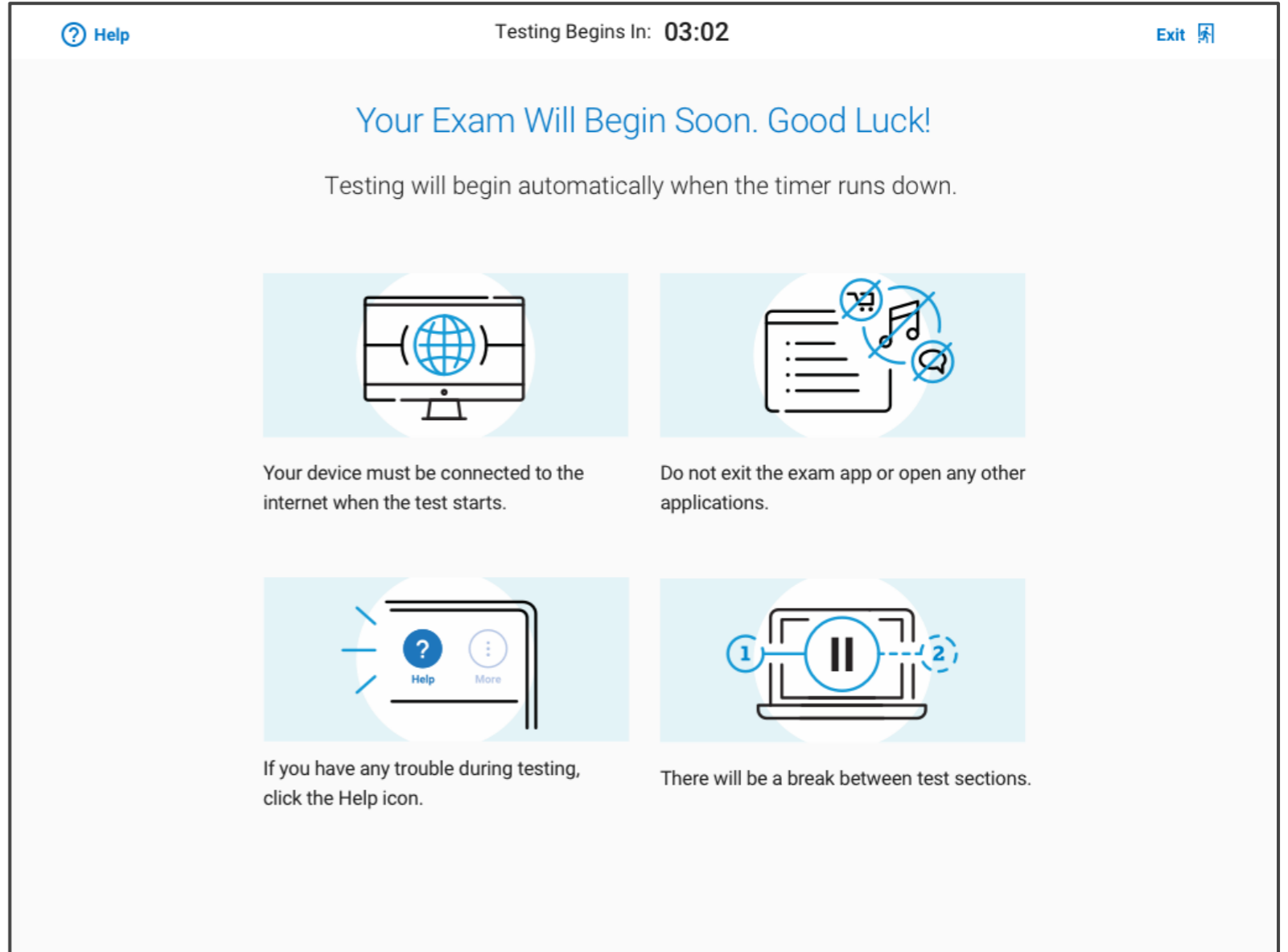
Right before the exam begins, **the app will lock your device**. You'll need to close all other applications before testing begins.



The screenshot shows the exam app interface during a lockdown mode warning. At the top left, there is a "Help" icon and text. At the top right, it says "Testing Begins In: 03:02" and an "Exit" button with a lock icon. The main heading reads "You're About to Enter Lockdown Mode". Below this is an illustration of a computer monitor with a lock icon and a close button (X) on the screen. The text below the illustration states: "Your test is about to begin, and the exam app will lock your device. Do not attempt to run any other applications while the test is in progress." At the bottom, there is a "Back" button, a progress bar labeled "Step 4 of 4", and a "Next" button.

# Digital Exams Start Automatically

If you finish check-in before your exam start time, you'll see a timer counting down. When time expires, **the exam will start automatically.**



The screenshot shows the digital exam interface. At the top left is a "Help" icon with a question mark. At the top center is a timer that says "Testing Begins In: 03:02". At the top right is an "Exit" icon with a door symbol. The main heading is "Your Exam Will Begin Soon. Good Luck!". Below this is the text "Testing will begin automatically when the timer runs down." There are four instructional cards arranged in a 2x2 grid. Each card has an icon and a text description.

Help

Testing Begins In: 03:02

Exit

Your Exam Will Begin Soon. Good Luck!

Testing will begin automatically when the timer runs down.

Your device must be connected to the internet when the test starts.

Do not exit the exam app or open any other applications.

