ACHIEVING COLOR
Harmony

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A Brief History of Color Theory

the perfect blend of art and science

The Science-y Part

Shortly after the apple fell and bonked Sir Isaac Newton on the head, he set his sights on figuring how light behaves. He shone a light through a prism, causing it to break into the spectrum of visible light. By recombining them, he could form them back into a white light. He then took the first color (red) and combined it with the last (violet) and made magenta - a color that doesn't appear in the rainbow spectrum. So he "bent" the spectrum into a circle - the predecessor of today's color wheel.
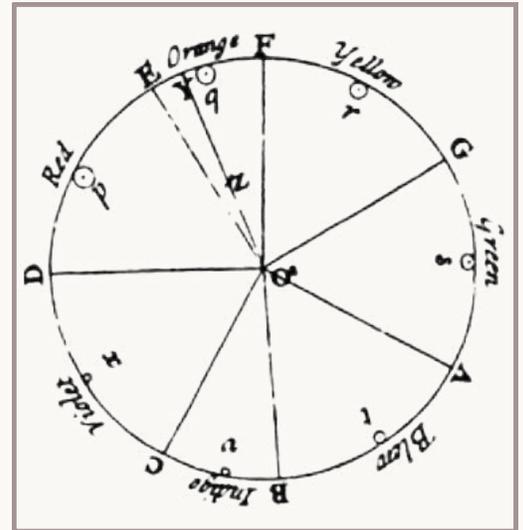
The Artsy Part

Shooting forward a hundred years or so, a poet named Wolfgang von Goethe wrote a book, *Theory of Colors*, which focused less on science, and more on the human relationship to color. He and Newton disagreed on the source of color (the prism vs. the light) and while Newton's theory (it was the light, not the prism) won the debate, Goethe focused on the cognitive effect that color has on humans. He also created his version of the color wheel, with its three primary colors, from which he theorized that all the colors of the world can be created.
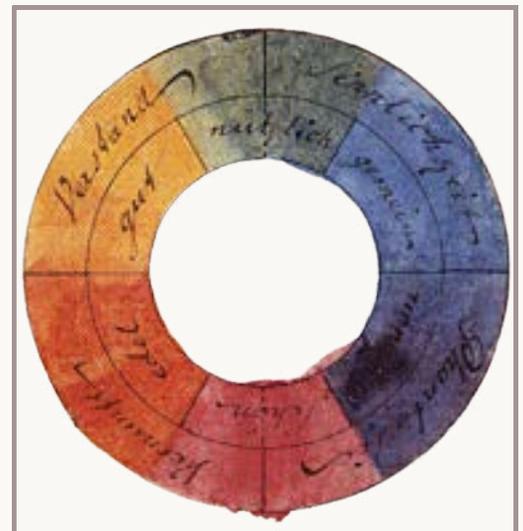
thank you isaac and wolfie!

What About Light and Dark Colors?

the quest to get us all on the same page

The Journey into Three Dimensions:

Artists around this time wanted everyone to speak a common "color language" and use a common color notation - much like music notation. The two-dimensional color wheels developed by Newton and Goethe didn't allow for any variations in brightness or saturation, so artists started generating three-dimensional models that would accurately define the entire range of colors that humans could see.

A dude named Mayer (I don't think his first name was John) created a model in the shape of a triangle. Then another dude tried a sphere; it was better but didn't offer enough variation in color intensity.

Finally Albert Munsell figured it out in the early 1900s, and created a model that depicts all the aspects of color! Don't worry, I'll explain them all after we go through some definitions.
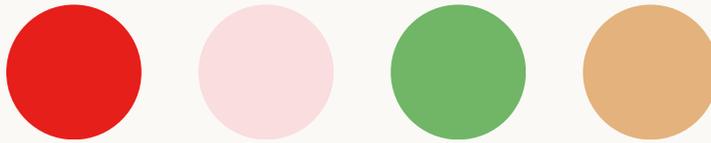
A Few Definitions

