ACCESSIBILITY FOR VISUAL DESIGN

The Accessible and Inclusive Design Conference 2026

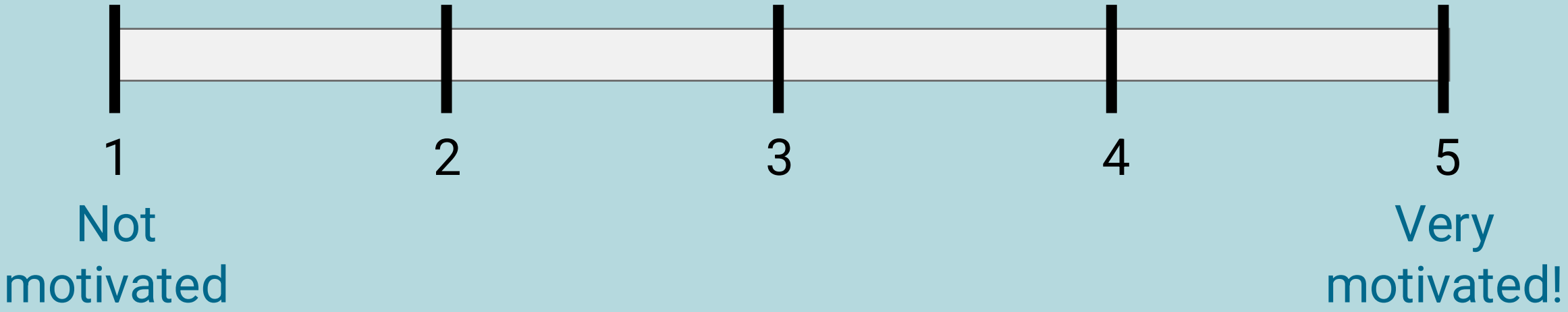






Enter a number in Chat.

On a scale of 1 to 5, how committed are you to improving the accessibility and inclusivity of your work?





Visual Accessibility

Visual accessibility ensures that people with varying degrees of visual ability can use websites, eLearning, and other digital information sources.



Color Vision Deficient



Low Vision



Blind



Sensitivity to Light



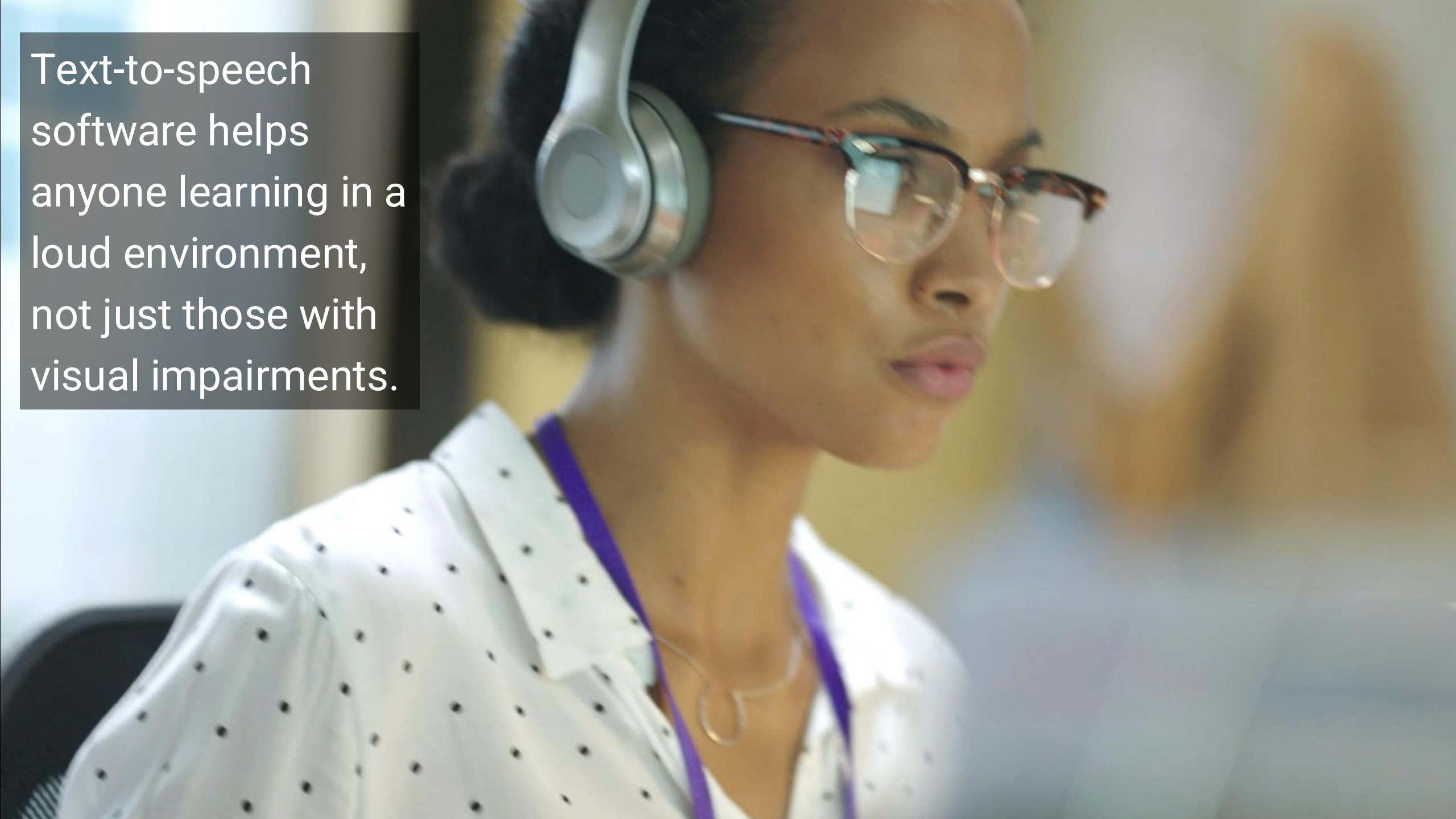
Cataracts



Glaucoma






Text-to-speech software helps anyone learning in a loud environment, not just those with visual impairments.



High color contrast helps people with visual impairments, but it’s also helpful when glare is on your screen.