If you have any trouble during testing, click the Help icon.

There will be a break between test sections.



# Testing Toolbar: Directions

At the top left of every testing screen, you can access general exam directions as well as section-specific directions.

The screenshot shows the top of the AP U.S. History testing interface. At the top left, it says "AP U.S. History" and "Directions ^". In the top right, there is a timer showing "1:40:00" with a "Hide" link below it. To the right of the timer are three icons: "Annotate" (pencil), "Help" (question mark), and "More" (three dots). Below the toolbar, the screen is split into two columns. The left column is titled "Exam Directions" and contains text about the exam's duration and structure, a note about source materials, and a warning to pace oneself. The right column is titled "Section Directions" and details "Section 2: 1 Hour, 40 Minutes", listing the types of questions and providing time advice. A "Continue" button is at the bottom right of the content area. At the very bottom of the screen, there are "Back" and "Next" navigation buttons.

AP U.S. History

1:40:00

Directions ^

Annotate Help More

## Exam Directions

The AP United States History exam is 3 hours and 15 minutes long. Section 1A lasts 55 minutes and has 55 multiple-choice questions. Section 1B lasts 40 minutes and has 3 short answer questions. Section 2 lasts 1 hour and 40 minutes, and has 1 document-based question (DBQ) and 2 short answer questions.

Source materials may have been edited for the purpose of this exam.

**Please note that you are responsible for pacing yourself. The clock will turn red when 5 minutes remain, but the proctor or app will not give you any other time updates.**

**Do not spend too much time on any one question, but remember that you cannot go back to a question once you've submitted it.**

## Section Directions

### Section 2: 1 Hour, 40 Minutes

1 Document-Based Question (DBQ) and 2 Short-Answer Questions (SAQ)

**Please note: All questions in this section are required.**

You are advised to spend:

- approximately 15 minutes reading the question and planning your answer to Question 1, the document-based question (DBQ),
- approximately 45 minutes writing your answer to the DBQ.
- approximately 40 minutes answering the two short-answer questions.

The DBQ requires your response in essay form. You may use scratch paper to organize your answers and for prep work, but no credit will be given for work on scratch paper, you must enter your answers in this app.

Continue

Back Next

# Testing Toolbar: Timer

During the exam, a **timer will count down the time remaining for each section.**

You can hide the timer, except during the last 5 minutes of a section.

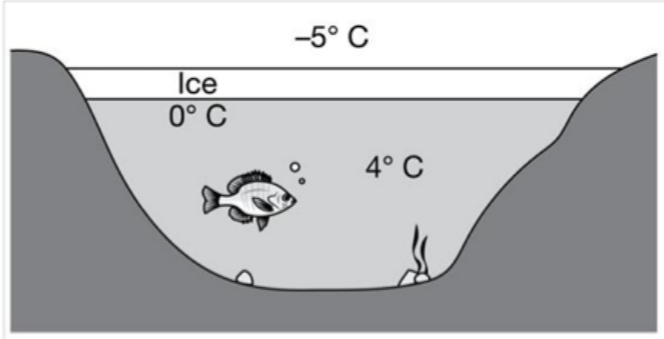
Once time expires on the last section of the exam, your answers will be submitted automatically.

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AP Biology 4:59

Directions ▾ Annotate Reference Help More

Questions 47 - 50 refer to the following diagram.



As shown in the diagram, when environmental temperatures drop below freezing, a layer of ice typically forms on the surface of bodies of freshwater such as lakes and rivers.

47

Which of the following best describes how the structure of ice benefits the organisms that live in the water below?

- (A) The water molecules in ice are closer together than those in liquid water, so the ice prevents the passage of air to the water, maintaining a constant gas mixture in the water
- (B) The water molecules in ice are closer together than those in liquid water, so the ice forms a barrier that protects the organisms in the water from the freezing air temperatures
- (C) The water molecules in ice are farther apart than those in liquid water, so the ice floats.
- (D) The water molecules in ice are farther apart than those in liquid water, so the ice floats, preventing




5 Minutes Remaining



If you're not done when time expires, the work you've completed will be submitted automatically. ✕

Alexander Adjashvili Question 47 of 60 Next

# Testing Toolbar: Annotate

You can highlight any part of a passage or question that you might want to return to or leave yourself a note to organize your thoughts.

Multiple Choice 22:15  
[Directions](#) Hide   

In a transformation experiment, a sample of *E. coli* bacteria was mixed with a plasmid containing the gene for resistance to the antibiotic ampicillin (*amp<sup>r</sup>*). Plasmid was not added to a second sample. Samples were plated on nutrient agar plates, some of which were supplemented with the antibiotic ampicillin. The results of *E. coli* growth are summarized below. The shaded area represents extensive growth of bacteria; dots represent individual colonies of bacteria.

**Source Documents For Review:**

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|

**Source 1**

Content for document 1. Students investigated the effect of light on the carbon cycle in aquatic ecosystems by performing the controlled experiment summarized below. The students placed equal amounts of water (pH 7.0) from a large aquarium in glass beakers. The students transferred aquatic plants from the aquarium to several of the beakers,

4

Plates that have only ampicillin-resistant bacteria growing include which of the following?

(A) I only

(B) III only

(C) IV only

(D) I and II

N/A Question 4 of 18 [Next](#)

# Testing Toolbar: Reference Sheet

In most STEM courses, you'll have access to a reference sheet with commonly used formulas.

