# THE ART OF INFOGRAPHICS

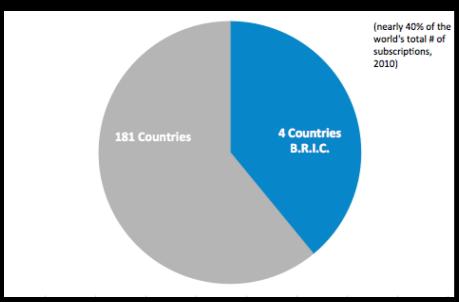
# WHAT IS THE DIFFERENCE?

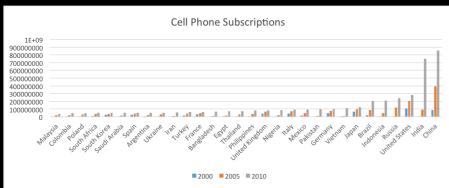
Simply put, data visualization is a visual representation of data. This data is quantifiable and is often in the form of pie charts, bar charts, line charts etc. Often a data visualization is used to help make sense of data and to make the data more accessible. The design of a specific data visualization is usually secondary to the data, and is often computer generated.

An information graphic, otherwise known as an infographic is created to tell a story. The design of the infographic is very important. The designer uses composition, color, typography and illustration to help tell the story to a particular audience. The design that is used for one infographic cannot usually be used for another.

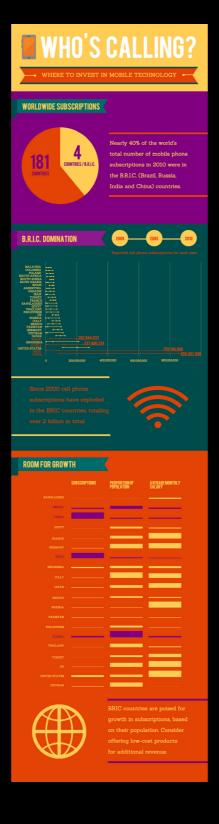
An Infographic can contain data visualizations, but a data visualization cannot contain an infographic. Both data visualizations and infographics can be static, interactive or animated.

