

Unlocking Access: Making Multimedia & Documents Accessible for All

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Goal

By the end of this session, you will understand the key accessibility guidelines and best practices to ensure all digital content is accessible to your learners.

Agenda

- Introduction
- Disabilities
- Section 508
- Images & Graphics
- Audio & Video
- Documents
- Technology Integration
- Universal Design for Learning
- Accessibility Check Walk-Through

About 56.7 million people — 19 percent of the population — had a disability in 2010, according to a broad definition of disability, with more than half of them reporting the disability was severe.

—(U.S. Census Bureau, 2012)

Definition & Types of Disabilities

*A **disability** is any condition of the body or mind (impairment) that makes it more difficult for the person with the condition to do certain activities (activity limitation) and interact with the world around them (participation restrictions).*

– Centers for Disease Control & Prevention

Types

- Auditory
- Cognitive
- Neurological
- Physical
- Speech
- Visual

Situations that Benefit from Accessibility

- Mobile phone use or small screens
- Temporary disability (lost glasses, broken arm)
- Situational limitations (bright sunlight)
- Low literacy learners
- Language learners
- Being in a cubicle

— World Wide Web Consortium (2018)

What is section 508?

Federal departments & agencies when developing, maintaining, or using electronic & information technology, must (unless it causes an undue burden) provide individuals with disabilities comparable access to those without disabilities. This includes federal employees with disabilities as well as members of the public who are seeking information & services.

— Section508.gov

1973

Vocational Rehabilitation Act

- To correct the problems of discrimination against people with disabilities
- Affirmative action to hire people with disabilities

Rehabilitation Act

Expanded training programs for those with disabilities.

1986

Section 508

- For electronic documents and information technology
- Was ineffective because of the lack of enforcement

1998

Section 508

- All Federal agencies must comply
- Private agencies do not unless they receive federal funds

2018

Section 508

Revised 508 Standards-federal agencies must make their electronic information and technology accessible

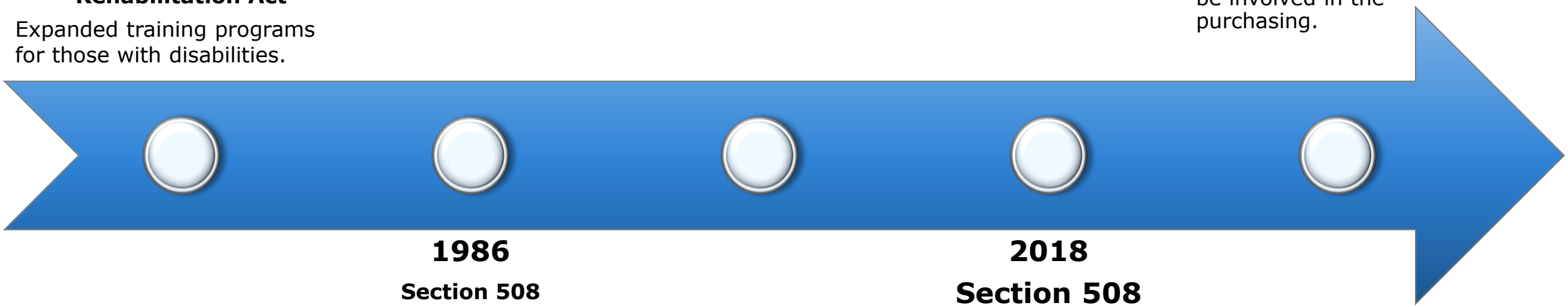
2024

Section 508

- Federal agencies must submit their Section 508 compliance reports.

Section 508 Refresh Act

- People with disabilities will test federal technology and be involved in the purchasing.



Images & Graphics



Use alternative text (alt text) on photos that convey meaning.