**If your AP Exam requires or allows calculators, you must bring your own.**

Are there any Digital exams in window 2 that need/allow a calculator?

Biology  
Environmental Science  
Econ

2021  
AP  
Exams

AP Physics 2 1:20:00  
Directions ▾ Pause Hide Annotate Reference Help More

AP Physics 2 Reference CLOSE X

Constants and Conversion Factors

|  |   |   |
|--|---|---|
| <b>Proton mass</b><br>$m_p = 1.67 \times 10^{-27} \text{ kg}$  | <b>Electron mass</b><br>$m_e = 9.11 \times 10^{-31} \text{ kg}$   | <b>Universal gas constant</b><br>$R = 8.31 \text{ J}/(\text{mol} \cdot \text{K})$                                   |
| <b>Neutron mass</b><br>$m_n = 1.67 \times 10^{-27} \text{ kg}$   | <b>Avogadro's number</b><br>$= 6.02 \times 10^{23} \text{ mol}^{-1}$  | <b>Boltzmann's constant</b><br>$k_B = 1.38 \times 10^{-23} \text{ J}/\text{K}$                                      |
| <b>Electron charge magnitude</b><br>$e = 1.60 \times 10^{-19} \text{ C}$   | <b>Speed of light</b><br>$c = 3.00 \times 10^8 \text{ m}/\text{s}$  | <b>Acceleration due to gravity at Earth's surface</b><br>$g = 9.8 \text{ m}/\text{s}^2$                             |
| <b>1 electron volt</b><br>$1 \text{ eV} = 1.60 \times 10^{-19} \text{ J}$  | <b>Universal gravitational constant</b><br>$G = 6.67 \times 10^{-11} \text{ m}^3/\text{kg} \cdot \text{s}^2$    |   |
| <b>1 unified atomic mass unit</b><br>$1 \text{ u} = 1.66 \times 10^{-27} \text{ kg} = 931 \text{ MeV}/c^2$   | <b>Coulomb's law constant</b><br>$k = 1/4\pi\epsilon_0 = 9.0 \times 10^9 \text{ N} \cdot \text{m}^2/\text{C}^2$ | <b>1 atmosphere pressure</b><br>$1 \text{ atm} = 1.0 \times 10^5 \text{ N}/\text{m}^2 = 1.0 \times 10^5 \text{ Pa}$ |
| <b>Planck's constant</b><br>$h = 6.63 \times 10^{-34} \text{ J} \cdot \text{s} = 4.14 \times 10^{-15} \text{ eV} \cdot \text{s}$<br>$hc = 1.99 \times 10^{-25} \text{ J} \cdot \text{m} = 1.24 \times 10^3 \text{ eV} \cdot \text{nm}$ | <b>Vacuum permeability</b><br>$\mu_0 = 4\pi \times 10^{-7} \text{ (T} \cdot \text{m)}/\text{A}$                 |   |

# Testing Toolbar: Zoom and Expand

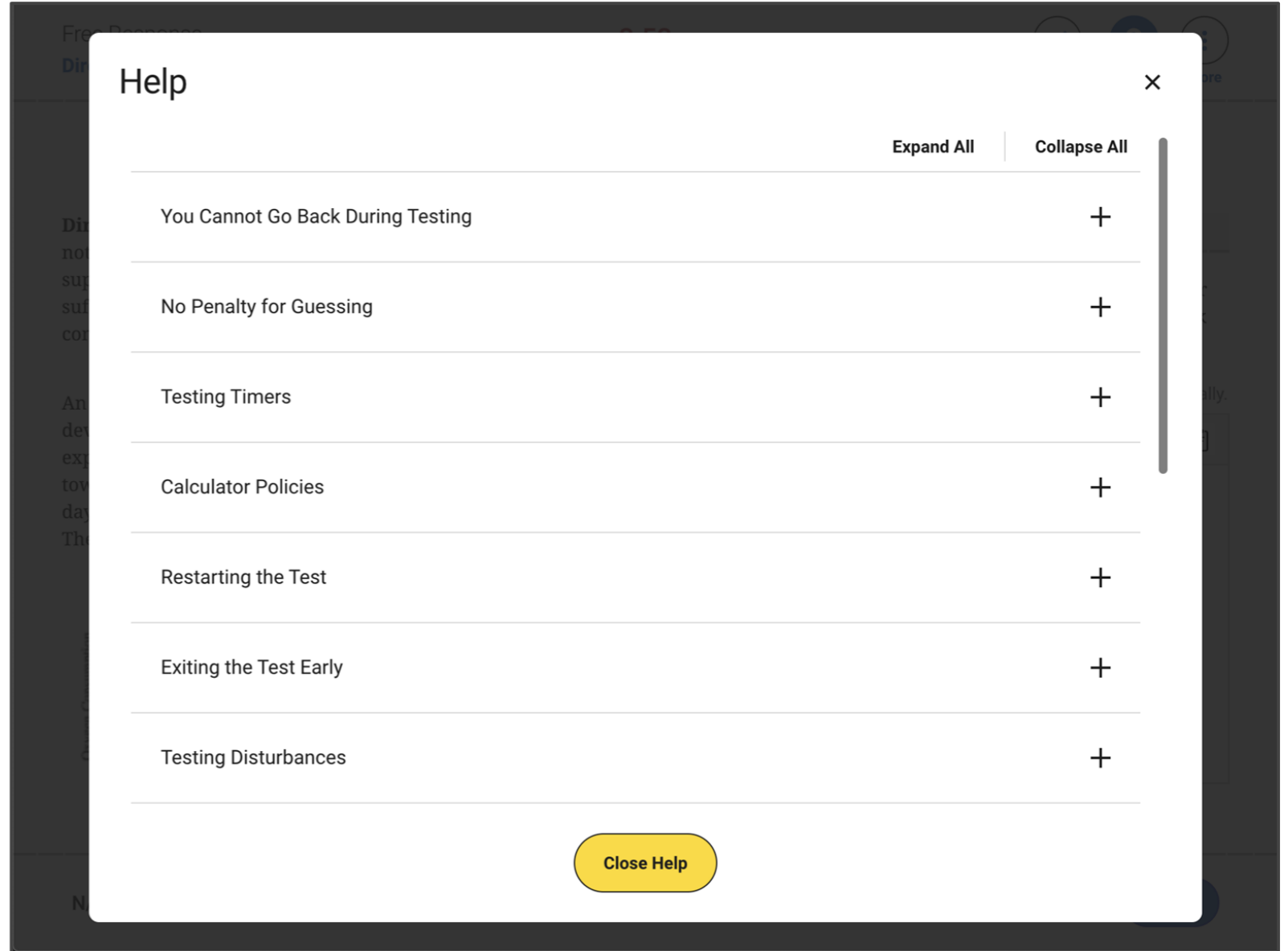
You can **Zoom In** and **Zoom Out** to get a closer look at any part of a question. You can find the Zoom In/Out buttons under **More**.