1

COLOR



Web Content Accessibility Guidelines

WCAG



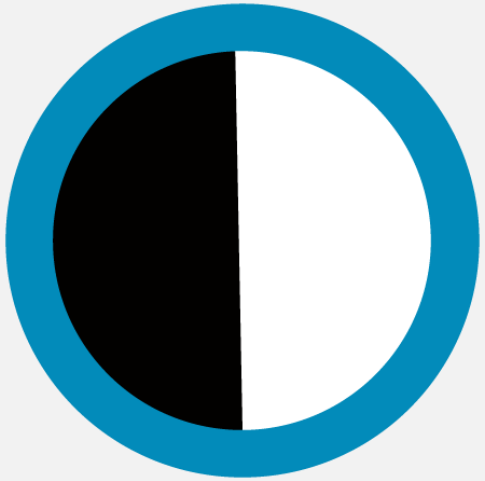
The World Wide Web Consortium

Main international standards organization

Key Areas To Focus On



COLOR



CONTRAST



ALT-TEXT

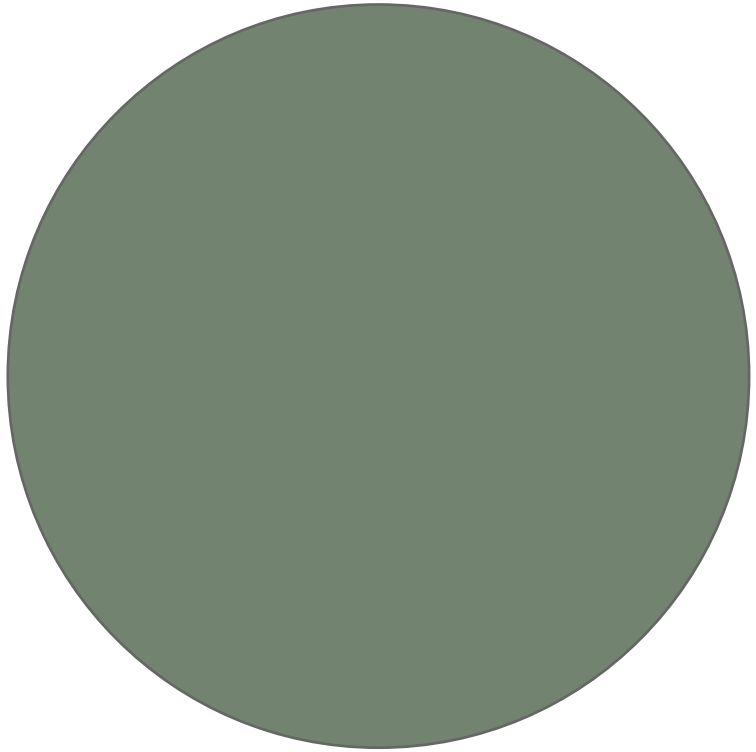
1

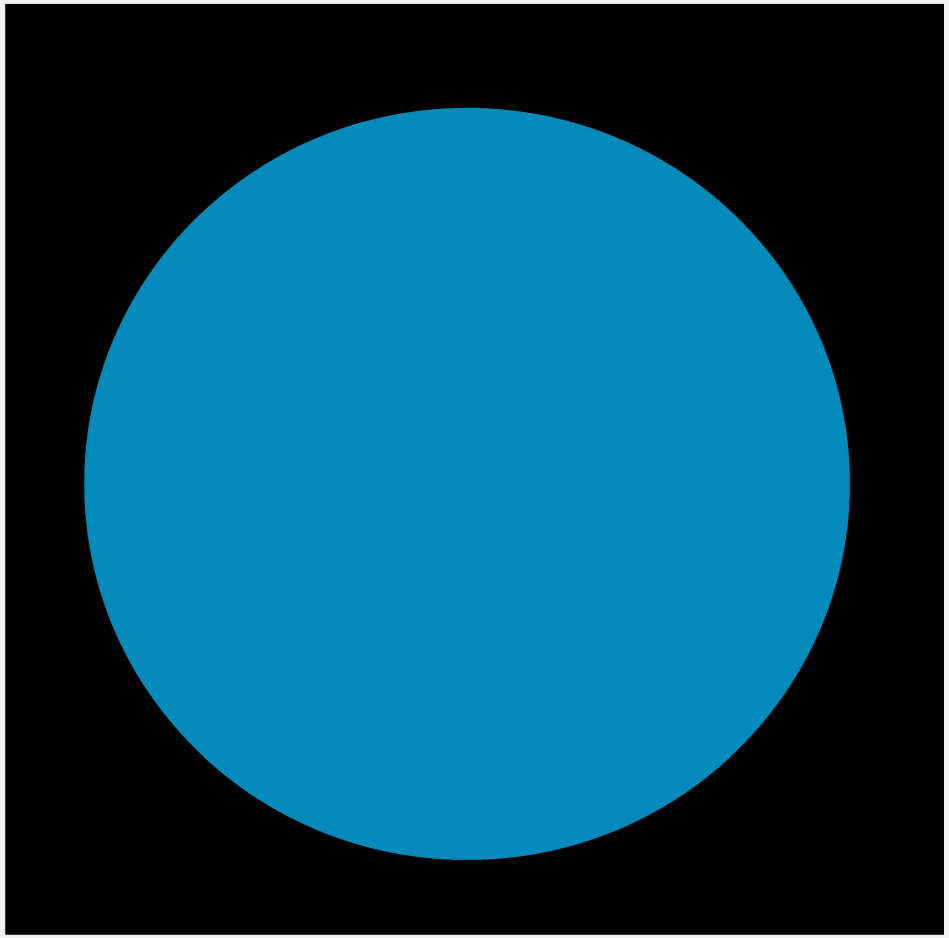
COLOR

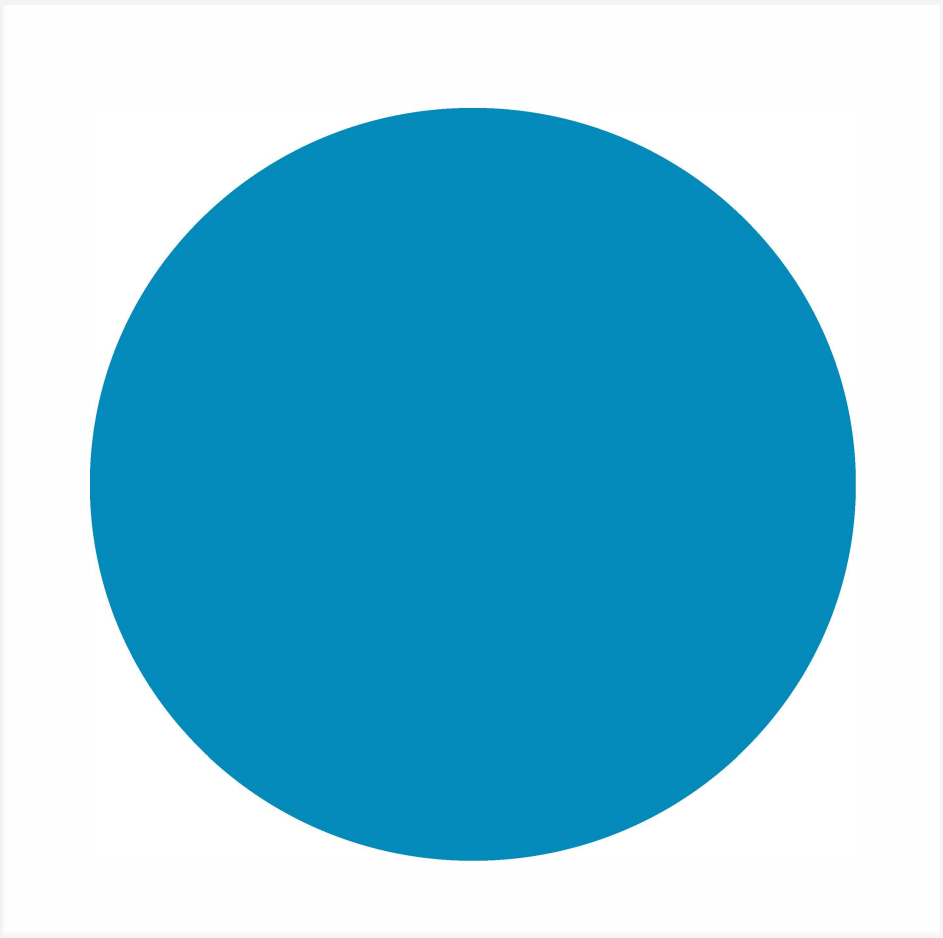


Color perception depends on vision, light, and individual interpretation.

Green or gray?





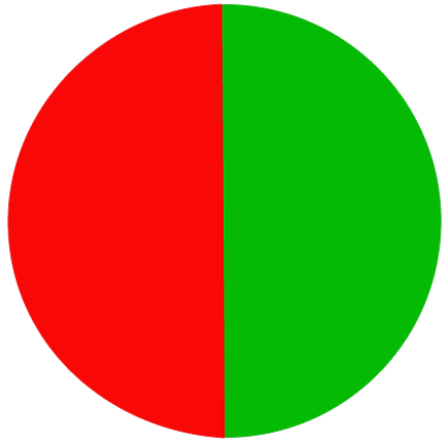




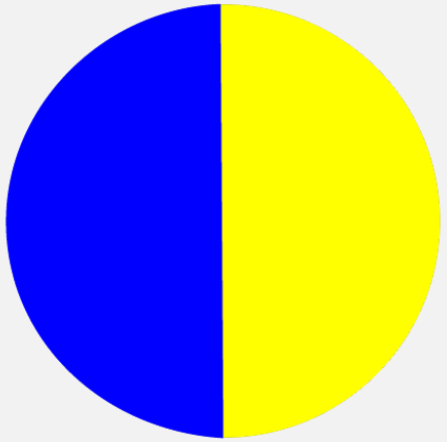
Color Vision Deficiency:

The inability to distinguish between certain colors.

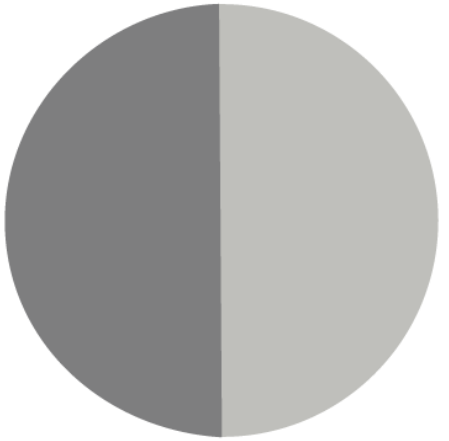
Types of Color Vision Deficiency



Difficulty distinguishing between red and green: affects 8% of men and 0.5% of women.



Difficulty distinguishing between blue and yellow: affects fewer than 1 in 10,000 people.



Severely reduced color vision is very rare.

See the problem with this feedback to a question?

What is the best response to this objection?
Select one answer and click Submit.

a. Let’s compare the camera quality of all three models and see what’s best for you.

b. These phones have the best cameras on the market. You won’t find anything better.

c. How much do you really know about camera quality? Have you done much research on this?

What would you do to fix it? Answer in Chat.

What is the best response to this objection?
Select one answer and click Submit.

a. Let’s compare the camera quality of all three models and see what’s best for you.

b. These phones have the best cameras on the market. You won’t find anything better.

c. How much do you really know about camera quality? Have you done much research on this?

What is the best response to this objection?
Select one answer and click Submit.

a. Let’s compare the camera quality of all three models and see what’s best for you.

b. These phones have the best cameras on the market. You won’t find anything better.

c. How much do you really know about camera quality? Have you done much research on this?





HISTORY

The field of HPT, also referred to as Performance Improvement, emerged from the fields of educational technology and instructional technology in the 1950s and 1960s. In the post war period, application of the Instructional Systems Design (ISO) model was not consistently returning the desired improvements to organizational performance.

HPT evolved as a systemiic and systematic approach to address complex type of performance issues and to assist in the proper diagnosis and implementation of sollutions to close performance gaps among individuals.

~~This is a sentence with a blue link.~~

This is a sentence with an underlined link.

Guidelines for Accessible Color



Avoid **color combinations** that are problematic for color-blind users (red/green or blue/yellow).



Avoid using color **as the only visual means** of conveying information or indicating an action (like a link).

2

CONTRAST



Contrast is a measure of the difference in perceived luminance or brightness between two colors, expressed as a ratio.