Example:

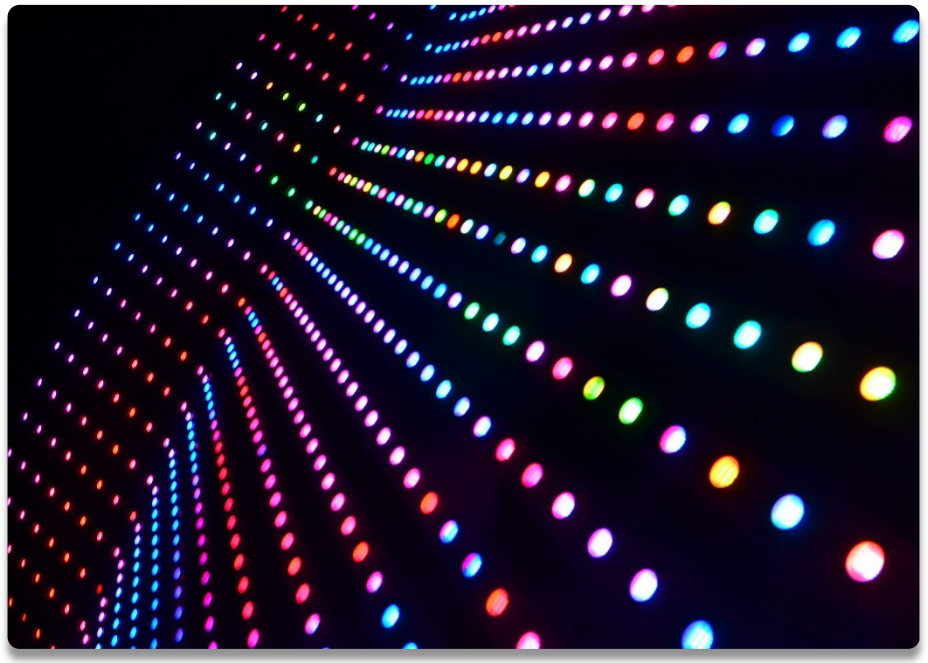
Don't: img8675309

Do: small dog with Santa in front of Christmas tree

Decorative Images

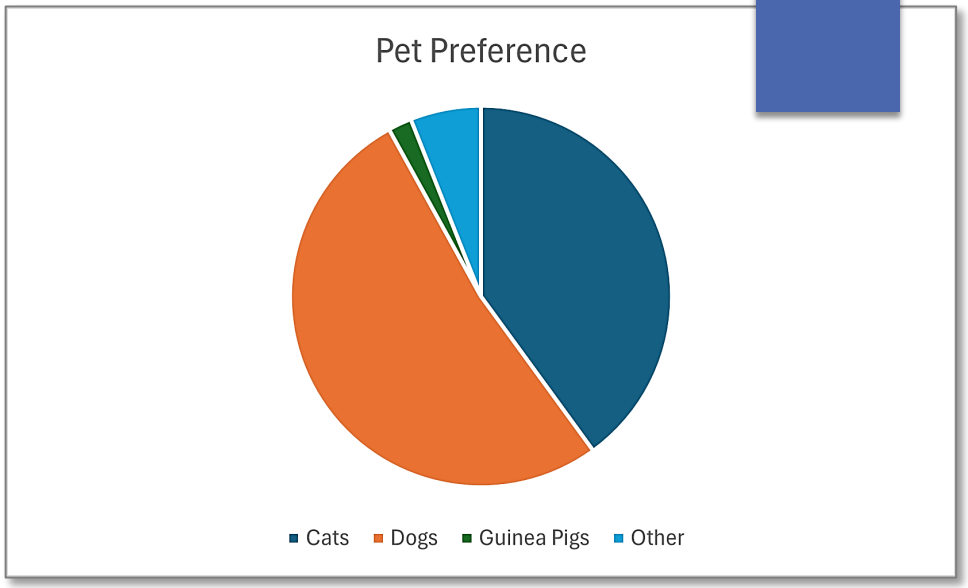
A decorative image:

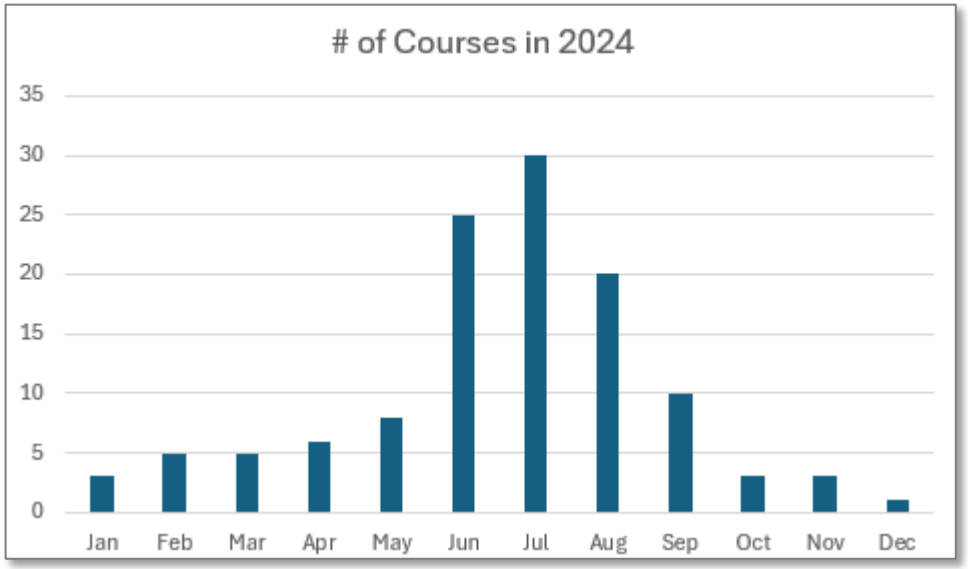
- Does not add any content to the page.
- The information may be provided in adjacent text.
- May only be included for aesthetic purposes.
- You can mark it as decorative in most programs and a screen reader will not detect it.



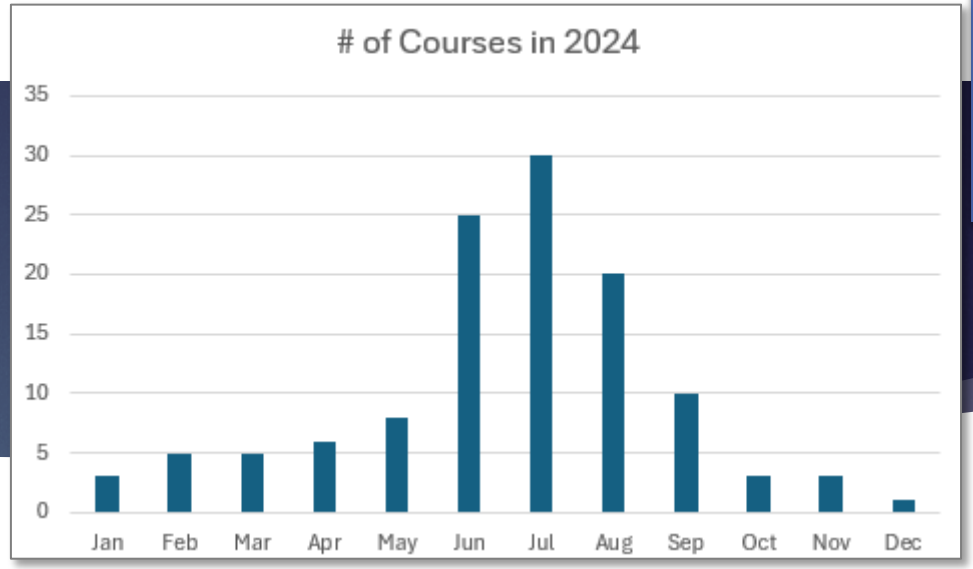
Complex Images

- Usually in the form of Charts or diagrams
- A two-part text alternative is required





Two-Part Text Alternative



Short Description

- Description of the image
- Location of the long description
- An overview

Example: Bar chart showing the number of classes for each month in 2024.

Long Description

- Textual representation of the essential information conveyed by the image.
- More detailed information

Example: This chart shows there were more classes offered in the summer than winter, fall, or spring. There was one class in December and there were 30 in July (Or you could list the number of classes for each month).