You can also make one side of the screen bigger than the other with the **Expand Left** or **Expand Right** controls.

The screenshot displays the AP Biology testing interface. At the top, it shows 'AP Biology', 'Directions', a timer at '1:40:00', and icons for 'Annotate', 'Reference', 'Help', and 'More'. The 'More' menu is open, showing 'Zoom In' and 'Zoom Out' options. Below the toolbar, the question text reads: 'Questions 1a - 1e refer to the following diagram.' The diagram illustrates a synapse between a 'Presynaptic Neuron' and a 'Postsynaptic Neuron'. A 'Neurotransmitter' is shown moving from the presynaptic neuron into the synaptic cleft. The 'Synapse' is labeled between the two neurons. The question text continues: '1a The researcher proposes two models to prevent the effect of the neurotoxin. In model A, AChE is added to the synapse. In model B, AChE is added to the cytoplasm of the postsynaptic cell. Predict the effectiveness of EACH proposed model. Provide reasoning to support your predictions.' Below the text is a rich text editor with a toolbar containing icons for bold, italic, underline, superscript, subscript, undo, redo, link, unlink, and copy. The footer shows 'Alexander Adjashvili', a question navigation bar with '1a 1b 1c 1d 1e | 2a-2e | 3a-3g', and a 'Next' button.

# Testing Toolbar: Help

On every screen, you have access to a **Help** page where you can view frequently asked questions.



The screenshot shows a 'Help' modal window with a close button (X) in the top right corner. Below the title, there are two buttons: 'Expand All' and 'Collapse All'. The main content area lists seven frequently asked questions, each with a plus sign (+) to its right, indicating they can be expanded. At the bottom of the modal is a yellow 'Close Help' button.

|                                   | Expand All | Collapse All |
|-----------------------------------|------------|--------------|
| You Cannot Go Back During Testing |            | +            |
| No Penalty for Guessing           |            | +            |
| Testing Timers                    |            | +            |
| Calculator Policies               |            | +            |
| Restarting the Test               |            | +            |
| Exiting the Test Early            |            | +            |
| Testing Disturbances              |            | +            |

# Multiple-Choice Questions

Most AP Exams are a combination of multiple-choice and free-response questions.

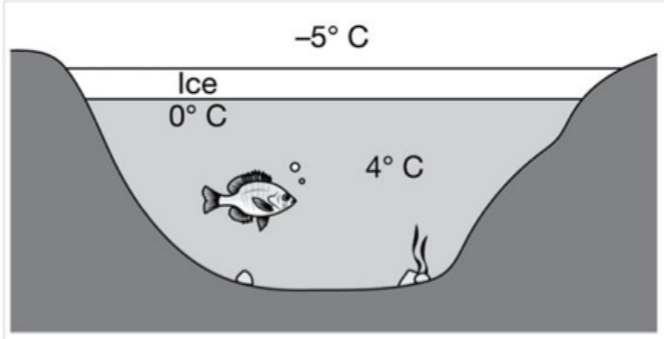
Some multiple-choice questions are centered on the screen while others have stimulus content on the left, and questions and answers on the right.

2021  
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AP Biology 1:20:00 Annotate Reference Help More

Directions Hide

Questions 47 - 50 refer to the following diagram.



The diagram shows a cross-section of a lake. At the top, a layer of ice is labeled with a temperature of  $-5^{\circ}\text{C}$ . Below the ice, the water surface is labeled with a temperature of  $0^{\circ}\text{C}$ . In the middle of the water column, a fish is shown, and the temperature is labeled as  $4^{\circ}\text{C}$ . The bottom of the lake is shaded grey, representing the lake bed.