WCAG 2.0 Guidelines



Low Contrast 1:1



High Contrast 21:1

Meeting WCAG Standards

Text

Is this sufficient contrast?

Images of text

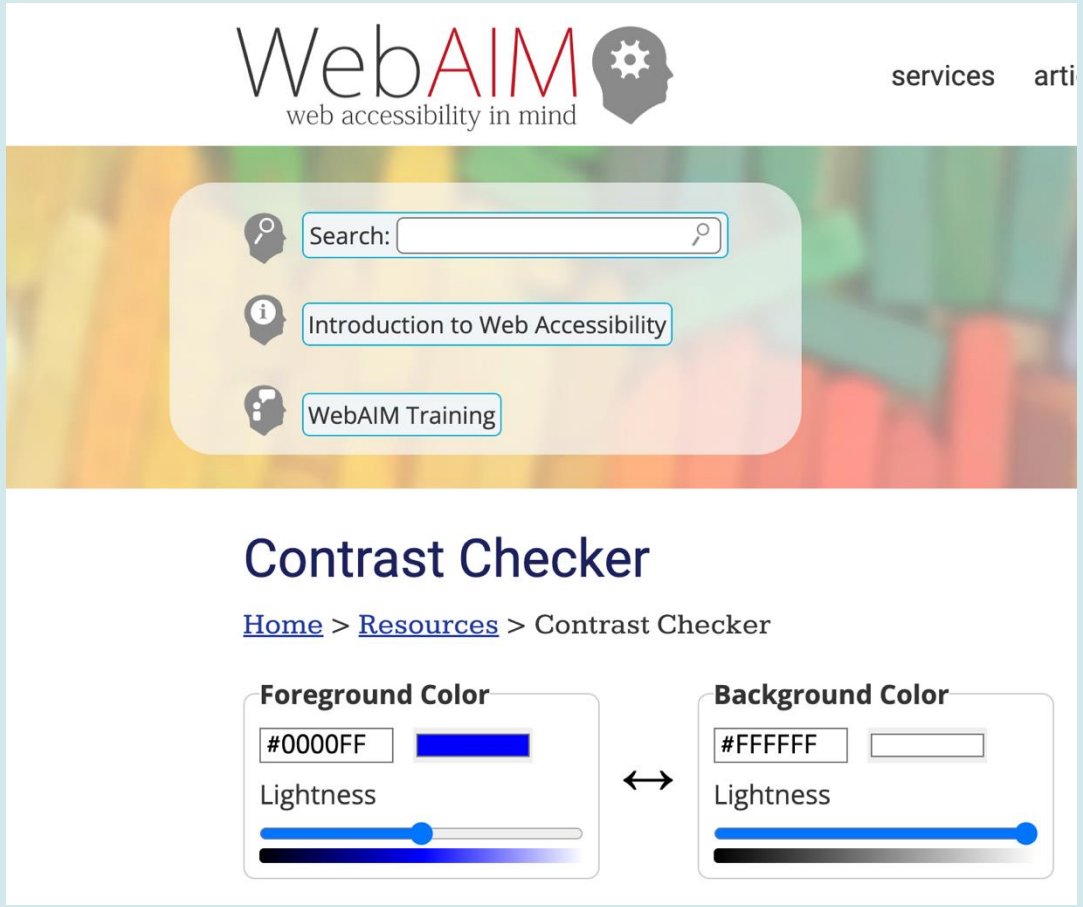


Controls

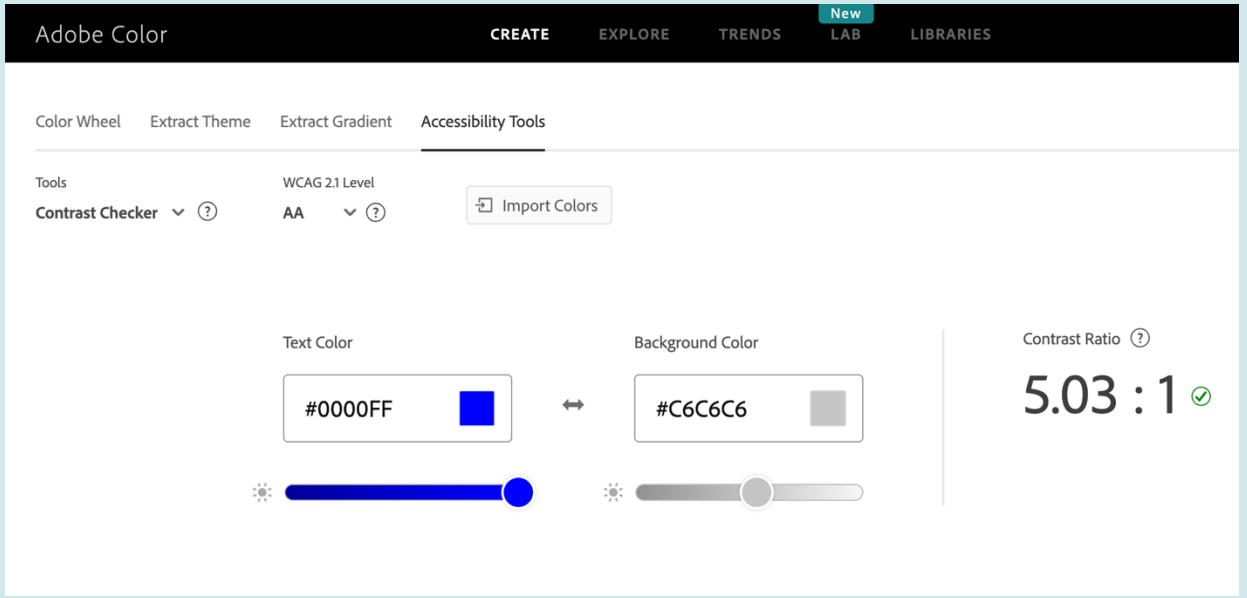


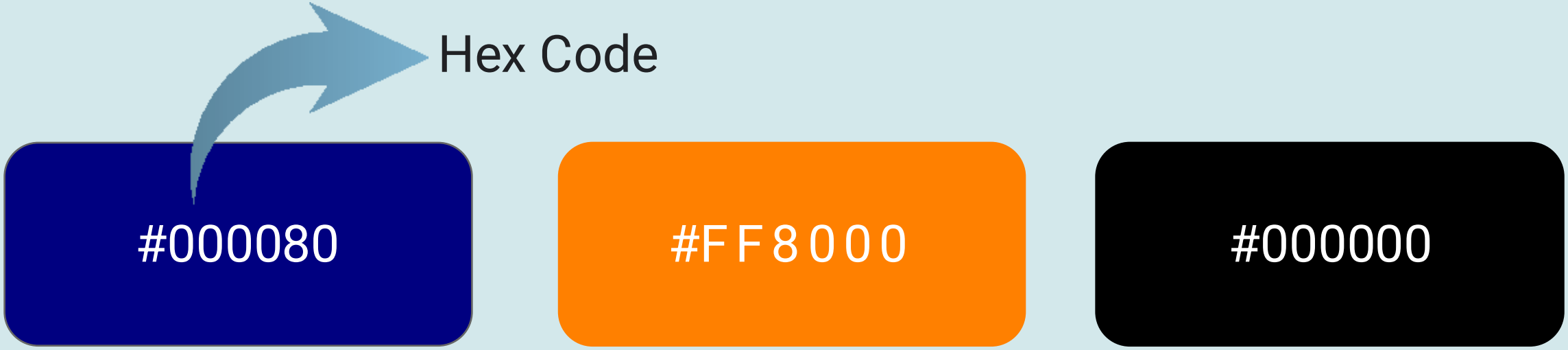
Contrast Checkers

WebAim



Adobe Color





- ✓ Hex codes are a way to represent colors using six characters.
- ✓ They tell a digital display how much red, green, and blue to show.

