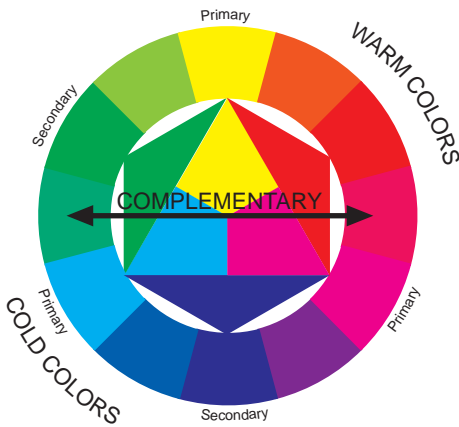


## Johannes Itten COLOR WHEEL



HUE RANGE, THE VISIBLE SPECTRUM



RED SATURATION RANGE



GREEN VALUE RANGE



GRAY SCALE



**Color** is present in our daily lives everyday, from sunrise to sunset. We all know what color is, however it is some way difficult to give a definition. We could say that **color doesn't exist cause it totally depends on the light**. If there's no light there's no color. Color is actually a **sensation or impression, it is a thought our brain has when it receives information from the eyes**. It travels through the air as electromagnetic waves. Those waves come from the light the objects' surfaces reflect. So there are basically two types of colors: Colored light and colored materials. Colored Light, **additive color**, is a little harder to understand and explain and it can be studied from the Physics area of knowledge. Material colors, also called **subtractive mixture**, are easier to understand and are all of them based in colored **pigments** mixed with a **binder**, both of them are the main ingredients for any paint. **Color Harmony** studies all types and classification of colors as well as the ways to combine them in compositions.

### COLOR TEMPERATURE: COLD AND WARM RANGES.

A **cold color harmony picture** is the one which has colors belonging to a **cold range**. A cold range is a set of colors whose main color in their mixture is blue or cyan. Here, on the right, you have an example.

Photographers measure the **temperature** of their pictures in Kelvin degrees attending to the range of colors showing in.

Cold colors, apart from temperature **express calmness, peace, silence, distance**, etc.

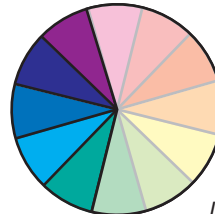


Image source: [http://www.sindark.com/wp/wp-content/uploads/2009/01/img\\_2267.jpg](http://www.sindark.com/wp/wp-content/uploads/2009/01/img_2267.jpg)



A **warm color harmony** image is the one that has colors related to a warm range. A warm range is formed by colors whose main colors in their mixture are **yellow, magenta or red**. See this example on the left.

Warm color images transmit energy, proximity, a high temperature, etc.



Sunset at Samurai Beach NSW Australia  
25 January 2004. User: Warrenlead69  
Image source: <http://commons.wikimedia.org/>

Learn why the color wheel is so important and how to use it by watching this short **Youtube video**



<http://youtu.be/59QGexKdFUI>

This **Youtube video** explains clearly the concepts of hue, value and saturation by showing variations of a cat picture.



<http://youtu.be/f31EHNzGTUI>

This **Youtube video** explains the color wheel along with hue, value and saturation with photoshop.



<http://youtu.be/fE6BmrVYxCI>

## FLOWERS ARE RED. BY HARRY CHAPIN

The little boy went first day of school  
He got some crayons and started to draw  
He put colors all over the \_\_\_\_\_  
For colors was what he saw  
And the teacher said.. What you doin' young man  
I'm paintin' flowers he said  
She said... It's not the time for art young man  
And anyway flowers are green and red  
There's a time for everything young man  
And a way it should be done  
You've got to show concern for \_\_\_\_\_ else  
For you're not the only one  
And she said...  
Flowers are red young man  
Green leaves are green  
There's no need to see flowers any other way  
Than the way they always have been seen  
But the little boy said...  
There are so many colors in the rainbow  
So many colors in the morning sun  
So many colors in the flower and I see every one  
Well the teacher said.. You're sassy  
There are ways that things should be  
And you'll paint flowers the \_\_\_\_\_ they are  
So repeat after me.....  
And she said...  
Flowers are red young man  
Green leaves are green  
There's no need to see flowers any other way  
Than the way they always have been seen  
But the little boy said...  
There are so many colors in the rainbow  
So many colors in the morning sun  
So many colors in the flower and I see every one