Audio & Video

Captions

- Synchronize the captions to the corresponding audio in the audio track
- Use appropriate spelling, grammar, and punctuation. Captions must have at least 99% accuracy to be readable.
- Identifying speakers, sound effects, and music

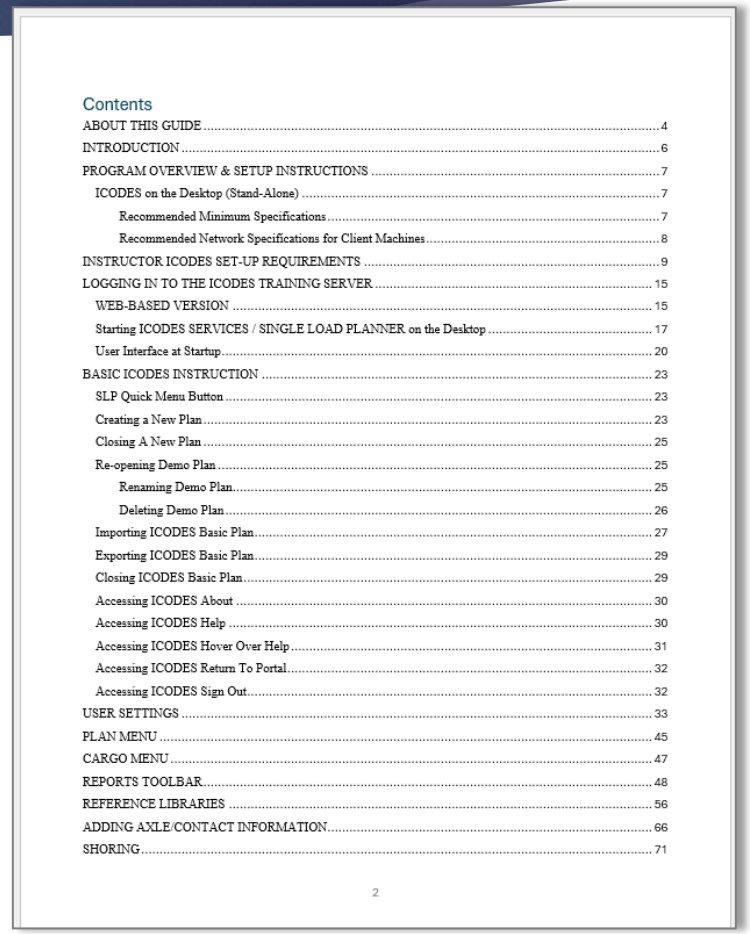
Transcripts

- For audio-only content, use the same guidelines as captions for determining which sounds to transcribe and what audio information must be included..
- Ensure that users can access the transcript in the same place as the original content.
- Provide the transcript in an accessible format, like a Section 508-conformant web page, a plain text file, or a conformant Microsoft Word document.

— Section508.gov

Documents

- Use Headings and a Table of Contents.
- Use alt text.
- Use meaningful hyperlinks.
- Use accessible fonts.
- Ensure color contrast between text and background.
- Use the Accessibility Checker for the program.



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Hyperlinks

TIPS	EXAMPLE
Avoid using the full hyperlink.	**Incorrect:** https://recycledpoms.org/ **Correct:** Tuffy and Max came from Recycled Pomeranians.
Include the type of document	GI Bill Request (PDF)
Avoid using “Click here.”	Click here.
Never use the same link for separate destinations.	Visit our products webpage to learn more about our products. Visit our contacts webpage to contact us.

Audio Examples

Example 1

Example 2

The Text

Tuffy and Max are Pomeranians and you can find out more about Pomeranians at the Wikipedia page on Pomeranians. They came from the rescue, Recycled Pomeranians.

What if I am Printing Documents?