You can find a hex code in most of the tools you use



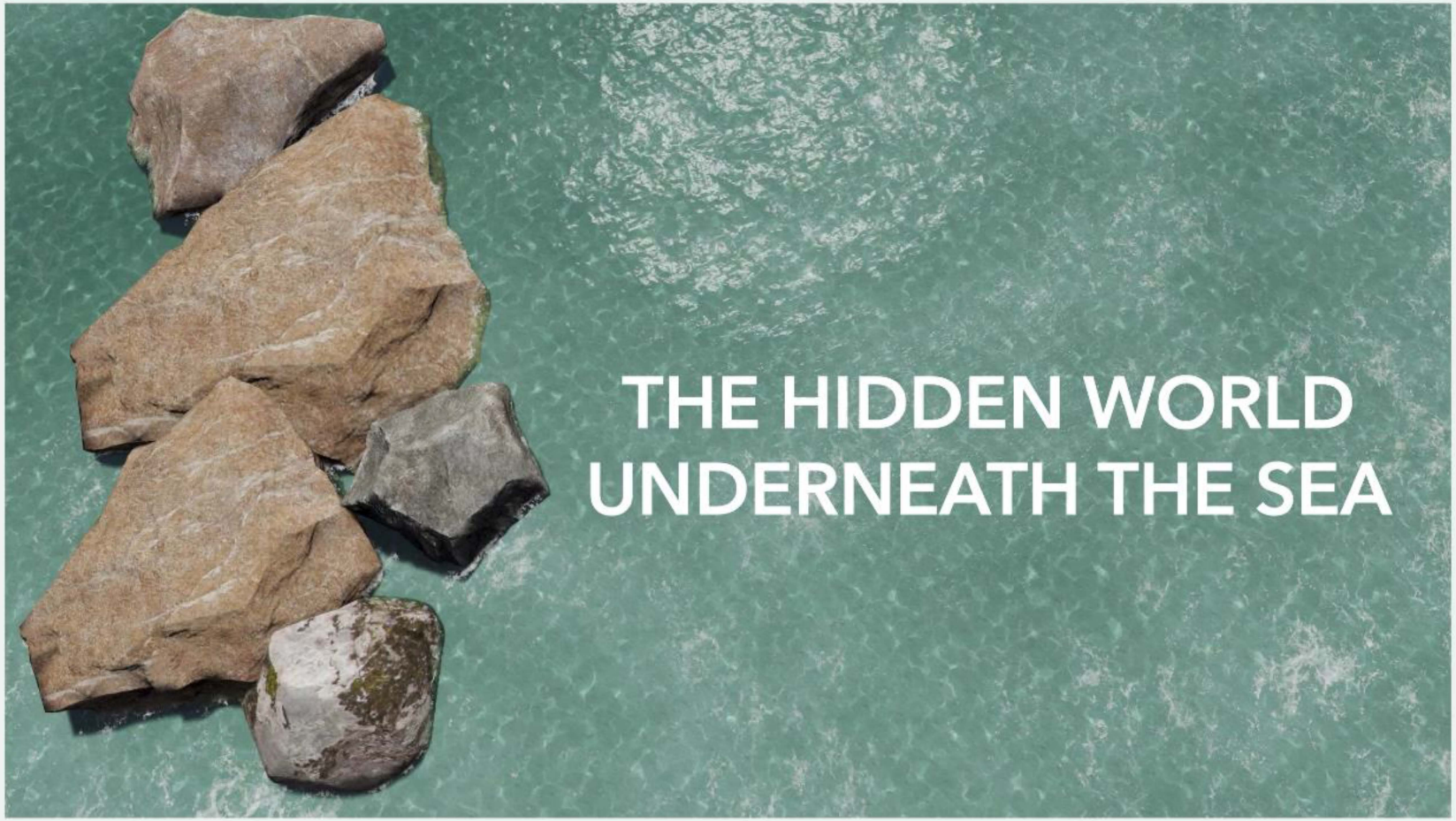


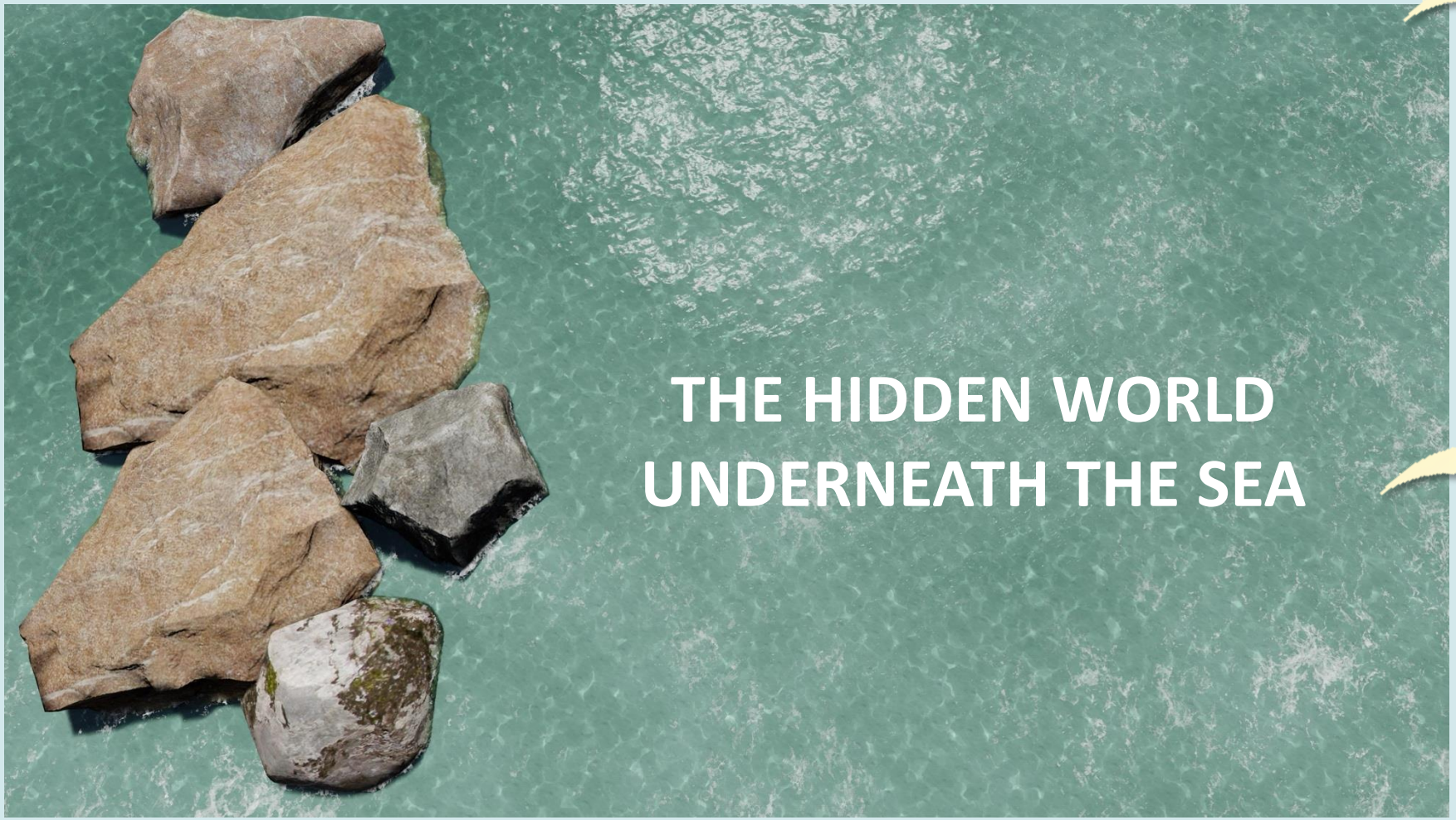









THE HIDDEN WORLD
UNDERNEATH THE SEA



Green Background:
#7C9A8F

White Text:
#FFFFFF

WCAG 2.0 Conformance Levels

Level AA (Minimum)

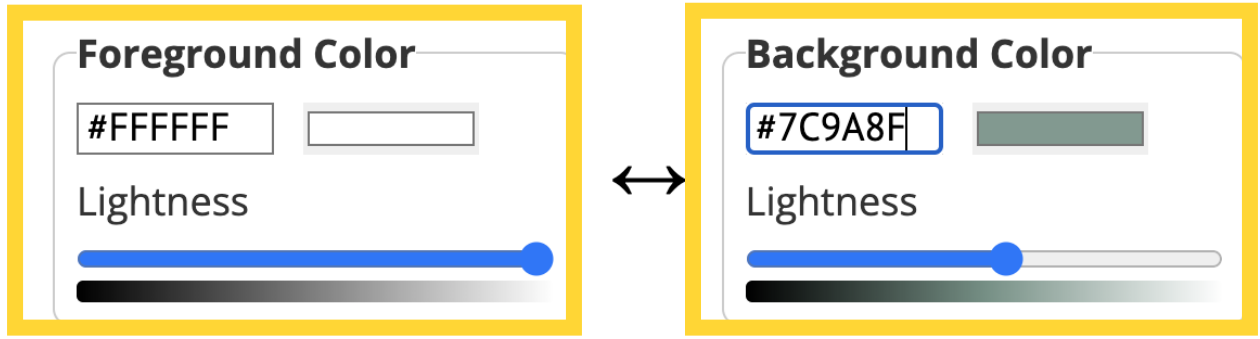
- ✓ **Normal Text** (12-17pt): **4.5:1**
- ✓ **Large Text** (18pt or 14pt bold or larger): **3:1**

Level AAA (Enhanced)

- ✓ **Normal Text** (12-17pt): **7:1**
- ✓ **Large Text** (18pt or 14pt bold or larger): **4.5:1**

Contrast Checker

WebAim.org



Contrast Ratio

3.05:1

permalink

Normal Text

WCAG AA: **Fail**

WCAG AAA: **Fail**

The five boxing wizards jump quickly.

Large Text

WCAG AA: **Pass**

WCAG AAA: **Fail**

The five boxing wizards jump quickly.



THE HIDDEN WORLD UNDERNEATH THE SEA

Contrast Checker

WebAim.org

Foreground Color

#FFFFFF

Lightness

↔

Background Color

#43564D

Lightness



Contrast Ratio

7.84:1

permalink

Normal Text

WCAG AA: **Pass**

WCAG AAA: **Pass**

The five boxing wizards jump quickly.

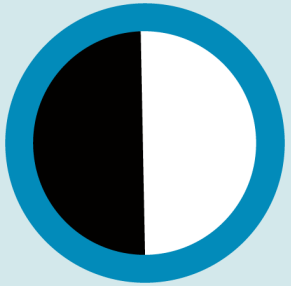
Large Text

WCAG AA: **Pass**

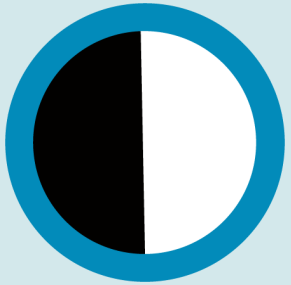
WCAG AAA: **Pass**

The five boxing wizards jump quickly.