The teacher put him in a \_\_\_\_\_  
She said.. It's for your own good..  
And you won't come out 'til you get it right  
And all responding like you should  
Well finally he got \_\_\_\_\_  
Frightened thoughts filled his head  
And he went up to the teacher  
And this is what he said.. and he said

Flowers are red, green leaves are green  
There's no need to see flowers any other way  
Than the way they always have been seen

Time went by like it always does  
And they moved to another \_\_\_\_\_  
And the little boy went to another school  
And this is what he found  
The teacher there was smilin'  
She said...Painting should be fun  
And there are so many colors in a flower  
So let's use every one

But that little boy painted flowers  
In neat rows of green and red  
And when the teacher asked him why  
This is what he said.. and he said

Flowers are red, green leaves are green  
There's no need to see flowers any other way  
Than the way they always have been seen.

Watch this [animated video clip in Youtube of this song](#) and try to fill in the blanks.

<http://youtu.be/qeJJOjb7fj4>



## COLOR VALUES AND VARIATIONS: DARK AND LIGHT.

You know that colors have different **degrees of hue, value, saturation**. But this is a specific way to talk about color. This three qualities of color are used by artists and designers.

### So, How do regular people talk about color?

People mostly use two adjectives to describe the quality of a color. They use the word **light or pale** meaning that the color contains **more white** in its mixture and **dark** meaning that the color contains **more black** on it's mixture:

Read this example in this short conversation:

-Is Susan wearing a light blue dress?

-No, she doesn't! Her dress is not light blue at all!, Susan's dress is dark red.

DARK BLUE

PALE BLUE

DARK RED

LIGHT RED

## A NAME AND THE NAME OF THE COLOR.

We can also add a name in front of the color name, so we are explaining what color we are referring more accurately:

navy blue

denim blue

cherry red

baby blue

canary yellow

red hot

dusky red

lemon yellow

emerald green

bottle green

grass green

golden yellow



## COLOR-ISH

When something looks like a color but it is not exactly the same color that we are thinking we can add the suffix **-ISH** to the name of the color and that way we express the thing we are referring looks like pretty much like that color.

Read this short dialogue to understand the use of this suffix:

- Mike has a very nice dog, have you seen it?
- No I haven't. What color is it?
- It's brownish with white spots.

### COMPLETE THE SENTENCES WITH THE RIGHT WORD

RED-VIOLET-MAGENTA-BLACK-ORANGE-BROWN-GRAY-PINK-GREEN-YELLOW-DARK BLUE-CYAN



Most Poppies are .....



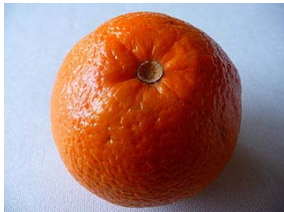
Beetroots are .....



Rosy dew plants are .....



Bulls are .....



This fruit is called .....



Trees bark is usually .....



Wolves are .....



Some roses are .....



Leaves are .....



All the sunflowers are .....



The sky at night is .....



This sky looks .....

All images taken from <http://commons.wikimedia.org/>

Poppy: Mohnbluete\_Durchlicht.jpg. User: Janwo

Beetroot: Beetroot\_preparing\_for\_curry.jpg. User: Ramesh NG

Rosy Dew plant: Starr\_080219-2882\_Lampranthus\_roseus.jpg. User: Forest & Kim Starr

Orange: Orange\_ungeschältl.JPG. User: 3268zauber

Bark: Rombergpark-100330-11398-Kastanie-Rinde.jpg. User: Mbdortmund

Wolf: Canis\_lupus\_laying\_in\_grass.jpg. User: John and Karen Hollingsworth

Leave: Hosta\_sieboldiana\_leave.jpg. User: Römert

Sunflower: Sunflower\_from\_Silesia.JPG. User: Pudelek (Marcin Szala)

Bull: Pudelek (Marcin Szala). User: Santiago Molina N.