Resources

Section 508.gov

Web Content Accessibility

W3org. Complex Image Tutorial

Accessibility Resources

Regulatory Guidance	
Resource	**Link**
Section508.gov	https://www.section508.gov/
Web Content Accessibility	https://www.w3.org/TR/WCAG21/
W3org. Complex Image Tutorial	https://www.w3.org/WAI/tutorials/images/complex/

Fonts

Font Size

- 12 pt. for Army Correspondence
- 14-28 pt. for PowerPoint

Accessible Fonts

- Tahoma
- Calibri
- Helvetica (Not available in PPT)
- Arial
- Verdana
- Times New Roman

Color

Good Color Contrast

Color Combination

Color Combination

Color Combination

Bad Color Contrast

Color Combination

Color Combination

Color Combination

Never use color in instructions

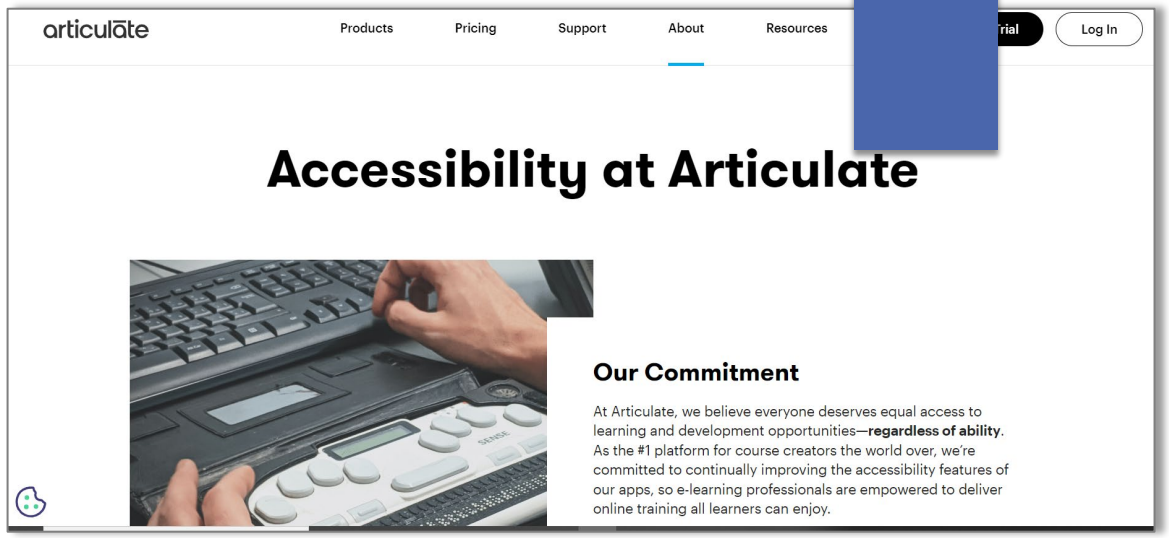
Click the green arrow to continue.