#### **DATA VISUALIZATIONS**

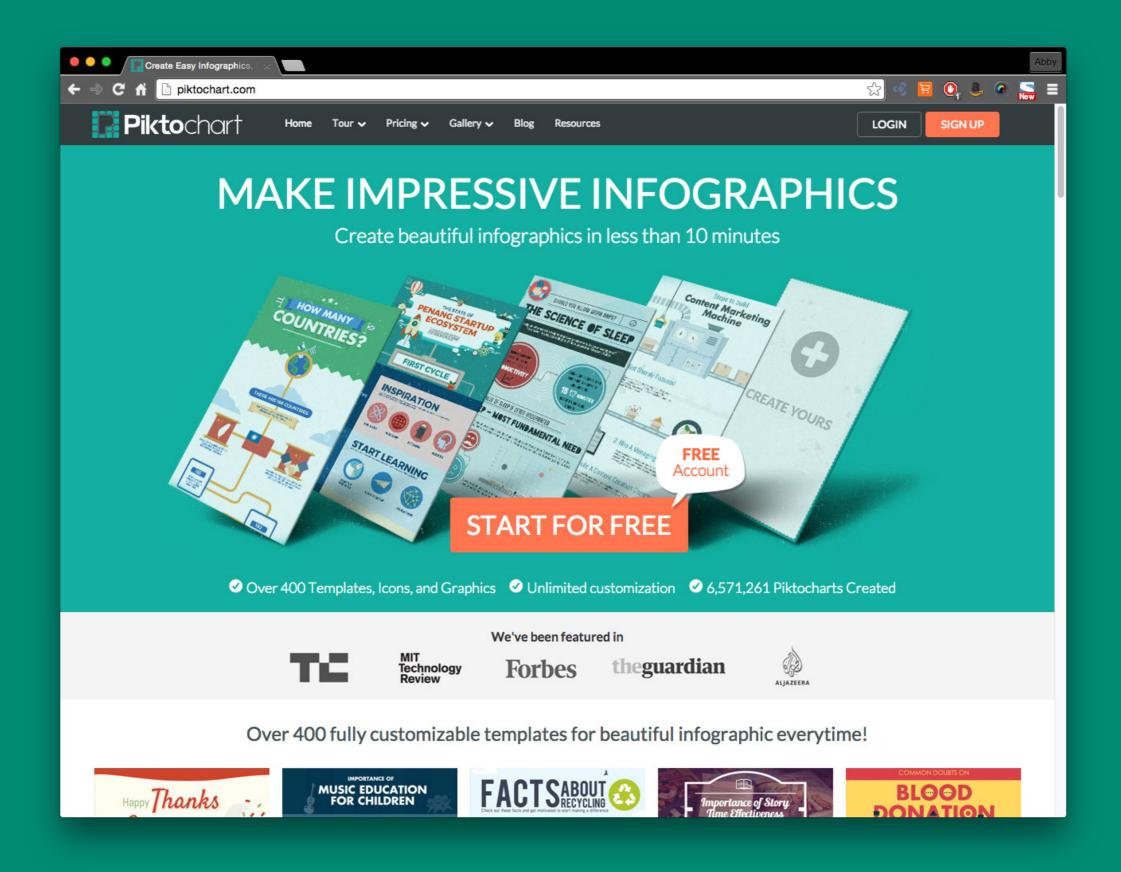




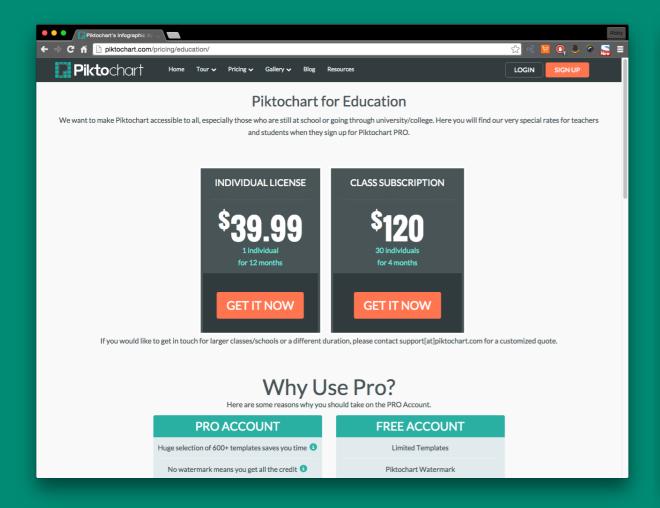
#### **INFOGRAPHIC**

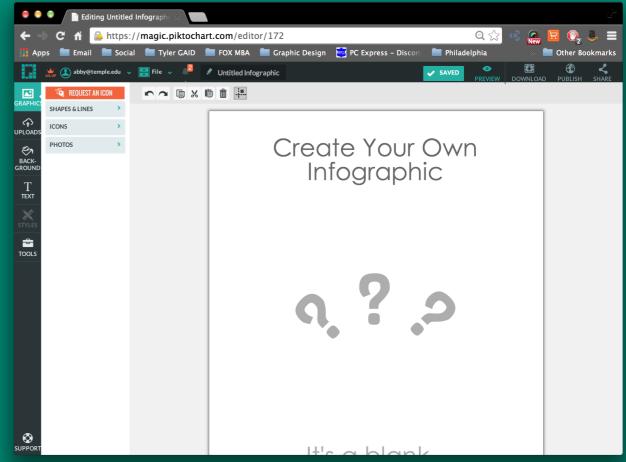


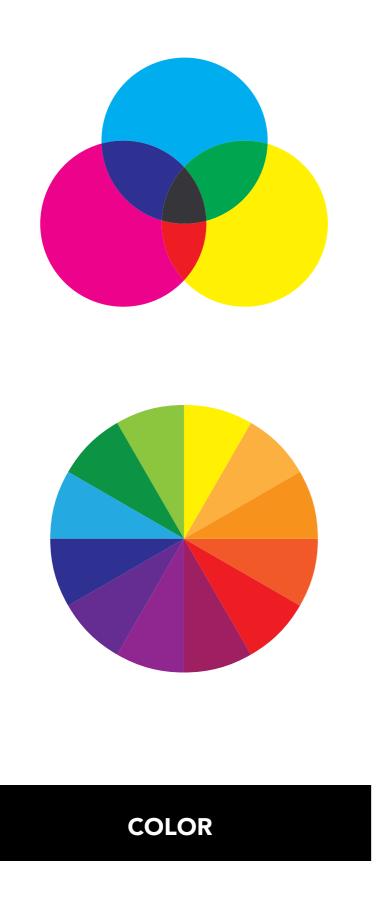


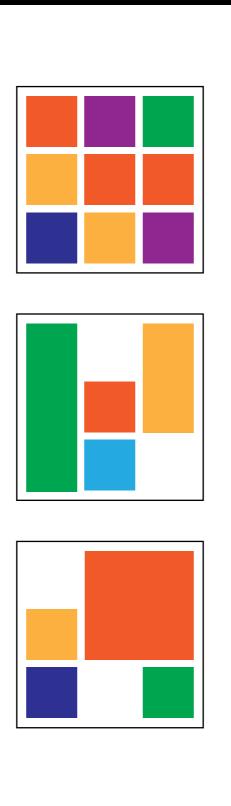


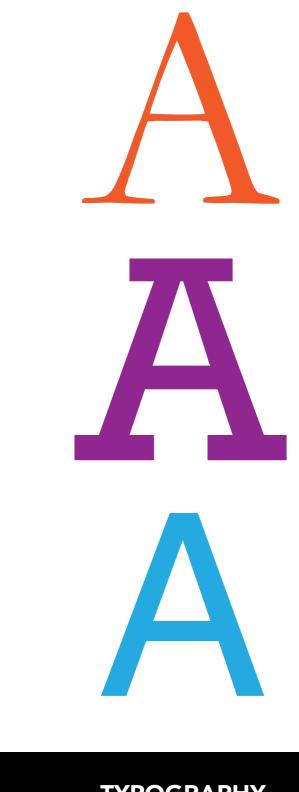
# **WYSIWYG APP**







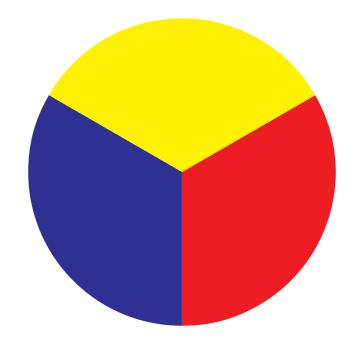


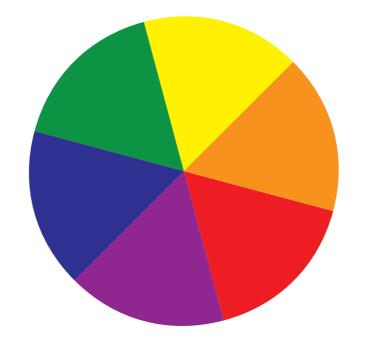


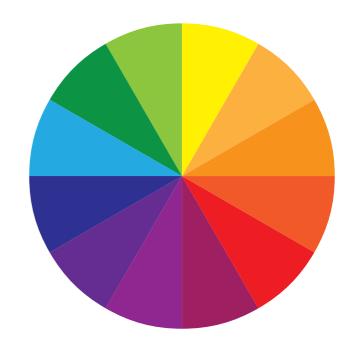
**COMPOSITION** 

**TYPOGRAPHY** 

# COLOR THEORY







#### **PRIMARY COLORS**

#### Primary Colors: Red, yellow and blue

In traditional color theory (used in paint and pigments), primary