

Different types of colour blindness and its suitable color palettes

Here are color palettes for the three categories of color blindness and their respective subtypes: Palettes

1) Red-Green Color Blindness:

- **Deuteranomaly**: Individuals with a green-weakness. A color palette that accommodates deuteranomaly might include:

- Primary: Blue (#0000FF), Yellow (FFFF00), Gray (#808080)
- Secondary: Black (#000000), White (FFFFFF), Dark Gray (#333333)

- **Deuteranopia**: Individuals unable to perceive "green" light. A color palette suitable for deuteranopia might include:

- Primary: Blue (#0000FF), Orange (FFA500), Gray (#808080)
- Secondary: Black (#000000), White (FFFFFF), Dark Gray (#333333)

- **Protanomaly**: People with a red-weakness. A color palette for protanomaly might include:

- Primary: Blue (#0000FF), Green (#008000), Gray (#808080)
- Secondary: Black (#000000), White (FFFFFF), Dark Gray (#333333)

- **Protanopia**: Individuals unable to perceive "red" light. A color palette suitable for protanopia might include:

- Primary: Blue (#0000FF), Yellow (FFFF00), Gray (#808080)
- Secondary: Black (#000000), White (FFFFFF), Dark Gray (#333333)

2) Blue-Yellow Color Blindness:

- **Tritanomaly**: Individuals with a blue-weakness. A color palette accommodating tritanomaly might include:

- Primary: Red (FF0000), Green (#008000), Gray (#808080)
- Secondary: Black (#000000), White (FFFFFF), Dark Gray (#333333)

- **Tritanopia**: Individuals unable to perceive "blue" light. A color palette suitable for tritanopia might include:

- Primary: Red (FF0000), Green (#008000), Gray (#808080)
- Secondary: Black (#000000), White (FFFFFF), Dark Gray (#333333)

3) Total Color Blindness:

- **Achromatomaly**: A milder form of total color blindness. A color palette for achromatomaly might include:

- Primary: Gray (#808080), Dark Gray (#333333), Light Gray (#D3D3D3)
- Secondary: Black (#000000), White (FFFFFF)

- **Achromatopsia**: The more severe form of total color blindness. A color palette for achromatopsia might include:

- Primary: Black (#000000), White (FFFFFF), Dark Gray (#333333)
- Secondary: Light Gray (CCCCCC), Mid-Gray (#808080)