I'm going to be using these definitions a lot (A LOT) as we progress through the study of color analysis, so it's important to make sure we're speaking a common "color language"!
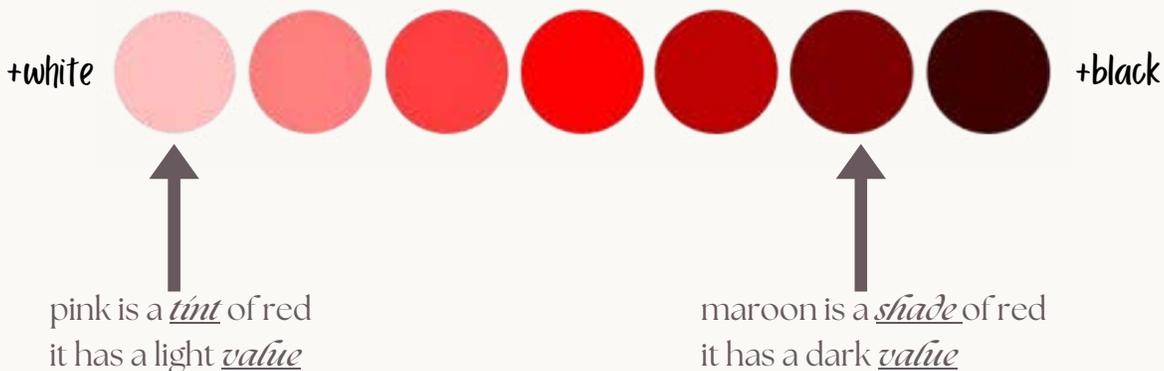
Hue: Basically, just another word for color. So red, blue, pink, yellow-green, etc.

Value: How light, medium, or deep a hue is. Lightness is achieved by adding white. Darkness is achieved by adding black.

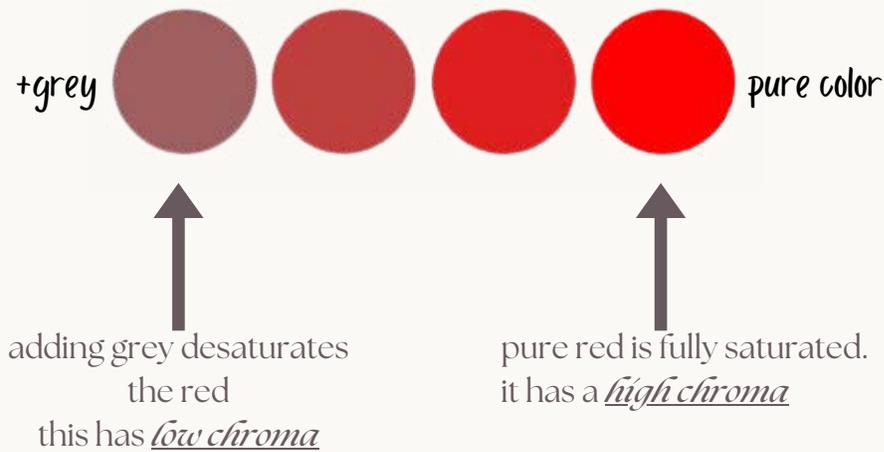Tint: How the color is altered by adding white

Shade: How the color is altered by adding black

+white   +black

pink is a *tint* of red
it has a light *value*

maroon is a *shade* of red
it has a dark *value*

<u>Chroma:</u> The "purity" (or clarity) of a color and how it changes when adding grey

<u>Bright:</u> Color that is fully saturated; high chroma

<u>Soft:</u> Color that has been desaturated; low chroma

+grey   pure color

adding grey desaturates
the red
this has *low chroma*

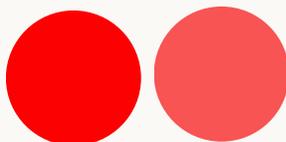pure red is fully saturated.
it has a *high chroma*

<u>Contrast:</u> The difference in *value* or *chroma* between two hues
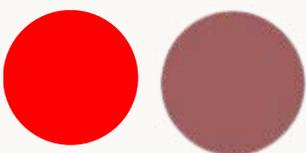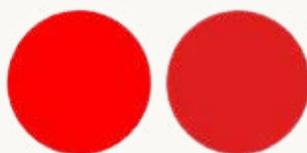
High Value Contrast
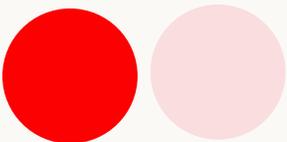
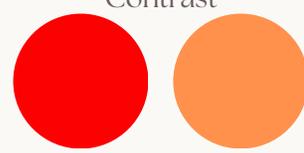Low Value Contrast