As shown in the diagram, when environmental temperatures drop below freezing, a layer of ice typically forms on the surface of bodies of freshwater such as lakes and rivers.

47

Which of the following best describes how the structure of ice benefits the organisms that live in the water below?

- (A) The water molecules in ice are closer together than those in liquid water, so the ice prevents the passage of air to the water, maintaining a constant gas mixture in the water
- (B) The water molecules in ice are closer together than those in liquid water, so the ice forms a barrier that protects the organisms in the water from the freezing air temperatures
- (C) The water molecules in ice are farther apart than those in liquid water, so the ice floats, maintaining the warmer, denser water at the lake bottom
- (D) The water molecules in ice are farther apart than those in liquid water, so the ice floats, preventing

Alexander Adjashvili Question 47 of 60 Next

# Multiple-Choice Questions: No Going Back

On multiple-choice questions, **you won't be able to move back and forth between questions** or return to questions you've already answered.

Remember: there's no penalty for guessing.

AP Biology 1:20:00

Directions ▾ Hide

Annotate Reference Help More

Questions 47 - 50 refer to the following diagram.

47

Which of the following best describes how the structure of ice benefits the organisms that live in the water below?

Ice  
0° C  
-5° C

As shown in the diagram, when temperatures drop below freezing, a layer of ice typically forms on the surface of bodies of freshwater such as lakes and rivers.

Reminder: You Can't Go Back

Once you move on from any multiple-choice question, you cannot return to it. You will not see this message again.

Next Question Stay on This Question

Next

Alexander Adjashvili Question 47 of 60



# Breaks Between Sections

Between sections, you'll have a break. A timer will let you know when the next section starts.

Just like at the beginning of the exam, **when the time expires, the exam will resume automatically.**

Testing Resumes In: 04:59



The Exam Will Continue Soon

When the timer above reaches zero, your exam will resume automatically.

# Free-Response Questions

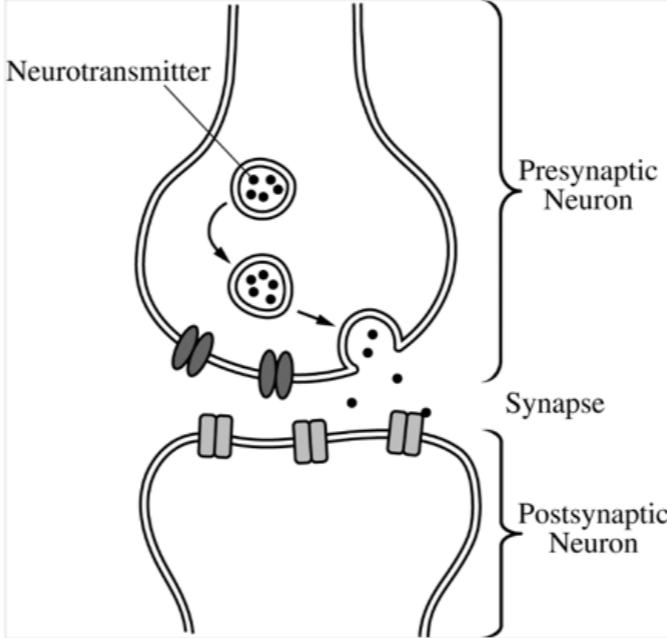
On free-response questions, you'll type directly into the app, and all your work will be saved automatically. **Any special characters you need are available in the text editor.**

There are no files to upload, and you won't submit any handwritten work.

2021  
AP  
Exams

AP Biology 1:40:00  
[Directions](#) Hide Annotate Reference Help More

Questions 1a - 1e refer to the following diagram.



The diagram illustrates a chemical synapse. At the top, a presynaptic neuron is shown with several vesicles containing neurotransmitters. One vesicle is shown releasing its contents into the synaptic cleft. The synaptic cleft is the space between the presynaptic neuron and the postsynaptic neuron. The postsynaptic neuron is shown with receptors on its membrane that are binding to the neurotransmitters. Labels include 'Neurotransmitter', 'Presynaptic Neuron', 'Synapse', and 'Postsynaptic Neuron'.

1a

The researcher proposes two models, A and B, for using acetylcholinesterase (AChE), an enzyme that degrades acetylcholine, to prevent the effect of the neurotoxin. In model A, AChE is added to the synapse. In model B, AChE is added to the cytoplasm of the postsynaptic cell. Predict the effectiveness of EACH proposed model. Provide reasoning to support your predictions.

Your response will be saved automatically.

**B** / U x<sup>2</sup> x<sub>2</sub> ↺ ↻ Ω ✂ 📄 📋

|   |   |   |   |   |
|---|---|---|---|---|
| ° | ∞ | ≤ | ≥ | ≠ |
| ≈ | π | Δ | Σ | X |
| α | β | ε | θ | κ |
| λ | μ | ν | ρ | σ |
| τ | ω | ̄ | ̂ | ̇ |
| → | ↔ |   |   |   |

As shown in the diagram, when environmental

Alexander Adjashvili 1a 1b 1c 1d 1e | 2a-2e | 3a-3g Next

# Free-Response Questions: No Going Back

Once you move on from any free-response question, you cannot go back to it.