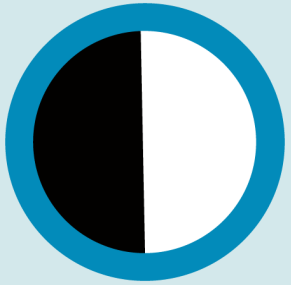
Guidelines for Accessible Contrast



Use color contrast checkers to ensure your color choices meet accessibility standards.

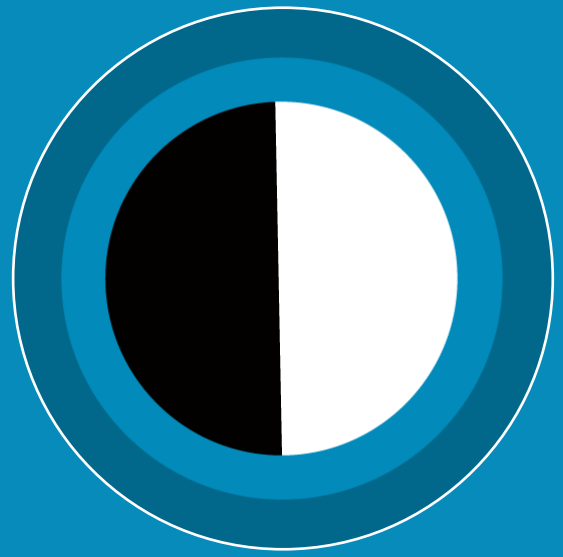


Level AA: contrast ratio should be greater than or equal to 4.5:1 for normal text and 3:1 for large text.

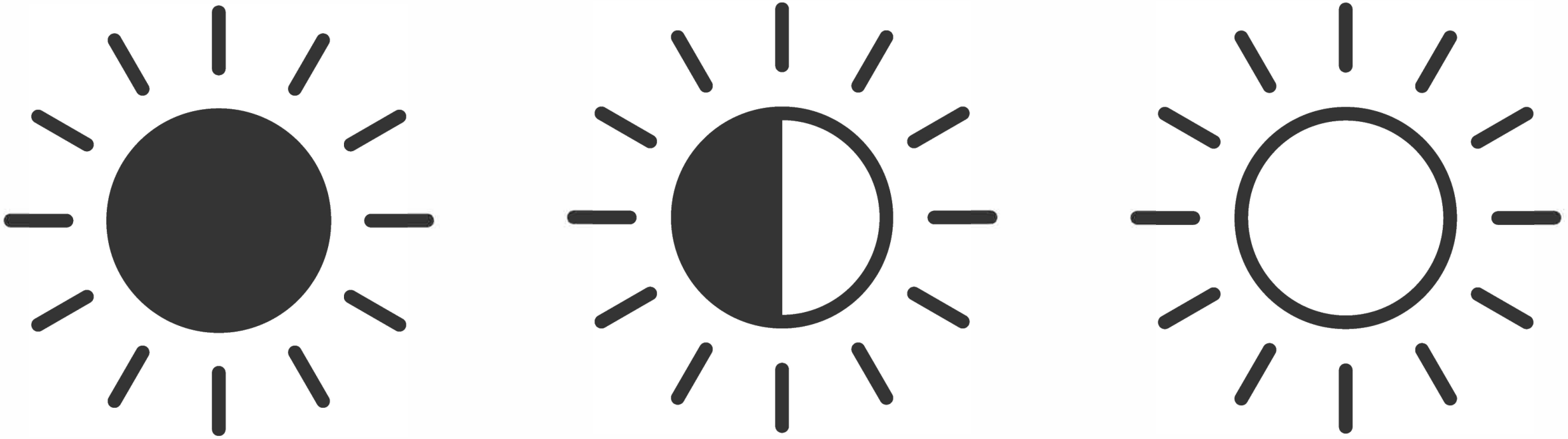


Level AAA: contrast ratio should be greater than or equal to 7:1 for normal text and 4.5:1 for large text.

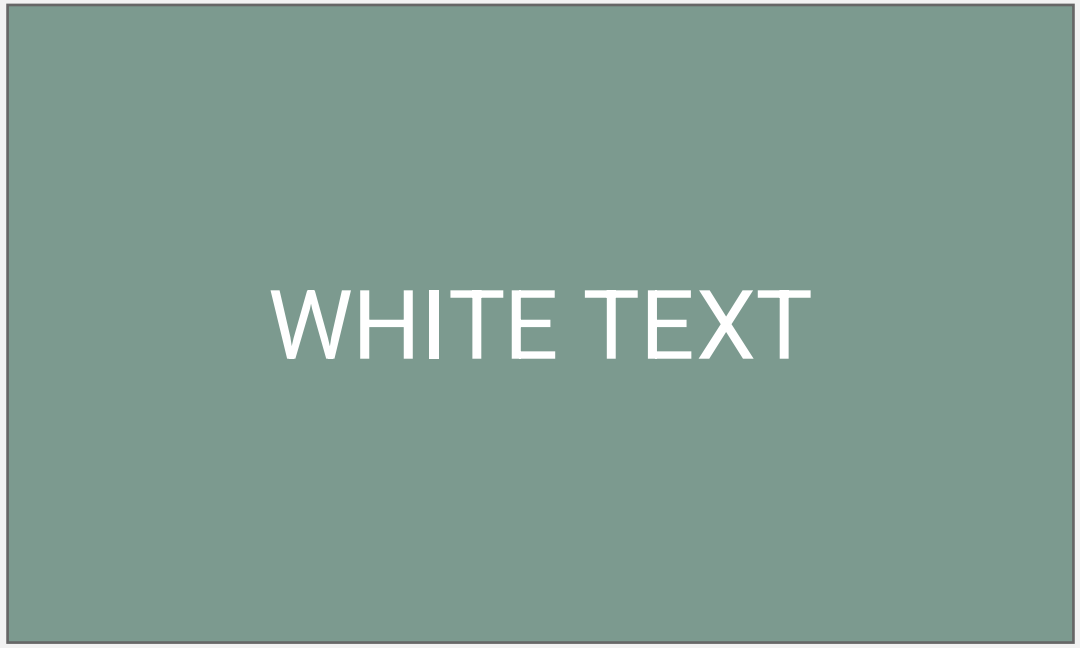
A Word of Caution about Contrast



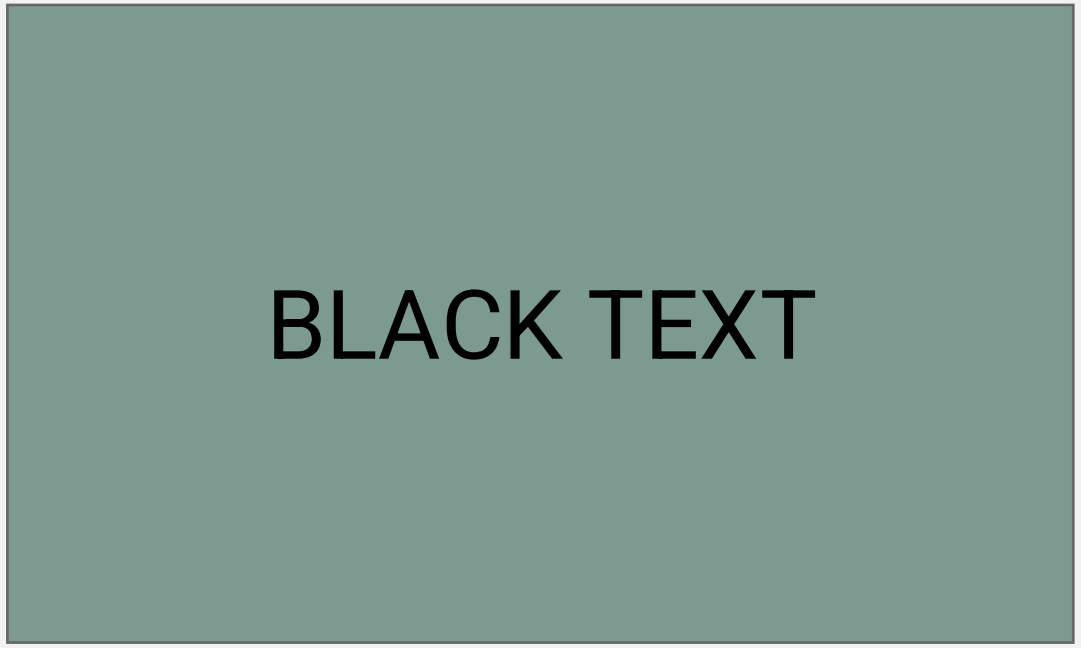
The WCAG 2 color contrast algorithm used by the contrast checkers may not accurately represent how people perceive luminance or brightness in all cases.



