



# Google & Chrome Accessibility

Built-in Features & Extensions

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## Presenter

- RESNA Certified ATP
- M.S. in Rehabilitation Science and Technology
- Taught undergraduate and graduate level assistive technology courses at East Carolina University
- Developed an online graduate certificate program in AT for East Carolina University



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## Key Learning Objectives

- Discuss Google doc accessibility features
- Learn about Google Chromebook accessibility
- Discuss assistive technology extensions for Chrome



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## Google

- Web & Customer Initiatives
  - FCC Video Programming Accessibility Advisory Committee (VPAAC)
  - FCC Consumer Advisory Committee (CAC)
  - Web Content Accessibility Guidelines (WCAG)
  - Google Impact Challenge: Disabilities
  - User Experience
  - Accessibility Trusted Tester program



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Google

- **Research & Education**
  - Faculty Research Awards Program
  - Education Initiatives



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# Built-in Google Accessibility

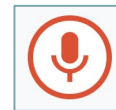
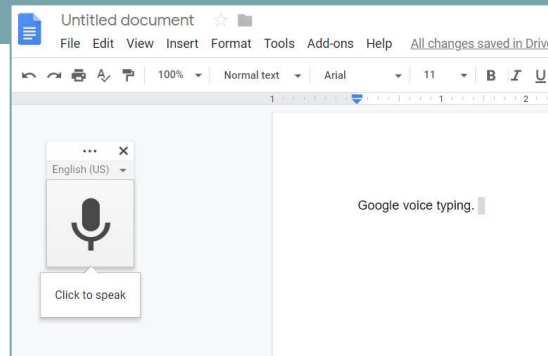


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## Voice Typing

- Tools – Voice Typing
  - Click to Speak
  - Phrases to enter punctuation
  - Voice commands to edit and format text
- No voice training required

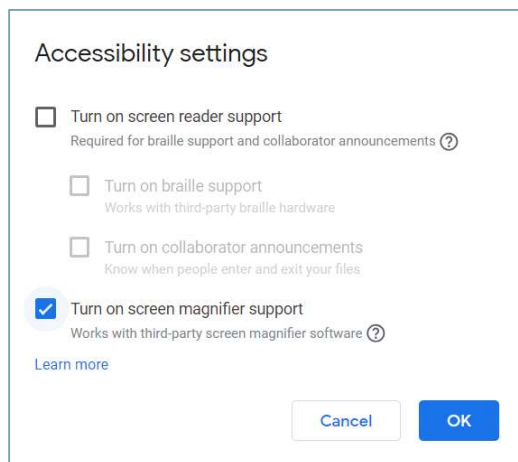


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## Screen Magnifier

- Google docs, slides, etc. work with 3<sup>rd</sup> party magnifiers
- Turn on support:
  - Tools – Accessibility Settings
  - Turn on screen magnifier support
- Available on Mac and Chrome OS

 Accessibility settings...



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## Screen Reader

- Turn on support for screen readers

Tools > Accessibility Settings > Turn on screen reader support



### Accessibility settings

- ☒ Turn on screen reader support  
Required for braille support and collaborator announcements ?
- ☐ Turn on braille support  
Works with third-party braille hardware
- ☐ Turn on collaborator announcements  
Know when people enter and exit your files
- ☐ Turn on screen magnifier support  
Works with third-party screen magnifier software ?

[Learn more](#)

Cancel

OK



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## Braille

- Turn on the braille display to read and edit:

- Documents
- Spreadsheets
- Presentations
- Drawings

Tools > Accessibility Settings > Turn on screen reader support > Turn on braille support

### Accessibility settings

- ☒ Turn on screen reader support  
Required for braille support and collaborator announcements ?
- ☒ Turn on braille support  
Works with third-party braille hardware
- ☐ Turn on collaborator announcements  
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Works with third-party screen magnifier software ?

