

# 2021 AP Exams Technical Requirements

## Operating Systems

### OS VERSIONS AND MINIMUM SPECS

Operating System Versions	Minimum Specifications
<p><b>Windows</b></p> <ul style="list-style-type: none"> <li>▪ 8.0 (Professional and Enterprise)</li> <li>▪ 8.1 (Professional and Enterprise)</li> <li>▪ 10 (Professional, Educational, and Enterprise)</li> </ul>	<p><b>Windows</b></p> <ul style="list-style-type: none"> <li>▪ 1 GHZ Processor</li> <li>▪ 2 GB RAM (64-bit)</li> <li>▪ 200 MB Free Hard Drive Space</li> </ul> <p><i>Note: Windows 7 and Windows 10 in S Mode is <u>not</u> supported.</i></p>
<p><b>Mac OS X/macOS</b></p> <ul style="list-style-type: none"> <li>▪ 10.11-10.15; 11.0+</li> </ul>	<p><b>Mac</b></p> <ul style="list-style-type: none"> <li>▪ 1 GHZ Processor</li> <li>▪ 2 GB RAM (64-bit)</li> <li>▪ 200 MB Free Hard Drive Space</li> </ul>
<p><b>Chrome OS v83+</b></p> <ul style="list-style-type: none"> <li>▪ The digital testing application runs in kiosk mode on school-managed Chromebooks.</li> <li>▪ To launch these devices in kiosk mode, they must be configured to be managed through the school's Google Admin Console and be part of an Enterprise or Education license.</li> </ul>	<p><b>School-Managed Chromebooks</b></p> <ul style="list-style-type: none"> <li>▪ 100 MB of Storage</li> </ul>

## Hardware Considerations

Student devices should be checked to ensure they meet the minimum hardware requirements and align with the following guidelines.

### COMPUTER REQUIREMENTS

<b>Monitors and Screen Displays</b>	<ul style="list-style-type: none"> <li>▪ Screen dimensions must be 10 inches or larger</li> <li>▪ Minimum screen resolution should be 1024 x 768</li> </ul>
<b>External Mice and Keyboards</b>	External keyboards and mice are allowed. It is recommended they be wired peripherals and be in good working order. Bluetooth mice and keyboards are allowed but should be fully charged to last the duration of the exam.
<b>Battery and Power</b>	Students' computers must be fully charged to last through the full-length exams and be able to be plugged in during the exam, if needed.

## BANDWIDTH REQUIREMENTS

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Number of Students Testing Concurrently	Average Bandwidth Required For Digital Testing
1	1–3 Mbps

### Best Practices

- Students must have all software applications, internet browsers, camera and microphone/audio programs closed before testing.
- Students must close any active screen capture programs, live web conferencing tools (e.g., Skype), media players (e.g., iTunes) and printing capability. They must disable tools such as application switching and smart assistants (e.g., Siri and Google Assistant). The only application that should be open for check-in and during the exam is the digital testing application.
- Student devices should be configured to prevent these common application types from launching during testing:
  - ♦ Antivirus software performing scheduled or automatic scans
  - ♦ Screen savers and sleep or hibernate mode
  - ♦ Automatic updates to software or applications
  - ♦ Email, calendar, text, or instant messaging alerts
- To minimize the risk of bandwidth disruptions, test environments should limit unnecessary internet traffic or high-volume content streaming on other devices on the same network during student test activity.