CSS Color Notes

1. Introduction to Color

- Enhances aesthetics, sets mood, evokes reactions.

- Used for text (foreground) and backgrounds.

2. Specifying Colors

- **RGB Values**: `rgb(red, green, blue)` (0–255). Example: `rgb(100,100,90)`.

- **Hex Codes**: # + six digits. Example: `#ee3e80`.

- **Color Names**: 147 names (e.g., `DarkCyan`). Limited, less common.

- **CSS3 Methods**:

  - **HSL**: `hsl(hue, saturation%, lightness%)`. Hue (0–360°), saturation/lightness (0–100%).

  - **HSLA/RGBA**: Adds alpha (opacity, 0.0–1.0). Example: `rgba(0,0,0,0.5)`.

3. Foreground Color

- `color` property sets text color.

- Example: `h1 { color:  DarkCyan; }` or `p { color:  rgb(100,100,90); }`.

4. Background Color

- `background-color` sets element background.

- Uses RGB, hex, names, RGBA/HSLA.

- Example: `body { background-color:  rgb(200,200,200); }`.

- Default: transparent; set on `<body>` for consistency.

5. Color Terminology

- **Hue**: Core color (e.g., red, blue).

- **Saturation**: Gray amount (0% = gray, 100% = vivid).

- **Lightness**: White/black amount (0% = black, 100% = white).

- **Brightness**: Black amount (differs from lightness).

6. Contrast

- High contrast improves readability; low contrast hinders.

- Medium contrast for long text.

- Light text on dark background: Increase line height, font weight.

- Tool: `www.snook.ca/technical/colour_contrast/colour.html`.

7. Opacity (CSS3)

- **opacity**: Element + children (0.0–1.0). Example: `opacity:  0.5`.

- **rgba/hsla**: Opacity for element only.

- **Fallback**: Use RGB/hex before RGBA/HSLA.

8. Color Pickers

- Tools (e.g., Photoshop, `colorschemedesigner.com`) show RGB/hex.

- Pixels mix red, green, blue.

9. Summary

- Colors: RGB, hex, names, HSL, RGBA, HSLA.

- Ensure contrast for readability.

- Use color pickers for precision.