## All Mixed Up <br> adding color to your life

## Primary Colors



## Primary Colors (Additive)

- RGB are the primary colors of light
- This means they can create the most number of new colors when they are combined
- All screens utilize RGB pixels to make all the colors we can see


## A bit of code

- Hex values represent colors in code
- Hex numbers range from 00 - FF, where 00 means none of that color, and FF means full color
- \#00FF00 - RGB each have a hex number, combine to make a color.


## Complementary Colors

- Red + Green = Yellow
- Green + Blue = Cyan
- Blue + Red = Magenta
- Any two colors that when added together make white


## Mixing by Subtraction (painting)

- Dyes are mixed so they only reflect the color that we want to be seen
- Red, Blue, Yellow?
- Cyan, Magenta, Yellow
- Used in painting and printing


## Color by Subtraction



## Color by Subtraction




## Why is the sky blue?

- Scattering
- Small wavelengths are scattered the most
- We're bad at seeing violet


## Why are sunsets red?

- Light has to travel farther through the atmosphere
- Longest wavelengths are scattered the least