Complementary Colors
have High Contrast

High Chroma Contrast

Low Chroma Contrast

Analogous Colors have Low
Contrast

Put on your 3-D Glasses

Value

Hue

Chroma
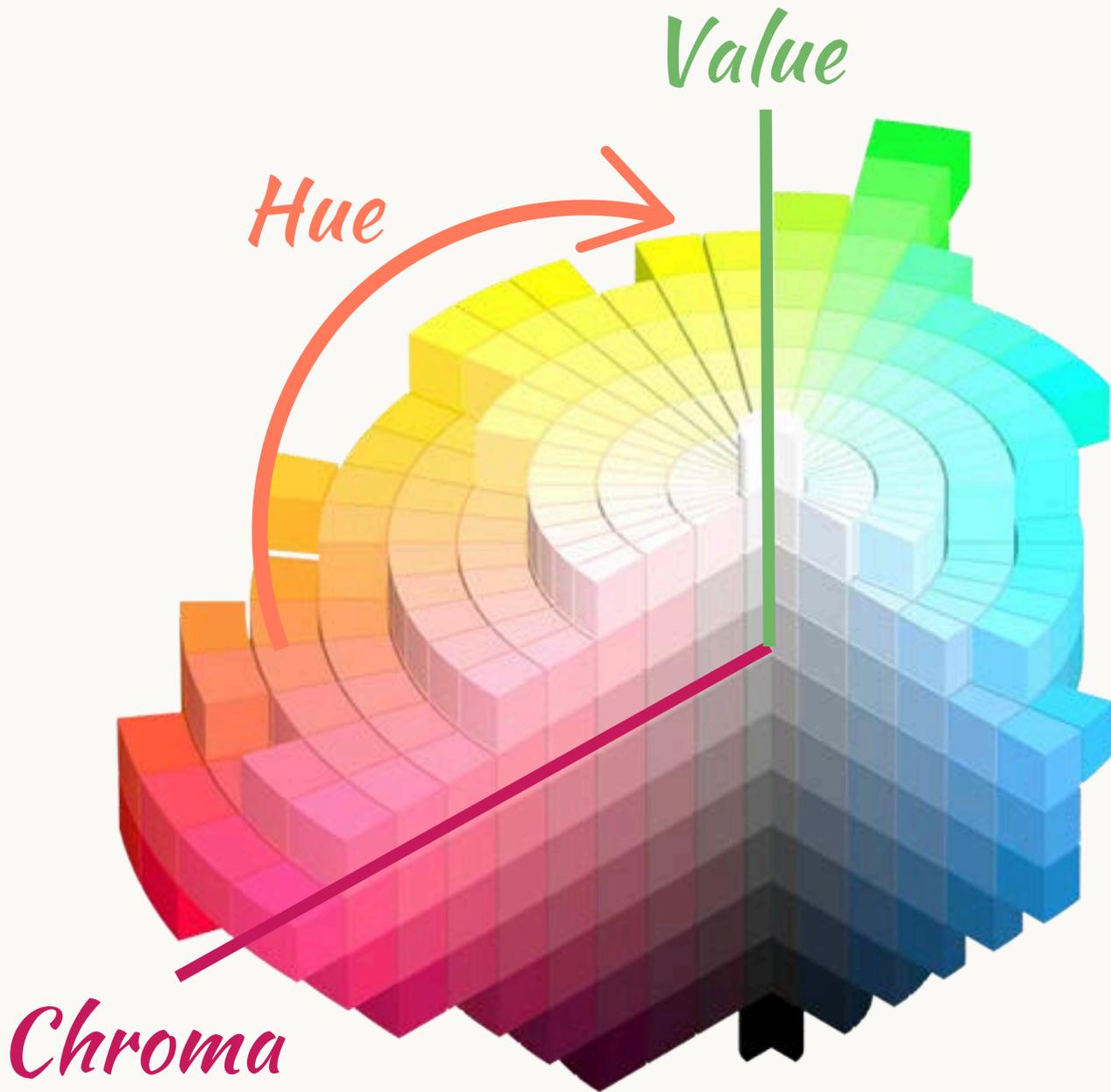
Introducing the Seasons

You know - Winter, Spring, Summer, Autumn

<u>Looking at Colors as Seasons:</u> In the early 1900s, a German named Johannes Itten (a painter/teacher) noticed that his students tended to select colors they found harmonious that were in line with their own personal coloring, He was among the first to divide the color wheel by color "temperature" - warm colors having yellow, and cool colors having blue.