Night sky: Jalama\_Moon\_(8358022075)\_2.jpg. User: John Murphy

Rose: Tea\_rose\_hybrid\_and\_bud.JPG. User: Jebulon

day sky: Greefus\_groinks\_-\_A\_lot\_of\_sky\_(by-sa).jpg. User: greefus groinks

## SUBTRACTIVE COLORS AND PIGMENTS

**Paint** is also what it is called **subtractive** mixture. When you mix all the **colors**, or the three primary in equal parts you obtain **black**.

**Paint** is a **substance** always composed by **Pigments** and a **binding medium**. Depending on the binding medium or **binder** we get one type of paint or other.

**Oil paint** uses **linseed oil** as a binder, while tempera paint used egg yolk, currently they use acrylic substances; **Encaustic** use **honeybee wax** and **resin** as binders and the pigments. That paint was used by ancient greek to pain their **outdoor sculptures** and **temples** and it lasted really long.

Paint also needs a **solvent**. So

sometimes when it is too **dry** or **thick** you can add the solvent to the paint and it will become more **liquid**. Solvents can be **alcohol**, **water** or **turpentine** depending the type of paint and its binder.

Watch this **Youtube tutorial** on how to make your own tempera paint with egg as a binding medium and pigments.

<https://youtu.be/tqTuG0h8SEg>



Indian pigments. Dan Brady

Img. Source: <http://www.flickr.com/photos/11853009@N07/1382064216/>

## ARTIST OR DESIGNERS WHO "PLAY" WITH COLORS

Many different occupations need that people who work on them "play" with colors. Colors themselves and their combinations are worth to communicate feelings or emotions or even call the attention of people who see or observe the results of a job.

### ARTISTS AND PAINTERS

Artists, specially painters, are thinking constantly about which colors they use or not depending on what they want to say, transmit or explain in their art.



Guernica by Pablo Picasso. 1937. Oil on canvas.  
Image source: <http://en.wikipedia.org/wiki/File:PicassoGuernica.jpg>

Picasso is one of the most important artists in Art history. He lived a season painting mostly blue paints. Later he became a cubist (arts style) and painted many paintings using many different colors. The most famous painting by Picasso is "The Guernica" which represented the result of a battle during the Spanish civil war.

**Why do you think Picasso used a gray scale? Do you think he was trying to communicate something special with it?**

### CLOTHES DESIGNERS

Clothes designers need to think about the colors they use for their creations all the time. Agatha Ruiz de la Prada is a Spanish clothes designer who is known for using bright and colorful designs

**Do you have a favourite color to dress with? Do you like better colorfull clothes or more formal and less saturated?**



**AGATHA RUIZ DE LA PRADA**

Agatha Ruiz de la Prada's Blog heading image  
Image source: <http://agatharuizdelaprada-com.blogspot.com.es/>

### WEB, PRESS, AND ADVERTISING



The use of color in advertising and graffic or web design is also very important. Designers need to know well the meanings of colors and which are the colors they need to use for every different purpose.

**When you read a magazine or a news paper do you pay more attention to any kind of image? Do you think colors make people realize of some products?**

MARCA.COM index page  
Image source: <http://www.marca.com>

### CONSTRUCTION AND DECORATION

Colors are also important in building design or architecture. Some buildings or even towns have a lot of personality because of their colored outside walls. The inside colors used for decoration are very important as well in order to create ambients.



Villa Joyosa (Alicante, Spain) houses  
Image source: <http://trapatroles.wordpress.com/2008/11/10/la-vila-joiosa-alicante/>



Frida Kahlo house  
Image source: <http://lasillaturquesa.blogspot.com.es/2011/06/la-casa-azul-de-frida-kahlo-y-diego.html>

**Which colors would you use to paint the outside if you had a house? How about your own bedroom? Do you have a main color in it? would you change it?**