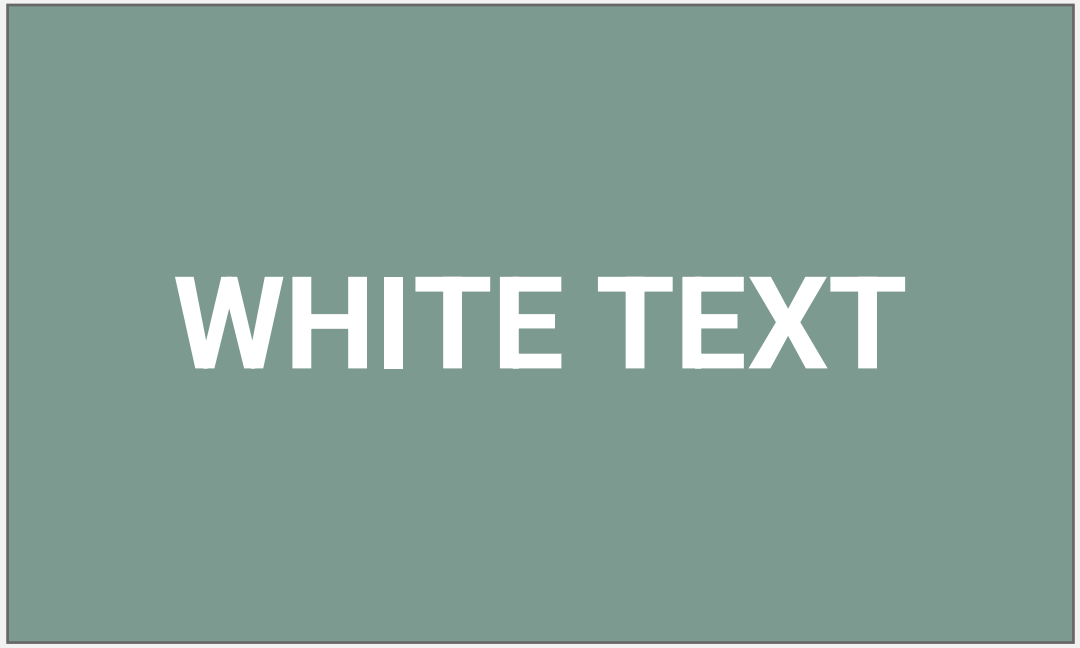
FAIL?

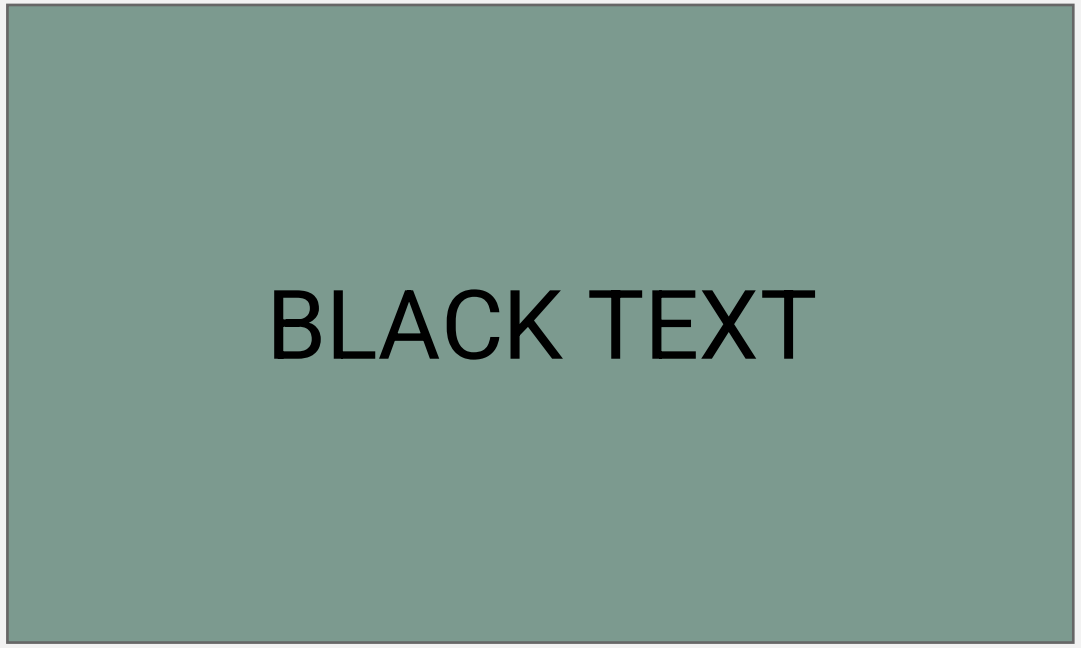


PASS?



You may disagree with the contrast checker's conclusion.

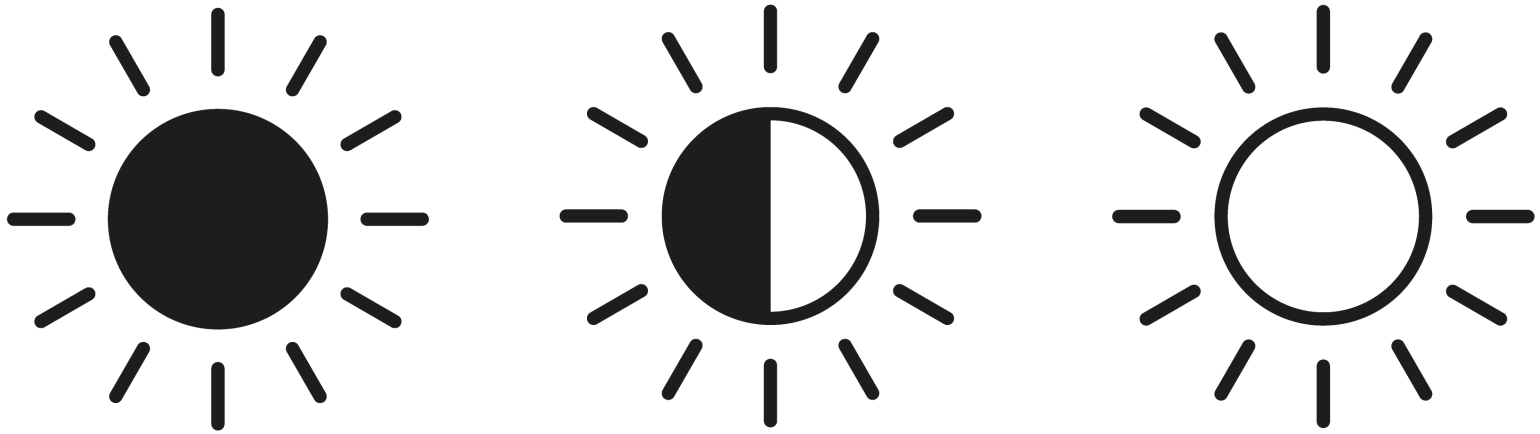




In that case, try enlarging the text and using boldface to ensure there is sufficient contrast.

WCAG 3 is exploring ways to improve how contrast is evaluated.

You can additionally test contrast with the APCA Contrast Calculator but it’s not compliant with WCAG 2 Guidelines.



3

ALT-TEXT



Alt-Text

- ✓ Describes non-text content
- ✓ Benefits people with visual or cognitive impairments
- ✓ Displays in browsers in place of the image if file fails to load
- ✓ **Benefits people who use screen readers**

What is a screen reader?

Reads aloud:

- ✓ Text written on the screen
- ✓ Alt-text description of images
- ✓ Buttons, links, and other controls





A person making bread.

A person wearing an apron kneading dough with both hands.

Size and Position

[Size

Position

Accessibility

Alt Textt

Object is visible to accessibility tools

Alternate text:

A sales associate, Anthony, is standing in a high-end tech sto1

LEARN MORE

CLOSE



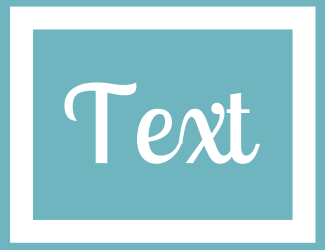
INFORMATIVE



DECORATIVE



FUNCTIONAL



IMAGES OF TEXT



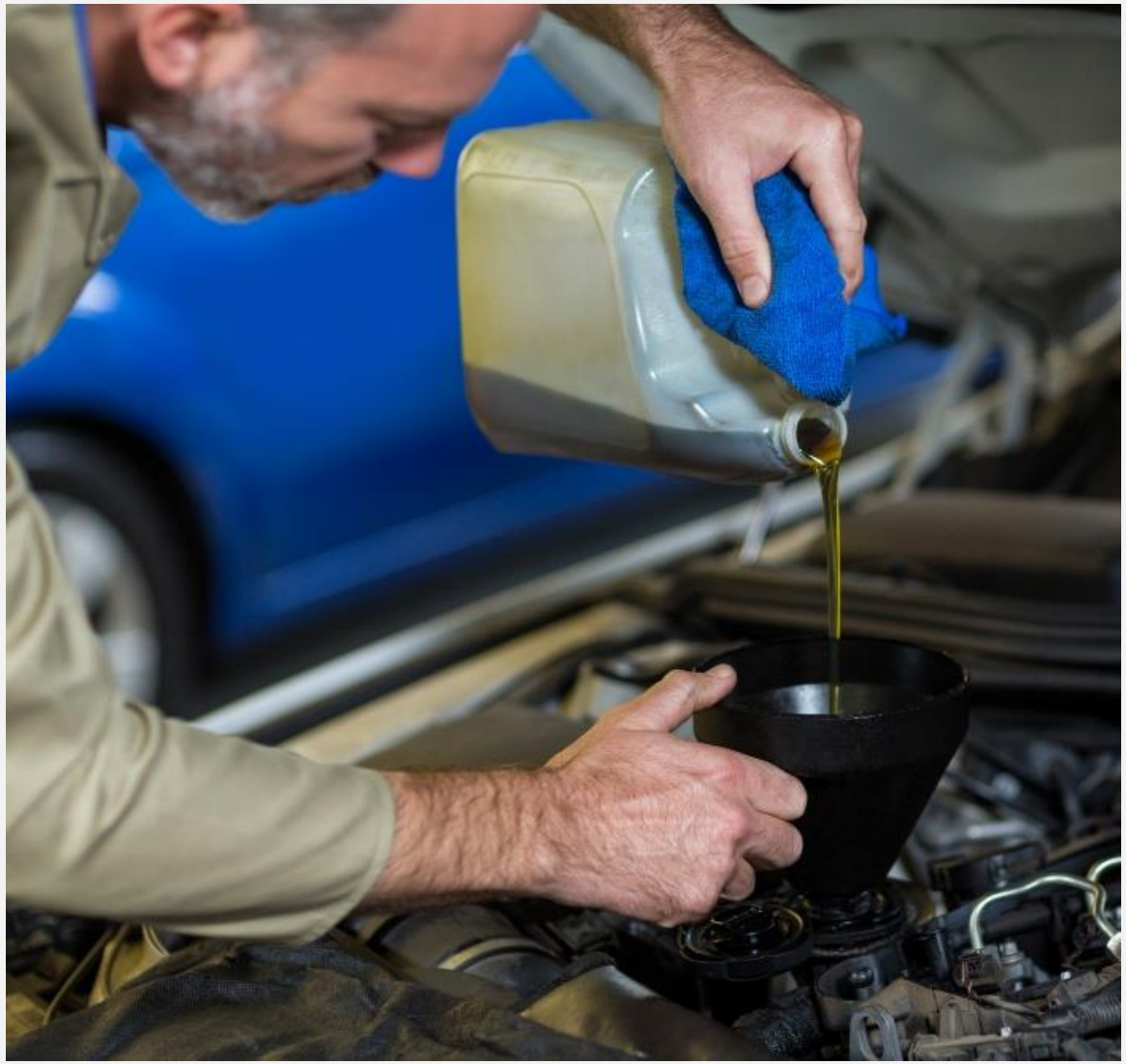
COMPLEX

1 Informative Images

Images that contribute to the meaning of a learning experience.

Alt-Text:

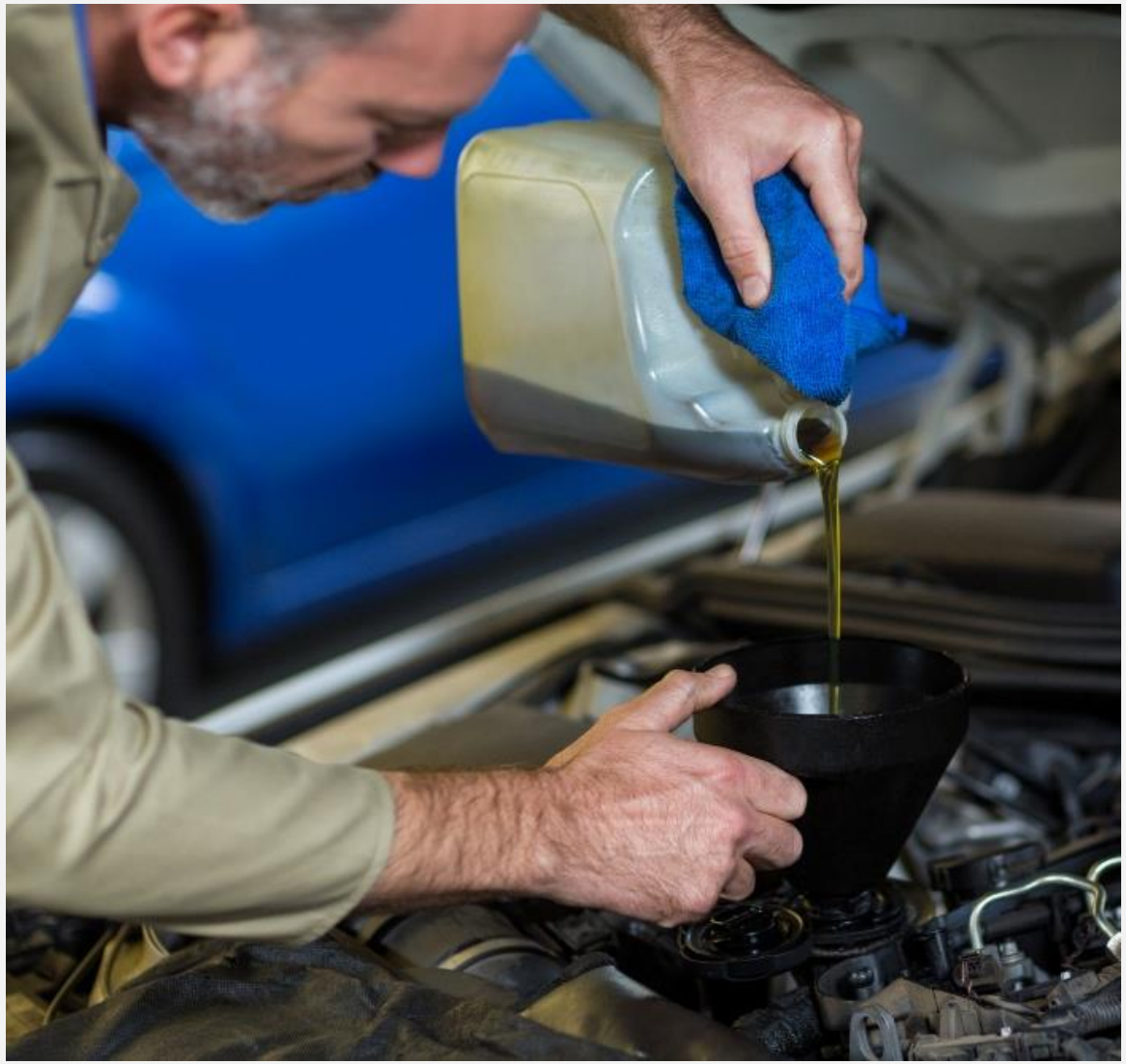
Write a short description that conveys the essential information.



1 Informative Images

Alt-Text:

A person pours motor oil into a funnel to fill the oil reservoir of a car.





HELPFUL WAYS TO LISTEN

- **Put yourself at the same height or lower than the child.**
- Give your child time to speak while you are fully focused.
- Nod or make a sound to show you have heard.



Alt-Text:

An adult is bending down to be at the same height as a child while listening.

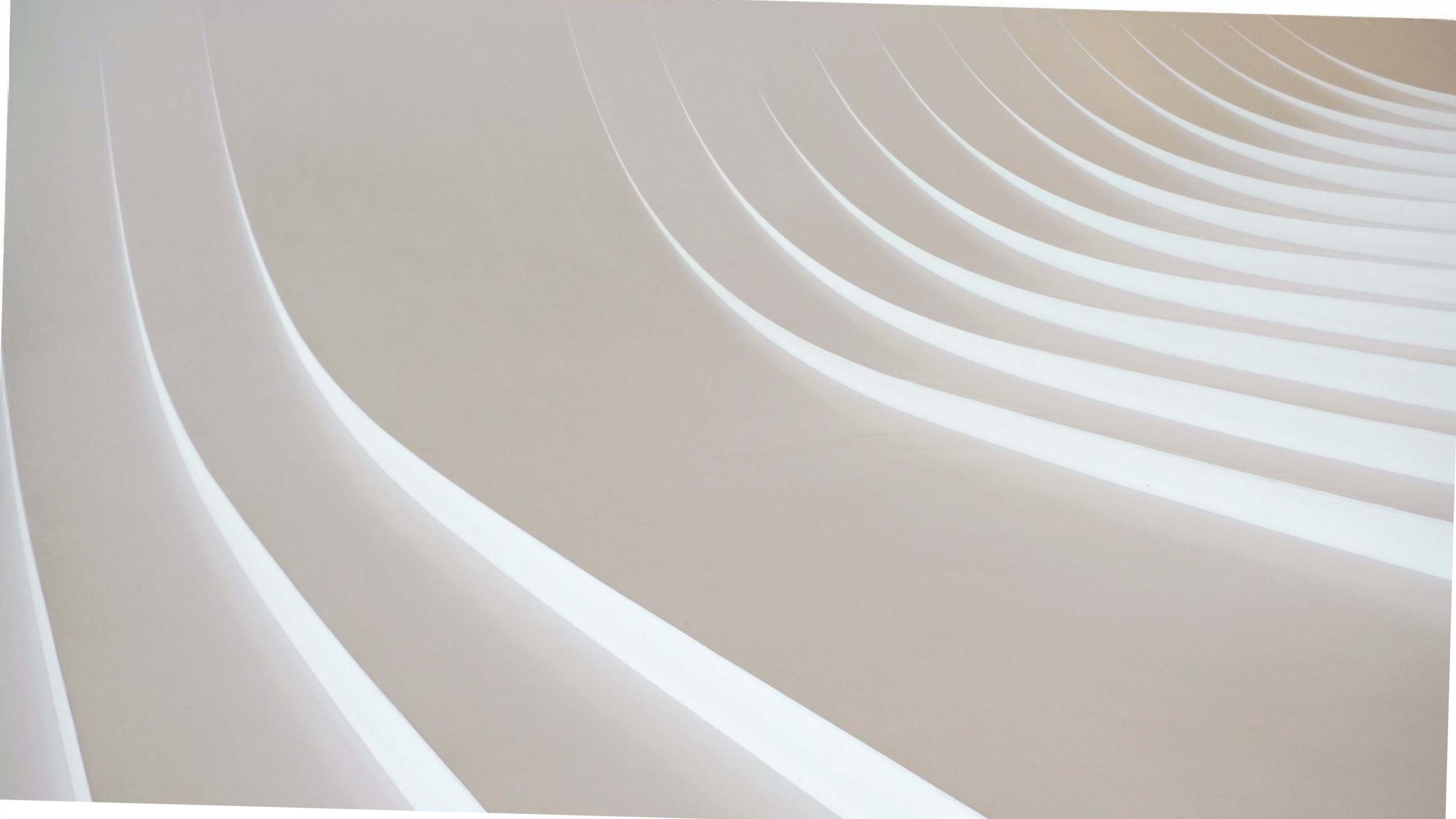
2 Decorative Images

Images that enhance visual appeal but don’t convey significant meaning to a learning experience.