colors are the 3 pigment colors that can not be mixed or formed by any combination of other colors. All other colors are derived from these 3 hues.

#### **SECONDARY COLORS**

# Secondary Colors: Green, orange and purple

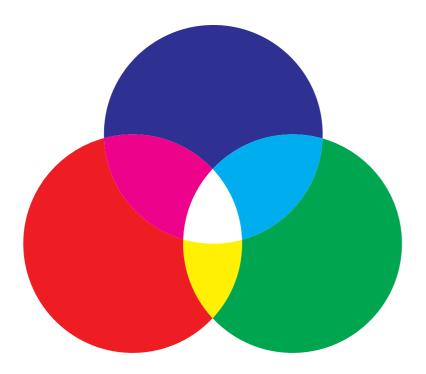
These are the colors formed by mixing the primary colors.

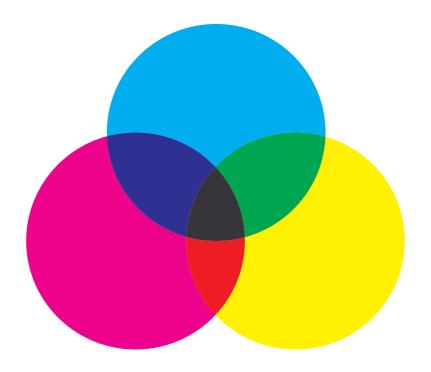
#### **TERTIARY COLORS**

#### Tertiary Colors: Yellow-orange, redorange, red-purple, blue-purple, bluegreen & yellow-green

These are the colors formed by mixing a primary and a secondary color. That's why the hue is a two word name, such as blue-green, red-violet, and yellow-orange.