But you know those crazy Germans - he went a little farther, and also divided the color wheel into light and dark. He then named the quadrant of colors into the seasons that they seem to represent.

No one did much with this great idea until the 1980s, when Carole Jackson wrote her book, Color Me Beautiful, which divided all people into one of the four seasons. It soon morphed into 12 seasons and then into 16 seasons, with seasons like Dark Autumn, True Spring, Soft Summer, and Cool Winter (what??)
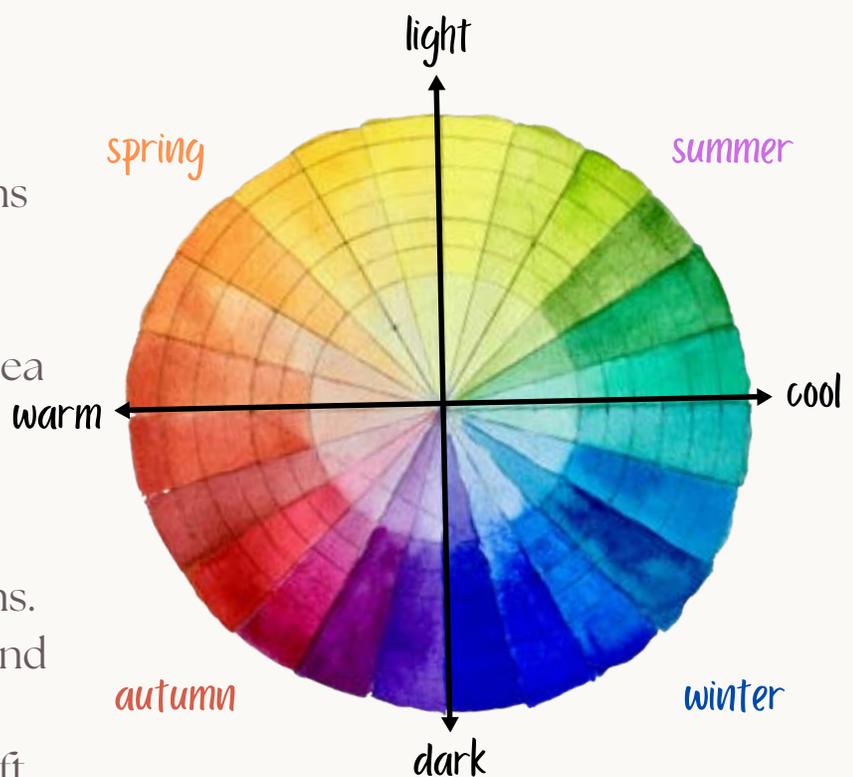
It turns out that there is a lot of color overlap in these seasons, and some Autumns can wear Spring colors, and some Springs can wear Winter colors. So I've found a better way - Tonal Color Analysis.

Tonal Color Analysis
a better way

> **Tonal Analysis vs. Seasonal Analysis:**
> Both systems use the same qualities to determine your ideal color palette. While seasonal analysis uses just its particular quadrant (or one-twelfthdrant) of the color wheel to give your palette of ideal colors, tonal color analysis opens up virtually the entire color wheel in order to select your ideal colors.
>
> The terms tonal analysis uses are:
>
> **Light, Medium, or Deep** (your overall value)
>
> **Warm or Cool** (your temperature)
>
> **Bright or Soft** (your chroma)

Value

Light, Medium, or Deep: These words describe the overall value of the person - taking into account eyes, skin, and hair. Here are some examples of each.

| Light | Medium | Deep |

Tonal Color Analysis
a better way

Temperature

Cool: This relates to a person's undertones. Cool undertones will have more blue to them. Here are some examples of celebrities with cool undertones.

Warm: This relates to a person's undertones. Warm undertones will have more yellow and/or red to them. Here are some examples of celebrities with warm undertones.

Tonal Color Analysis
a better way

Chroma

Soft: Other words we use are muted or dusty. These people can't handle brighter and more intense colors; they need the softer tones of each hue. Here are some examples of celebrities who are soft in their coloring.