Alt-Text:

Use null alt-text by entering a pair of quotation marks with no space ("").





3 Functional Images

Images that are interactive elements, like buttons and links, used to initiate actions.



Alt-Text:

- ✓ Convey the action the image will initiate.
- ✓ If the image is important, include a brief description.

3 Functional Images

Alt-Text:

Search button



3 Functional Images

Alt-Text:

Hear Mia’s objection. She stands with her arms crossed and appears resistant.



4 Image Text

Text created in a graphic program, known as *embedded text.*

Alt-Text:

Provide the exact text in the alt-text area because screen readers can’t read graphic text.



4 Image Text

Alt-Text:

Sticky note with security tip: don’t click on links in your email.



5 Complex Images

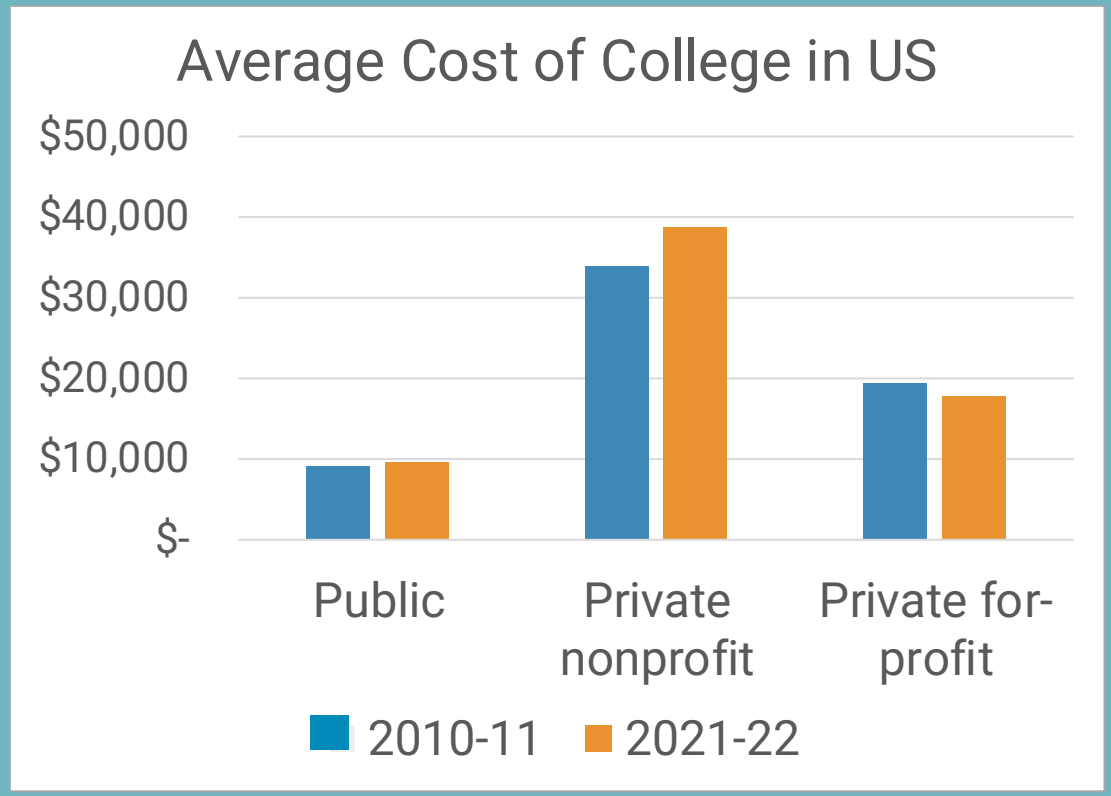
Complex images contain substantial information, like graphs, charts, and screenshots.

Alt-Text:

Write a short description of the image and the location or a link to the long description.

Long Description:

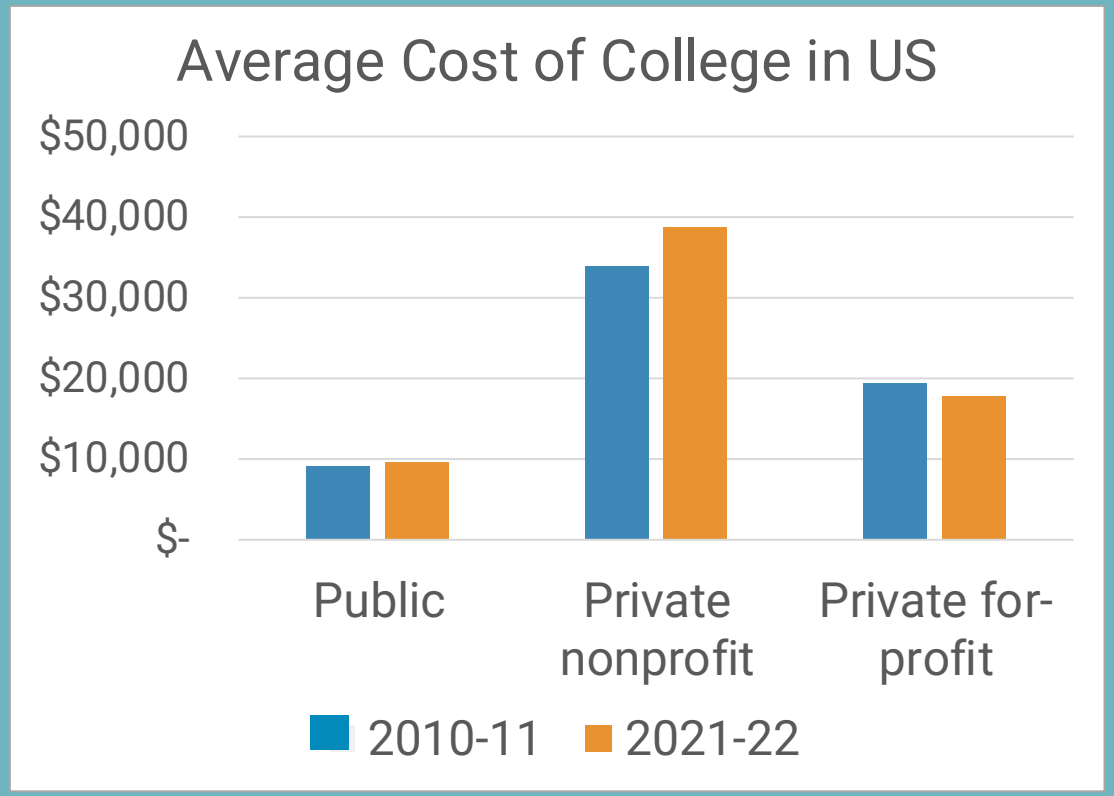
Provide a text version of the essential information conveyed by the image.



5 Complex Images

Alt-Text (Part 1):

Bar chart comparing the current average cost of US colleges. See the full description associated with this graph.



5 Complex Images

Long Description (Part 2):

Overview

The graph compares the average cost of college in the US from 2010 to 2011 with the cost a decade later. It shows that the cost of public colleges had a slight increase, private nonprofits increased by over $4,000, and private for-profit colleges decreased in average costs.

Values

Numerical values presented on the image:

Average Cost of College in US

	2010-11	2021-22
Public	$ 9,100	$ 9,700
Private nonprofit	$ 34,000	$ 38,800
Private for-profit	$ 19,400	$ 17,800

Graph Presentation

The bar chart is divided into three college categories. Vertical bars compare the average cost of college in each category for years 2010 to 2011 with years 2021 to 2022. The height of the bars represent the average cost.

ALT-TEXT FOR CATEGORIES OF IMAGES	
Informative Images	Write a short description that conveys the essential information.
Decorative Images	Use null alt-text by entering a pair of quotation marks with no space ("").
Functional Images	Convey the action the image will initiate. If the image is important, include a brief description.
Images of Text	Provide the exact text in the alt-text area because screen readers can’t read graphic text.
Complex Images	1) **Alt-text:** Short description and the location of the long description. 2) **Long Description:** Text version of the essential information conveyed by the image.

Questions to Ask When Writing Alt-Text

Why is this visual element here?

What information does it present?

What is the purpose of the image?

How does the image help someone reach the learning outcome?

Contact Information

theelearningcoach.com/newsletter

linkedin/in/conniemalamed

theelearningcoach.com/accessibility