**COLOR: MIXING** 



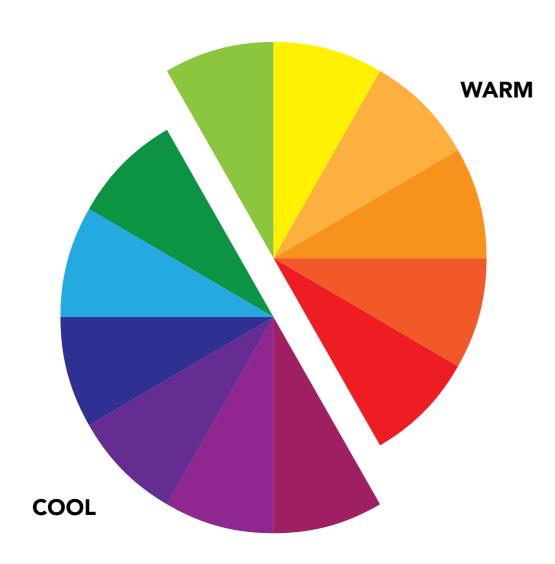


#### **RGB (RED, GREEN, BLUE)**

RGB is an 'additive color' process where color is produced by the light emitting from your monitor. In this process, the three primary colors of light are combined in various proportions to produce any color in the visible spectrum. You cannot print RGB colors, these can only be seen on screen and will be converted when printed.

#### CMYK (CYAN, MAGENTA, YELLOW AND BLACK)

CMYK are the colors used in printing inks. These four colors are used in printing because virtually any visible color can be created simply by mixing them in various amounts. CMYK is a 'subtractive color' process, which works by subtracting the colors of light reflected on a piece of white paper. In other words, each color of ink on the paper reduces the light that would otherwise be reflected and seen by our eyes. For example, when light falls on red ink printed on white paper, it absorbs (subtracts) all the colors from light except red. Hence this process is called a 'subtractive color' process.



**WARM COLORS** are vivid and energetic, and tend to advance in space.

**COOL COLORS** give an impression of calm, & create a soothing impression.

WHITE, BLACK AND GRAY are considered to be neutral.

#### **COLOR AND EMOTIONS**

**RED** is the color of fire and blood, so it is associated with energy, war, danger, strength, power, determination as well as passion, desire, and love.

**ORANGE** combines the energy of red and the happiness of yellow. It is associated with joy, sunshine, and the tropics. Orange represents enthusiasm, fascination, happiness, creativity, determination, attraction, success, encouragement, and stimulation.

**YELLOW** is the color of sunshine. It's associated with joy, happiness, intellect, and energy.

**GREEN** is the color of nature. It symbolizes growth, harmony, freshness, and fertility. Green has strong emotional correspondence with safety. Dark green is also commonly associated with money.

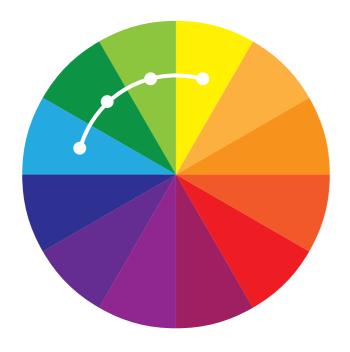
**BLUE** Blue is the color of the sky and sea. It is often associated with depth and stability. It symbolizes trust, loyalty, wisdom, confidence, intelligence, faith, truth, and heaven.

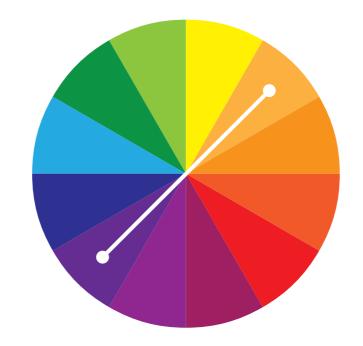
**PURPLE** combines the stability of blue and the energy of red. Purple is associated with royalty. It symbolizes power, nobility, luxury, and ambition. It conveys wealth and extravagance. Purple is associated with wisdom, dignity, independence, creativity, mystery, and magic.