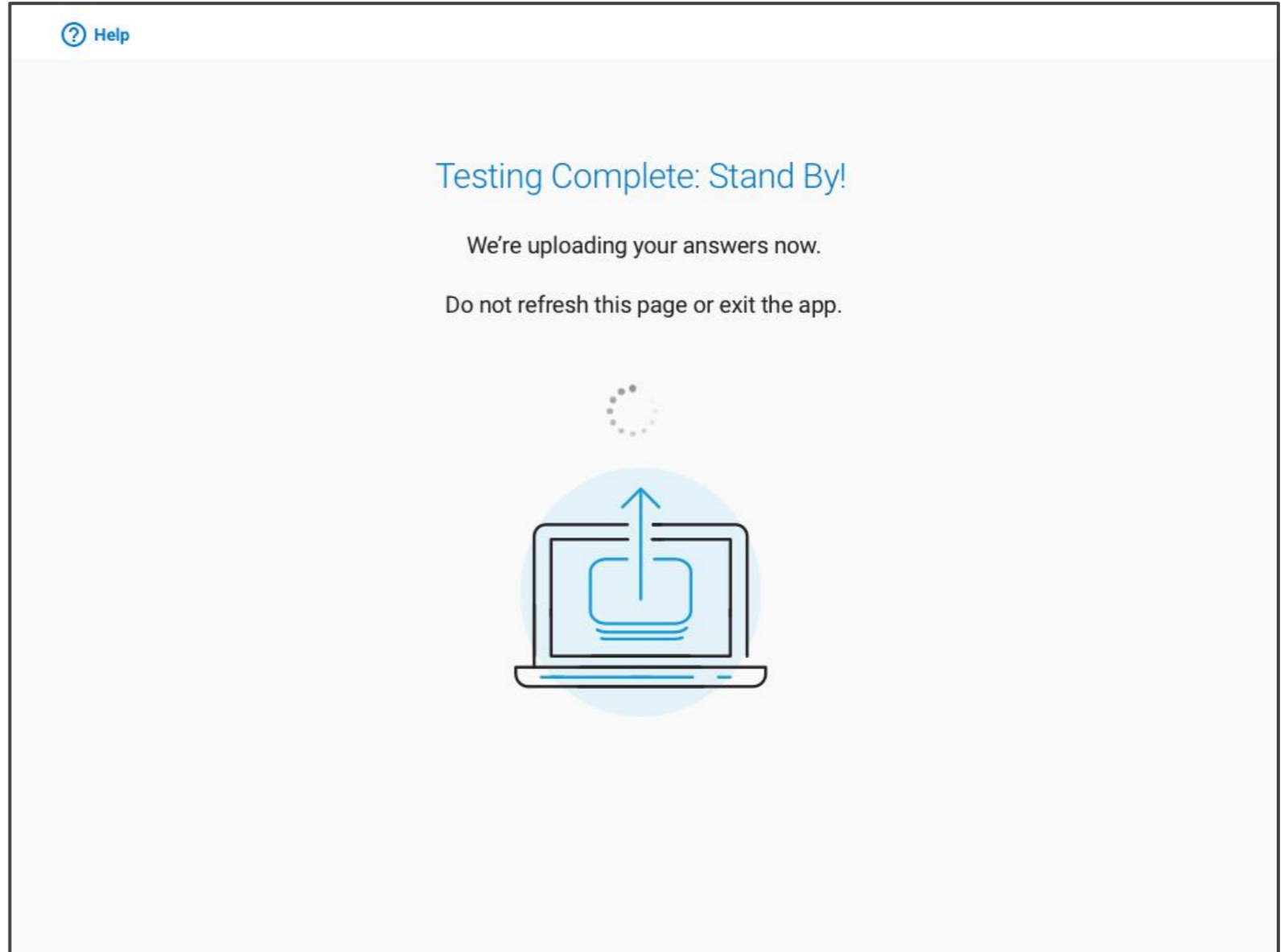
But on free-response questions that have more than 1 part, you can go back and forth between parts until you're done working on the entire question.

The screenshot shows the AP Biology exam interface. At the top, it says "AP Biology" and "Directions" with a dropdown arrow. A timer shows "1:40:00". There are icons for "Annotate", "Reference", "Help", and "More". The question text reads: "Questions 1a - 1e refer to the following diagram." Below this is a diagram of a synapse. The diagram shows a presynaptic neuron with vesicles containing neurotransmitters, a synapse, and a postsynaptic neuron. Labels include "Neurotransmitter", "Synapse", and "Postsynaptic Neuron". The question part "1a" asks: "The researcher proposes two models, A and B, for using acetylcholinesterase (AChE), an enzyme that degrades acetylcholine, to prevent the effect of the neurotoxin. In the synapse. In model B, AChE is located on the postsynaptic cell. Predict the effect of the neurotoxin on the postsynaptic cell. Provide reasoning to support your prediction. Your response will be saved automatically." A white pop-up box with the title "Reminder: You Can't Go Back" is overlaid on the question. The text in the pop-up says: "Once you move on from any free-response question, you cannot return to it." At the bottom of the pop-up are two buttons: "Next question" and "Stay on this question". At the bottom of the exam interface, there is a navigation bar with "Alexander Adjashvili" on the left, "1a 1b 1c 1d 1e | 2a-2e | 3a-3g" in the center, and a "Next" button on the right.

# After Your Exam: Answer Submission

When testing time expires, the app will end the exam and your completed answers will be submitted automatically.