Bright: Other words we use are clear or pure. These people can handle brighter and more intense colors. Here are some examples of celebrities who have bright in their coloring.
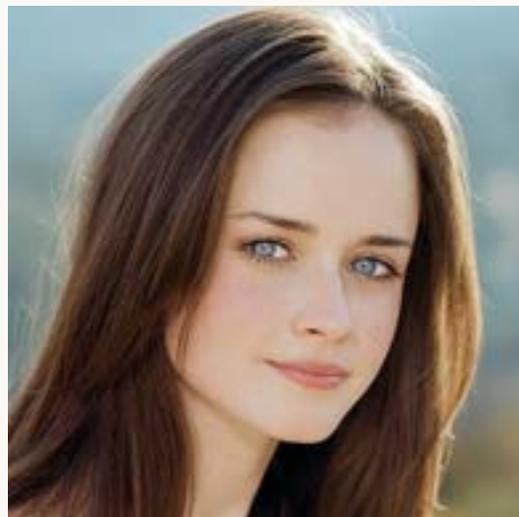
Putting it All Together
like a puzzle

Let's do some math - it will be easy math, I promise! If we have 3 Values (light, medium, and deep) and 2 Temperatures (warm and cool), and 2 Chroma (bright and soft), how many combinations will we have? Ok, I'll tell you. We have 12 different combinations, that break out like this:

Bright	Cool	Deep
Bright	Cool	Medium
Bright	Cool	Light
Bright	Warm	Deep
Bright	Warm	Medium
Bright	Warm	Light
Soft	Cool	Deep
Soft	Cool	Medium
Soft	Cool	Light
Soft	Warm	Deep
Soft	Warm	Medium
Soft	Warm	Light

Putting it All Together

like a puzzle

This is the Bright color wheel. It shows you the full spectrum of colors that start with *pure* colors in the middle band. The colors darken outward with black being added. The colors lighten inward with white being added. If you have Bright Chroma, your colors are taken from this wheel.

This is the SOFT color wheel. It shows you the full spectrum of colors that start with *slightly muted* colors in the middle band. The colors darken outward with black being added. The colors lighten inward with white being added. If you have Soft Chroma, your colors are taken from this wheel.
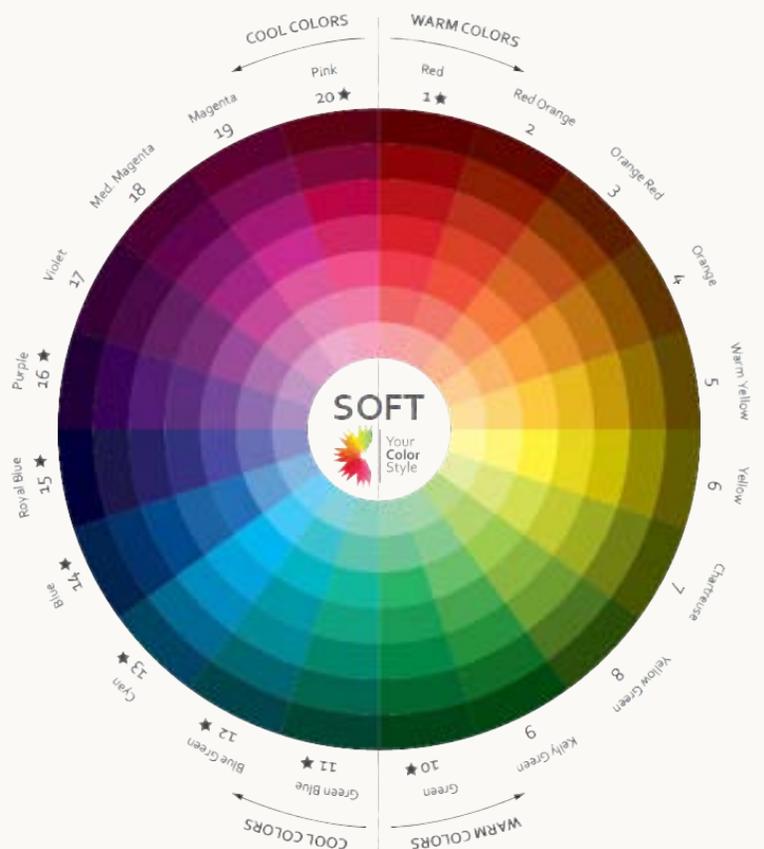
Putting it All Together

like a puzzle

If you are Bright and Deep, your colors will be taken from the Bright color wheel, most likely omitting the inner two rings. If you are Bright and Light, your colors will also be taken from this color wheel, but most likely omitting the two or three outside rings.