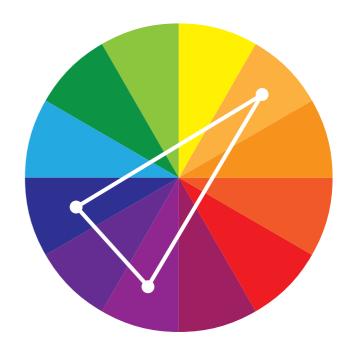
**WHITE** is associated with light, goodness, innocence, purity, and virginity. It is considered to be the color of perfection.

**BLACK** is associated with power, elegance, formality, death, evil, and mystery.

(http://www.color-wheel-pro.com/color-meaning.html)







#### **ANALOGOUS**

Uses any three or more colors on the color wheel that have a color in common and are adjacent on the color wheel. Analogous color schemes are often found in nature and are harmonious and pleasing to the eye. Make sure you have enough contrast when choosing an analogous color scheme. Choose one color to dominate, a second to support. The third color is used (along with black, white or gray) as an accent.

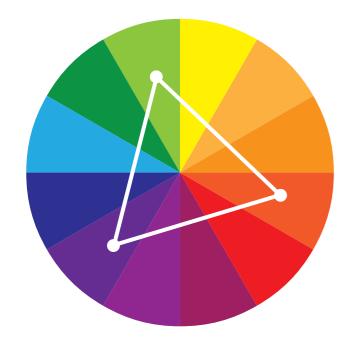
#### **COMPLEMENTARY**

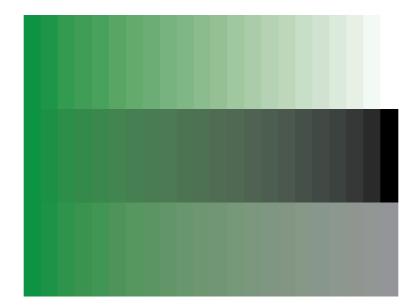
Uses colors that are across from each other on the color wheel. The high contrast of complementary colors creates a vibrant look especially when used at full saturation. This color scheme must be managed well so it is not jarring. Complementary colors are tricky to use in large doses, but work well when you want something to stand out.

#### **SPLIT-COMPLEMENTARY**

A variation of the complementary color scheme. In addition to the base color, it uses the two colors adjacent to its complement

This color scheme has the same strong visual contrast as the complementary color scheme, but has less tension. The split-complimentary color scheme is often a good choice for beginners, because it is difficult to mess up.





#### **TRIAD**

Uses colors that are evenly spaced around the color wheel. Triadic color harmonies tend to be quite vibrant, even if you use pale or unsaturated versions of your hues. To use a triadic harmony successfully, the colors should be carefully balanced - let one color dominate and use the two others for accent.

#### **MONOCHROMATIC**

Uses one color and all of the tints, tones, and shades of that color.

