

HARDWARE/SOFTWARE - PC										
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1.0 GHz processor	1.3 GHz processor									
512 MB of memory	1 GB (required for audio recording)									
200 MB disk space available	1 GB									
3	Operating System	Windows XP SP3, Vista SP1, Windows 7								
4	Additional Software	Adobe® AIR® Java Runtime Environment™ (JRE 6, Update 24)								
HARDWARE/SOFTWARE - LINUX										
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3	Operating System	Linux Fedora Release 11 (Red Hat), OpenSUSE 11.1, or Ubuntu 9.04								
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HARDWARE/SOFTWARE - MAC										
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1.8 GHz Intel processor										
512 MB of memory	1 GB (required for audio recording)									
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3	Operating System	OS 10.4.8, OS 10.5.4, or OS 10.6 Intel								
4	Additional Software	Flash® Player 9 Java Runtime Environment™ JRE 6, Update 24								
5	Web Browser	Safari® 2.0, or Firefox® 2.0 <b>Note:</b> Safari required for test delivery on student workstations.								
HARDWARE/SOFTWARE – Common to all Machines and Operating Systems										
2	Display Monitor	Set to minimum of 800 x 600 pixels Minimum color display: 256 colors (8-bit)								
6	Internet Access	High-speed internet connection (see below)								
7	Peripherals	Keyboard (should not have shortcut hot keys enabled) Mouse is required for manipulatives Sound card, headphones for Screen Reader accommodation Sound card, headphones or speakers, microphone for audio recording capability (if enabled)								
NETWORK CONNECTIVITY										
8	Bandwidth	Minimum 1.5 Mbps upload and download – T1, high-speed cable or high-speed DSL required for every 50-100 concurrent users								
9	Firewalls	Port 80 and 443 must be open								
10	Proxy Servers	Dynamic pages are not to be cached Allow both HTTP and HTTPS traffic for *.ctb.com Prioritize and exclude oas.ctb.com from filters— <i>highly recommended</i>								
11	Web Browser	Configured to be SSL capable (SSL 2.0 and SSL 3.0).								

SECURITY AND OTHERS		
12	Instant Messaging	Instant messaging and e-mail notification disabled
13	Screensavers	Screen savers and power savers disabled
14	System Scans	Anti-virus system scans and/or auto-updates set to run when testing will not be taking place
15	System Restore	System restore utilities, e.g. Deep Freeze, disabled during setup and testing, so that new data remains in place after system reboot
15	Remote Desktop	Remote desktop access disabled
17	Web Content Filtering	Exclude *.ctb.com from web filtering
18	Others	Other automatic software that needs to be disabled

**Note:**

*The software listed above has been tested for correct operation with the online system. Later versions of these applications may work but they have not been tested and are not supported by CTB.*

*Software applications that would interfere with secure, locked-down browser application must be disabled/ turned off (not uninstalled); they must be set to run outside the testing window for security.*