If you are Soft and Deep, your colors will be taken from the Soft color wheel, most likely omitting the inner two rings. If you are Soft and Light, your colors will also be taken from this color wheel, but most likely omitting the two or three outside rings.
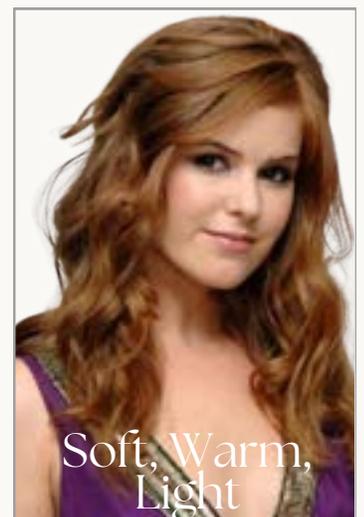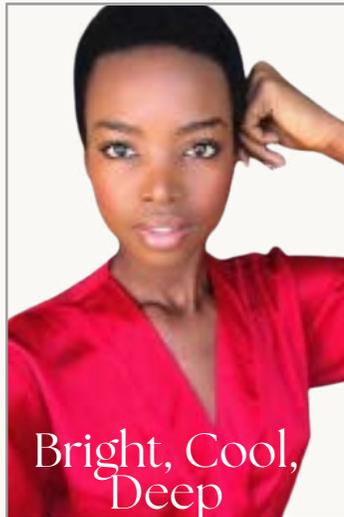
Putting it All Together

like a puzzle

If you are Bright, Deep, and Warm, your colors will be taken from the Warm side of the Bright and Deep color wheel, PLUS what colors from the Cool side are harmonious on you! If you are Bright, Light, and Cool your colors will be taken from the Bright and Light color wheel, but most likely only on the left. Very few warm tones look harmonious on cool skin, but there are some exceptions!

If you are Soft, Deep, and Warm, your colors will be taken from the Warm side of the Soft and Deep color wheel, PLUS what colors from the Cool side are harmonious on you! If you are Soft, Light, and Cool your colors will be taken from the Soft and Light color wheel, but most likely only on the left. Very few warm tones look harmonious on cool skin, but there are some exceptions!
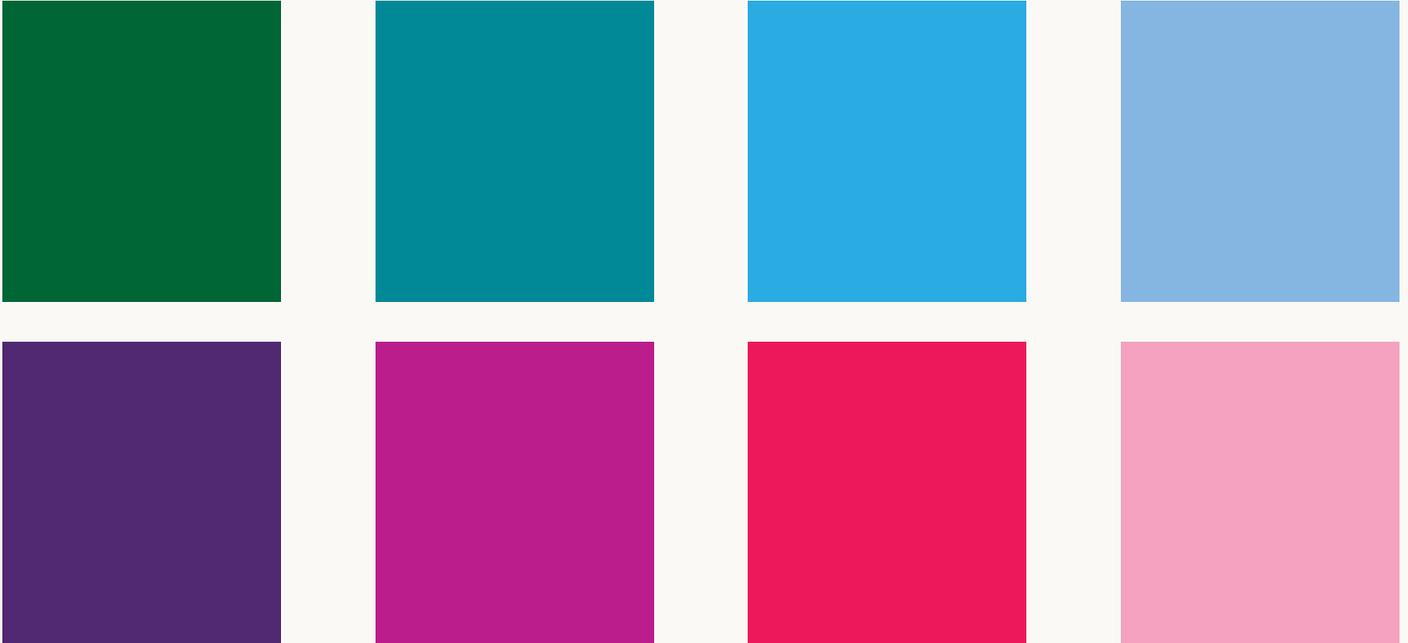