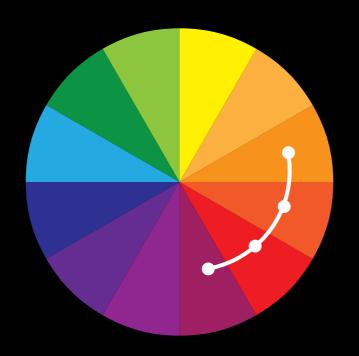
25.9%

24.5%

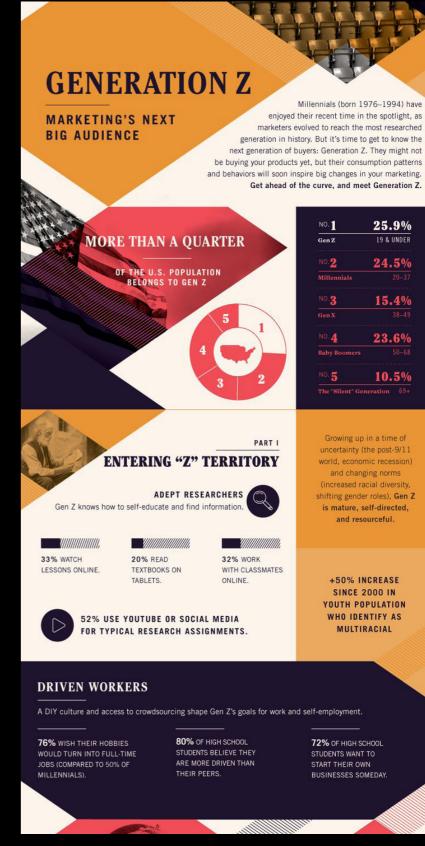
15.4%

23.6%

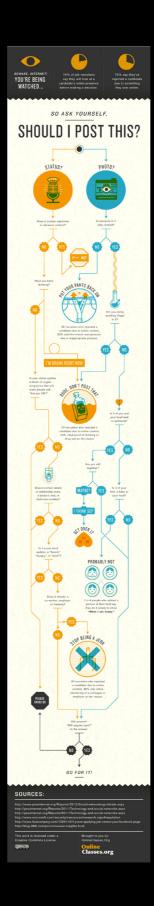
10.5%

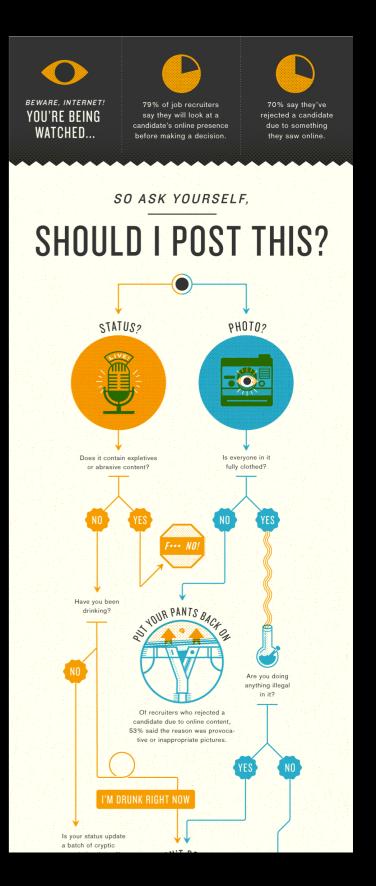


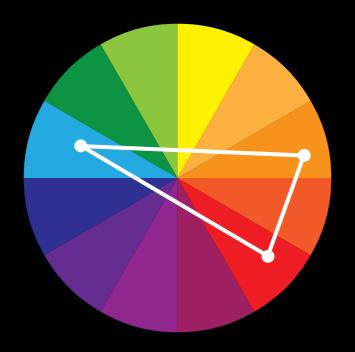




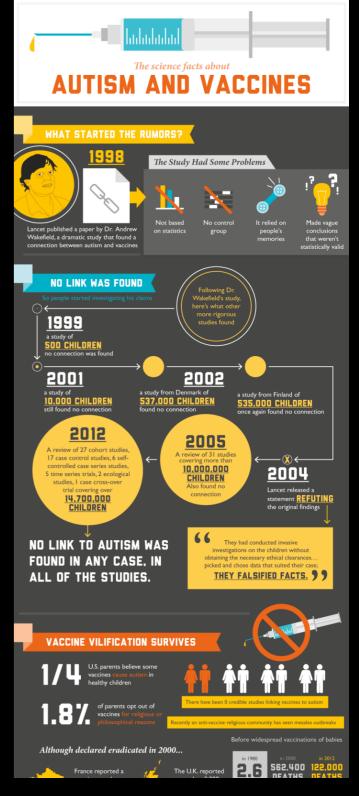




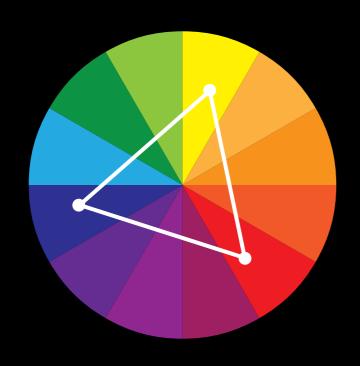








**COLOR: TRIAD** 

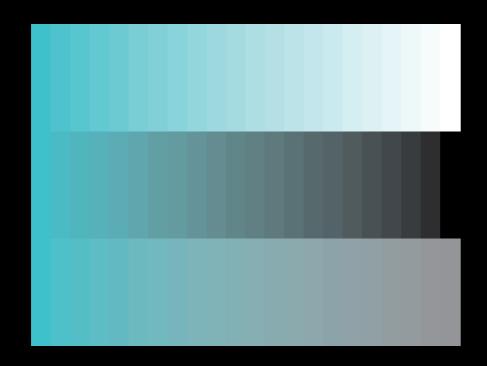


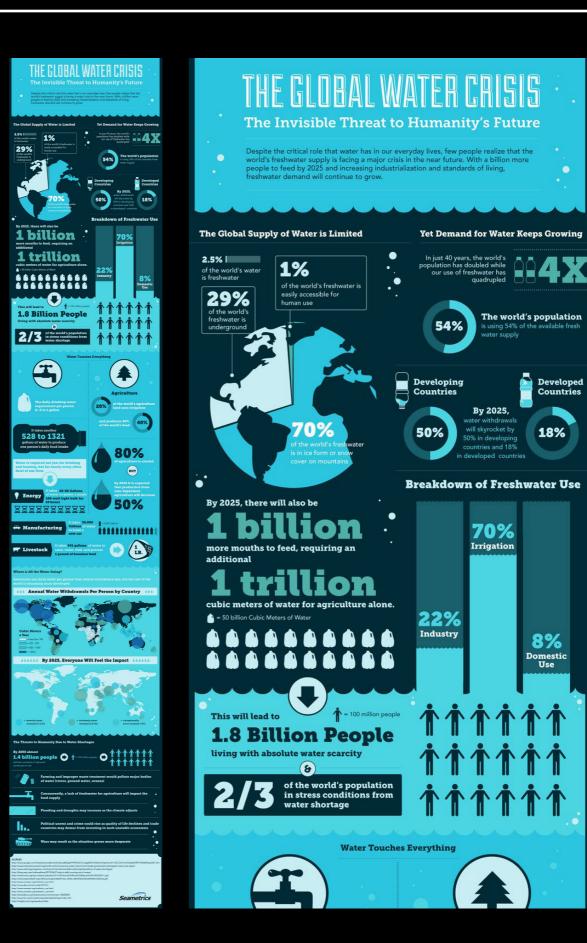


The world's population