[Learn more](#)

Cancel

OK

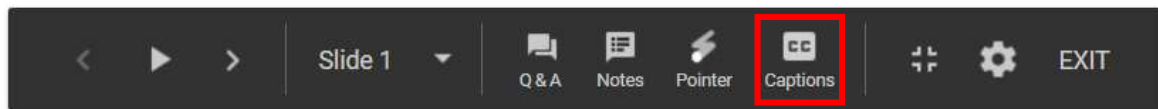


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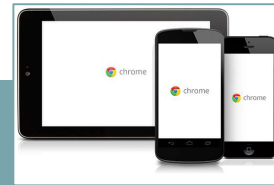
## Slides with Captions

- Set up live captioning for Google Slides
  - Start the presentation
  - Click on 'Captions' (CC)
- Captions are not stored
- Captioning does not include punctuation



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## Chrome Accessibility



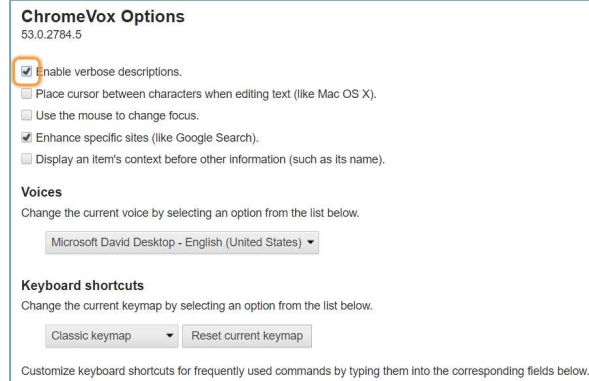
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# ChromeVox



- Free Chrome screen reader
- Pre-installed on Chromebooks
- Extension available for use with Google Chrome
- Does not work with other screen readers

<http://www.chromevox.com/tutorial/>

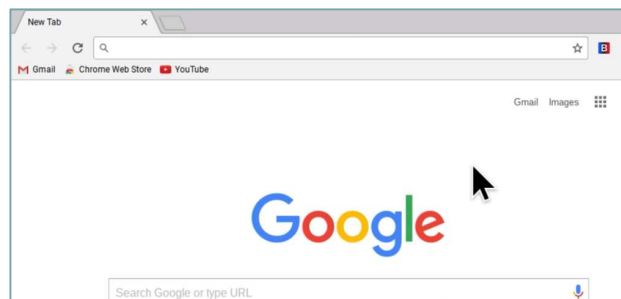


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# Zoom

- Zoom
  - Ctrl +
  - Ctrl -
  - Ctrl 0
- Browser content and mouse cursor zoom in/out
- Tabs/icons on shelf remain the same size




Enlarge everything: Ctrl – Shift – +

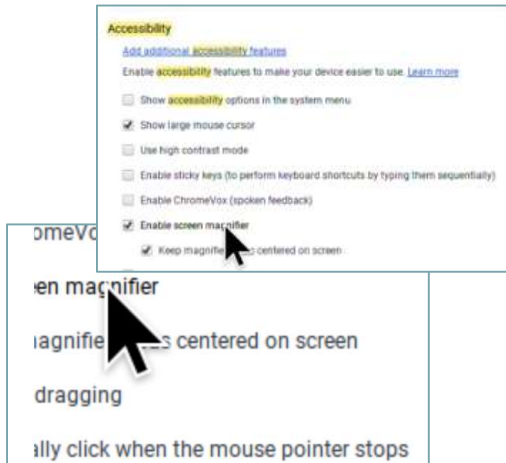


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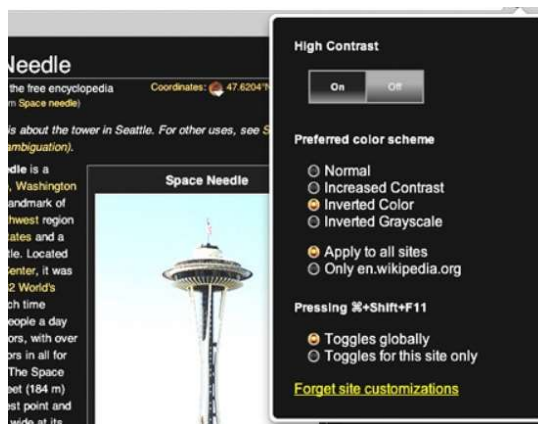
## Screen Magnifier - Chromebook