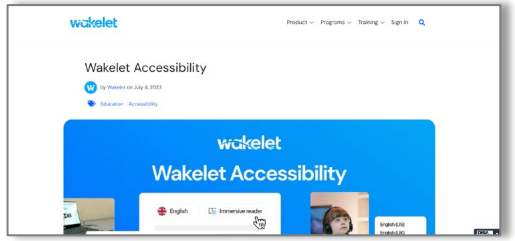


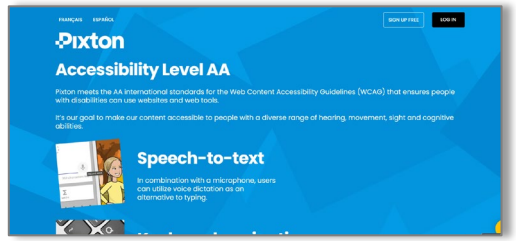
Next

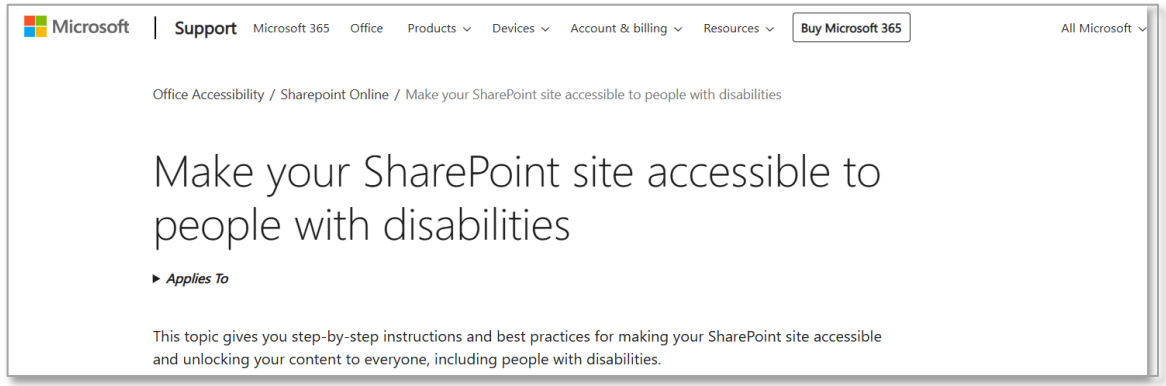
Technology Integration

- Many programs already have accessibility features and checkers and are constantly updating.
- Research the accessibility of the program.
- Contact the provider of the program.









Universal Design for Learning (UDL)

UDL is a framework to guide the design of learning environments that are accessible, inclusive, equitable, and challenging for every learner. Ultimately, the goal of UDL is to support learner agency, the capacity to actively participate in making choices in service of learning goal.

UDL aims to change the design of the environment rather than to situate the problem as a perceived deficit within the learner. When environments are intentionally designed to reduce barriers, every learner can engage in rigorous, meaningful learning.

—Center for Applied Special Technology (CAST)

Accessibility Checker

- Walk-through of an Accessibility check in PowerPoint
- Very similar in all Microsoft products
- Making PDFs accessible in Adobe Acrobat is more complicated.
- Once items are accessible in Microsoft, they will still need to be made accessible as a PDF. There are always warnings, but it is much easier to remediate.

Review

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References

- AR 25-50 Preparing & Managing Correspondence
- Centers for Disease Control & Prevention
- Section508.gov
- U.S. Census Bureau
- World Wide Web Consortium
- Center for Applied Special Technology (CAST)
- W3.org Tutorial Complex Images

Questions



Activity

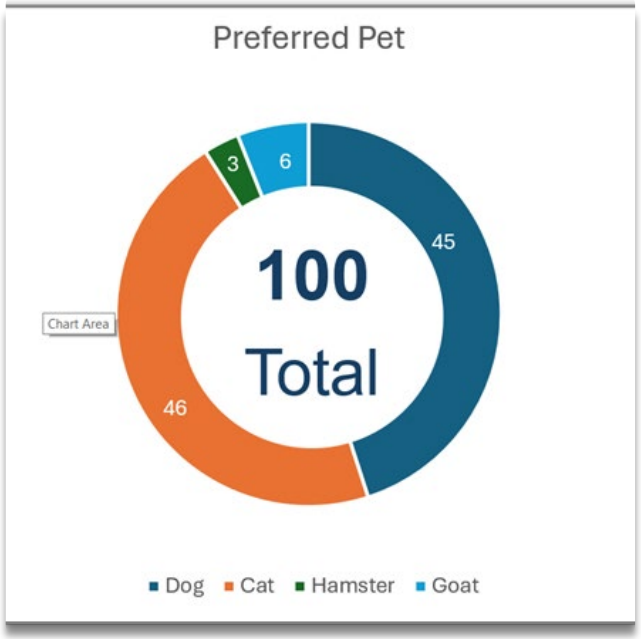
Instructions:

You have five minutes to complete the activity in your group. After the five minutes, your group with brief the rest of the class.

Group 1

Instructions:

Write alt text for the following images.





Group 2

Instructions:

You heard of a tool called Quizizz that allows you to create interactive quizzes and games and you would like to use it in your lessons. Is it accessible? If so, what features does it offer? If you have accessibility questions about this technology, who would you contact?

Group 3

Instructions:

Compare these two videos. Which one uses the closed captions appropriately? Why?

VCU Welcome Tour	University of Texas Austin College of Education Welcome Back Video	Fall 2022

Group 4

Instructions:

You have to give a presentation and your boss gave you this PowerPoint slide to fix for the presentation. What do you do to make it accessible?