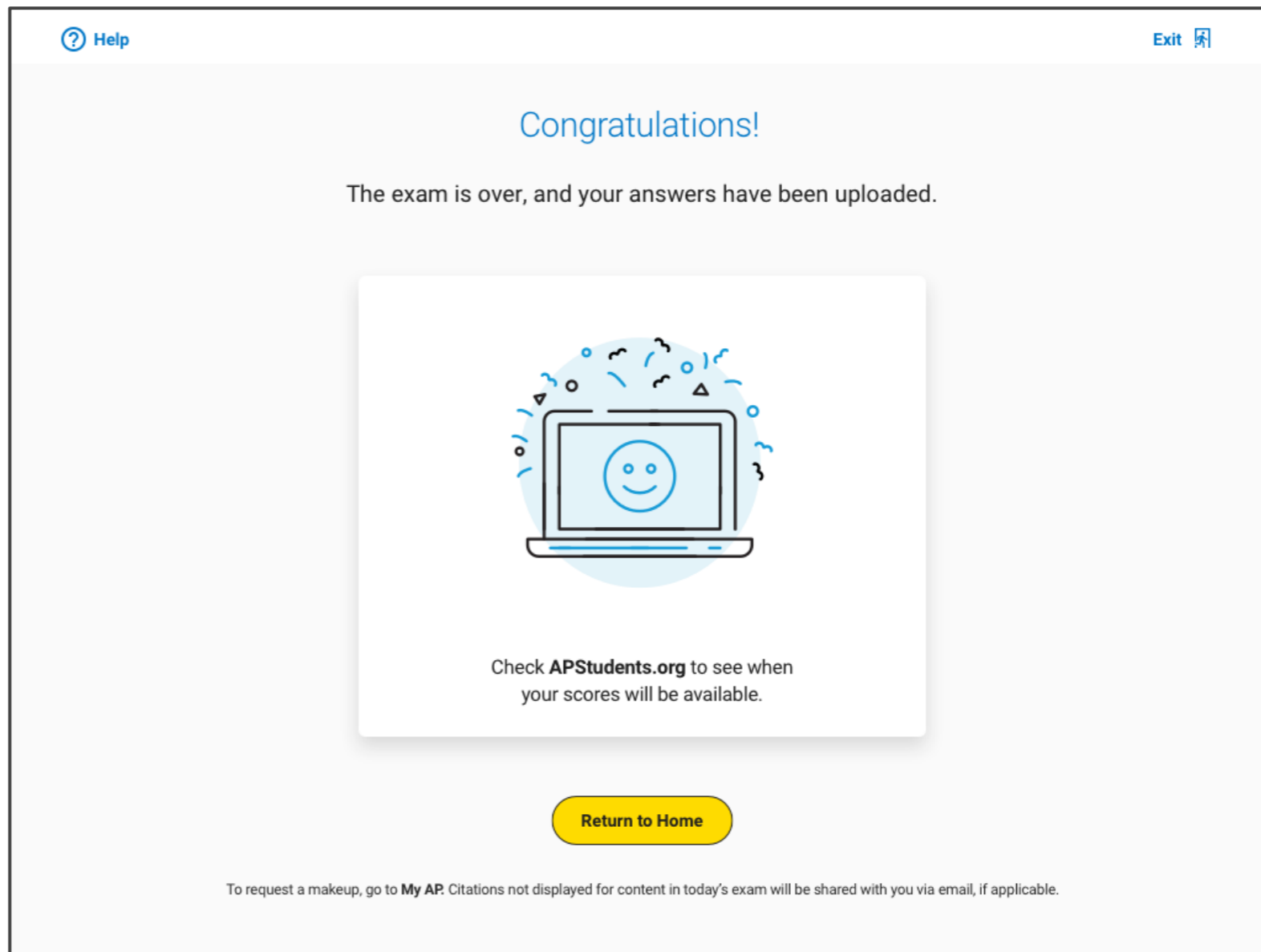
**Do not exit the app until you see a “congratulations” message, confirming that we received your answers.**



# After Your Exam: Answer Submission Complete

When you see this screen, you're all set!

Check [AP Students](#) to see when your results will be posted.