- Built-in magnifier
  - Alt – Shift – S
  - OR Status Tray Menu
    - Lower-right corner
    - Settings 
  - Navigate to Accessibility – Enable screen magnifier
- Entire screen becomes magnified



## High Contrast

- High Contrast Options:
  - Normal
  - Increased Contrast
  - Inverted Color
  - Inverted Grayscale
- Shortcut: Ctrl – Shift – F11





## Keyboard Shortcuts

- Google Chrome Shortcut Keys
  - Keyboard access to commonly used features
  - Increases accessibility
    - Eliminates mouse usage
    - Or pointing devices

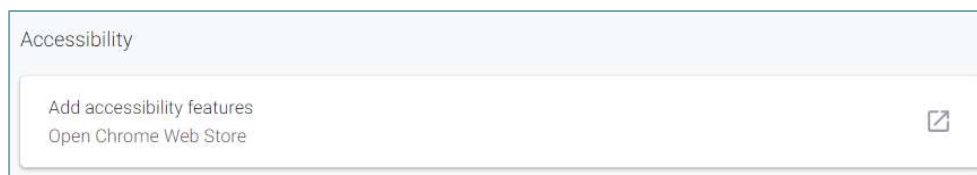
Shortcut Keys	Description
Alt+Home	Open your homepage.
Alt+Tab	Toggle between browser windows.
Alt+Left Arrow	Back a page.
Alt+Right Arrow	Forward a page.
F11	Display the current website in full-screen mode. Pressing F11 again will exit this mode.
Esc	Stop page or download from loading.
Ctrl+(- or +)	Zoom in or out of a page, "-" will zoom out and "+" will zoom in.
Ctrl+1-8	Pressing Ctrl and any number 1 through 8 will move to the corresponding tab in your tab bar.
Ctrl+9	Switch to last tab.
Ctrl+0	Reset browser zoom to default.

## Accessibility Extensions



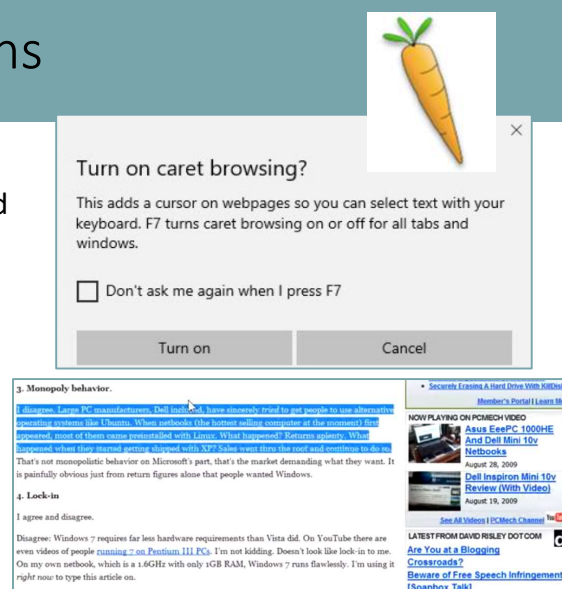
# Accessibility Extensions

- Settings – Advanced – Accessibility – Add Accessibility Features



# Accessibility Extensions

- Caret Browsing
  - Use the keyboard to move around and select text on a webpage
  - Great for low vision or physical disabilities webpage access
    - Use the keyboard to navigate and select text
    - Alternative to mouse
    - Use a screen reader to read text



## Accessibility Extensions

- Long Descriptions in Context Menu
  - Puts items in the context menu
  - Extension will indicate with a colored border to images, if selected
  - Right-click on anything with a “longdesc” or “aria-describedby” attribute



## Other Extensions

- Reading
- Writing
- Spelling
- Annotation Tools
- Graphic Organizers
- Screen Readers & Magnifiers
- Math Supports



## Resources

<https://www.google.com/accessibility/>

<https://support.google.com/docs/answer/6282736?co=GENIE.Platform%3DDesktop&hl=en>

<https://www.google.com/accessibility/products-features/>

<http://www.chromevox.com/tutorial/> ; <https://www.chromevox.com/>

<https://support.google.com/chrome/answer/157179?hl=en>

<https://www.google.com/accessibility/initiatives-research/>



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## Questions



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## Any Questions after Webinar

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