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Some Celebrity Examples!

These are just examples, obviously I've not done an analysis on them! They're used just for illustrative purposes, so you can see how each color type might represent in real life!

Bright, Cool, Deep

Soft, Cool, Deep

Bright, Warm, Deep

Soft, Warm, Deep

Bright, Cool, Medium

Soft, Cool, Medium

Bright, Warm, Medium

Soft, Warm, Medium

Bright, Cool, Light

Soft, Cool, Light

Bright, Warm, Light

Soft, Warm, Light

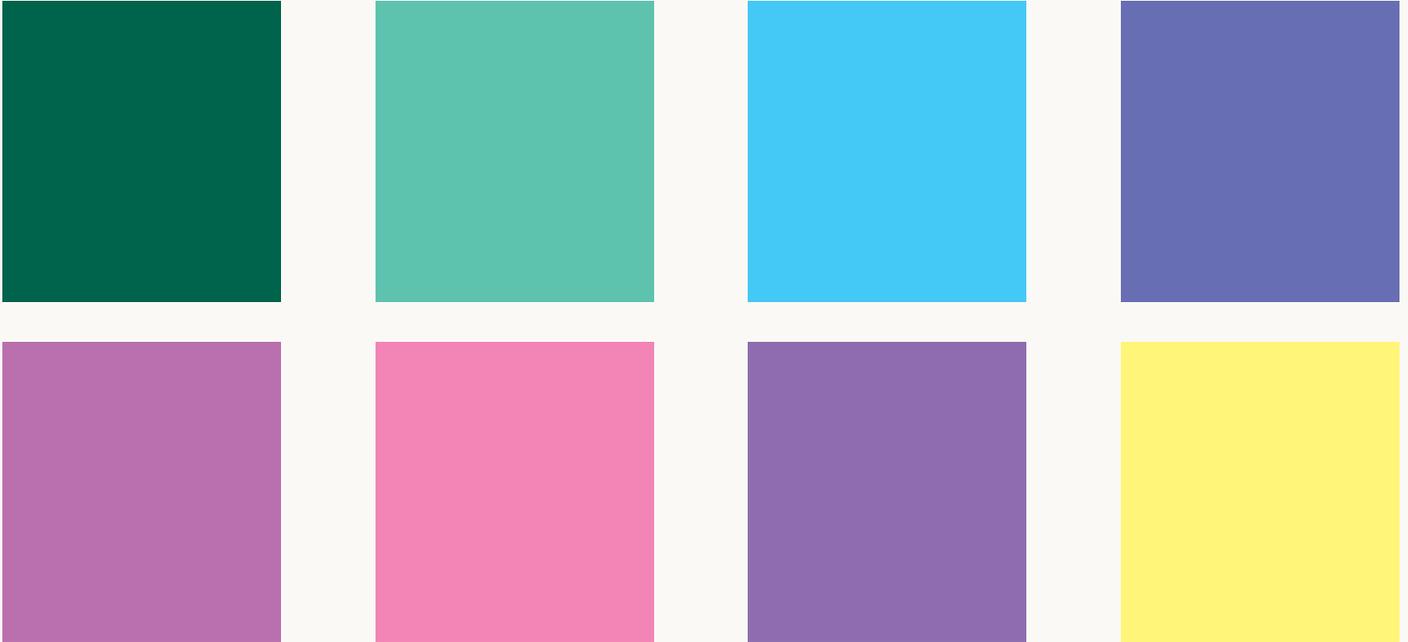# Sample color palettes

Bright and Cool

Bright and Warm

Sample color palettes

Soft and Cool

Soft and Warm

let's find your perfect color palette together!

Take me there!