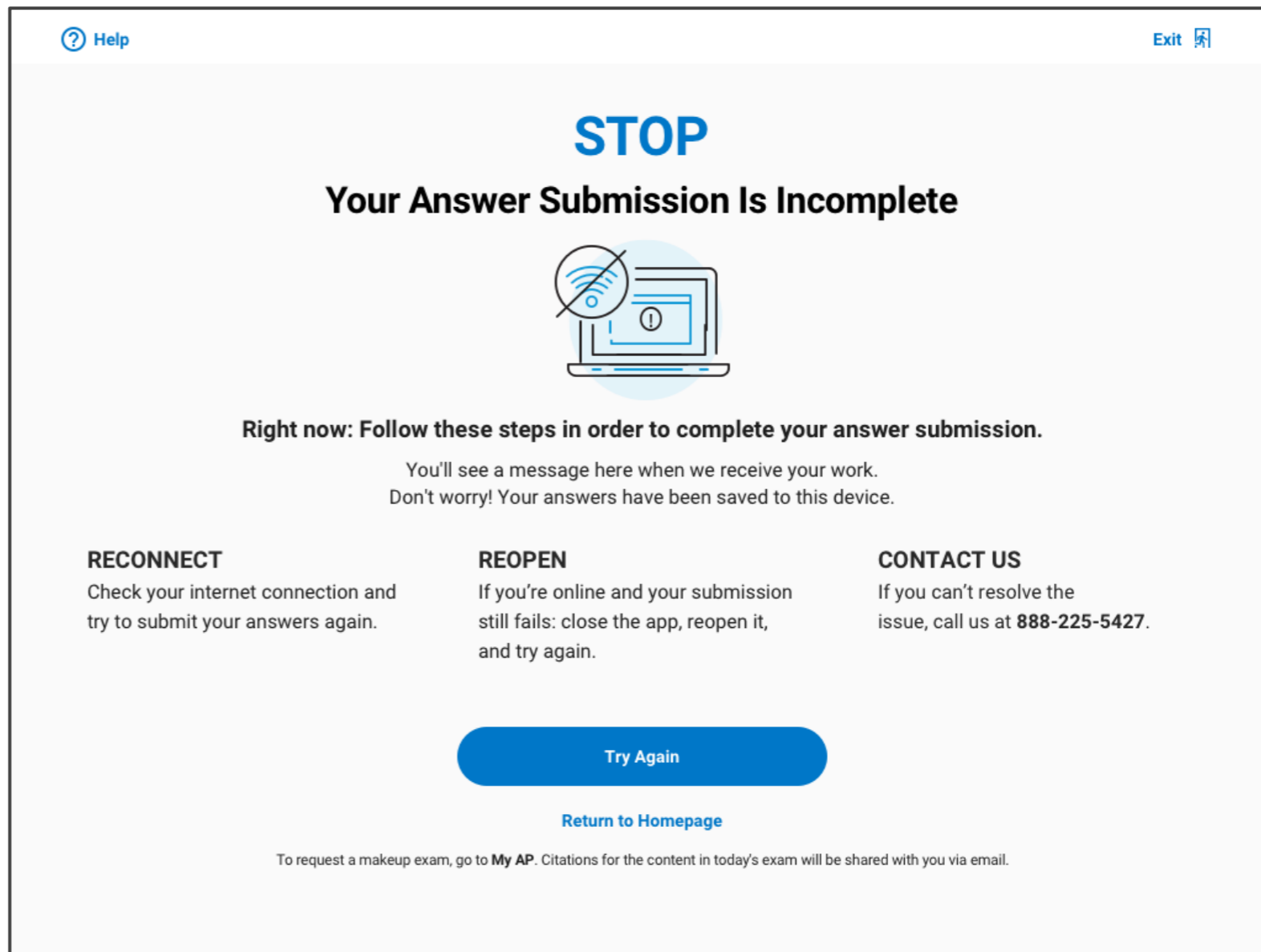


The screenshot shows a web interface with a light blue background. At the top left is a "Help" link with a question mark icon, and at the top right is an "Exit" link with a window icon. The main content area features the word "Congratulations!" in a large, blue, sans-serif font. Below this, a message states: "The exam is over, and your answers have been uploaded." In the center is a white square containing a blue illustration of a laptop with a smiling face on its screen, surrounded by celebratory confetti. Below the illustration, the text reads: "Check [APStudents.org](#) to see when your scores will be available." At the bottom center is a yellow button with the text "Return to Home". At the very bottom of the page, a small line of text says: "To request a makeup, go to [My AP](#). Citations not displayed for content in today's exam will be shared with you via email, if applicable."

# After Your Exam: Answer Submission Incomplete

If your internet connection drops at the end of the test, we'll show you some immediate steps that you'll take to complete your answer submission.

If you run into an issue you can't recover from, you can go to [My AP](#) to request a makeup.



The screenshot shows a user interface for an exam. At the top left is a 'Help' icon and text, and at the top right is an 'Exit' icon. The main content area features a large blue 'STOP' heading, followed by the text 'Your Answer Submission Is Incomplete'. Below this is an icon of a laptop with a Wi-Fi signal icon crossed out and a warning sign on the screen. The text reads: 'Right now: Follow these steps in order to complete your answer submission. You'll see a message here when we receive your work. Don't worry! Your answers have been saved to this device.' There are three columns of instructions: 'RECONNECT' (Check your internet connection and try to submit your answers again.), 'REOPEN' (If you're online and your submission still fails: close the app, reopen it, and try again.), and 'CONTACT US' (If you can't resolve the issue, call us at 888-225-5427.). At the bottom, there is a large blue 'Try Again' button and a link for 'Return to Homepage'. A footer note states: 'To request a makeup exam, go to My AP. Citations for the content in today's exam will be shared with you via email.'

# Next Steps

In early April, AP students will be able to download the app and start practicing.

You'll need your College Board username and password to use the exam app, so make sure you have that info handy.

Good luck on your 2021 digital AP Exam!

**2021**  
AP  
Exams

The screenshot displays the CollegeBoard AP Practice interface. At the top, the CollegeBoard logo is on the left, and the user's name, Alexander Adjashvili, is on the right. Below the logo, there are two tabs: "Active Practice" (selected) and "Past Practice". A dark blue sidebar on the left contains "My Exams" and "Practice" (selected). The main content area features two cards for "AP Biology Digital Practice". Each card includes an icon of a laptop with "AP" on the screen, the title "AP Biology Exam App Demo" or "AP Biology Digital Practice", the status "Status: Ready for Exam Setup", and a yellow "Start Exam Setup" button.

# Reminders