Developed Countries

18%





#### **BACKGROUND COLOR**

#### **TEXT COLOR**





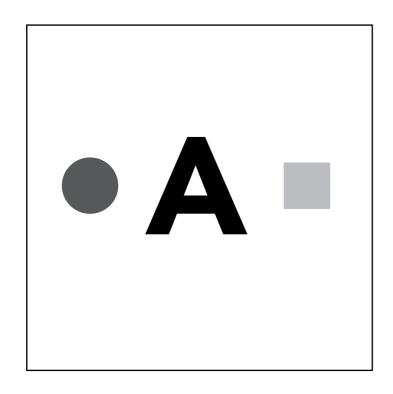
**COLOR TIP: USE A COLOR PICKER** 

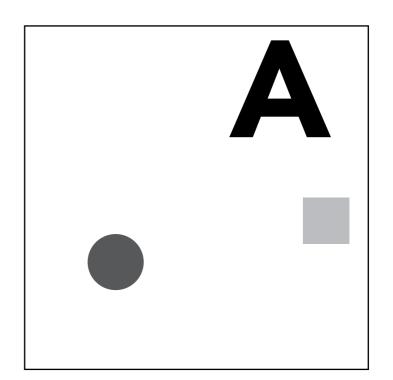
http://www.w3schools.com/tags/ref\_colorpicker.asp

**COLOR TIP: USE ADOBE COLOR APP** 

https://color.adobe.com

# COMPOSITION



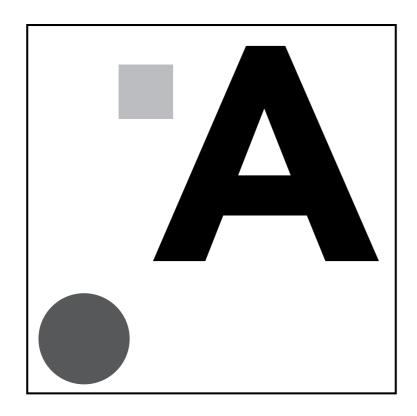


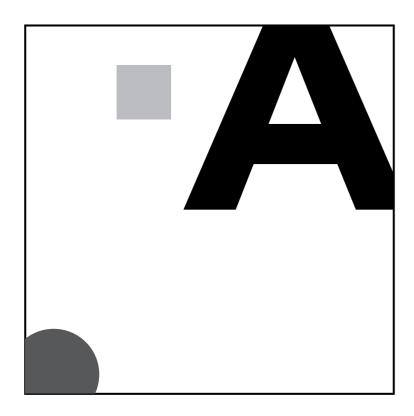
#### **SYMMETRIC**

A composition that is balanced and uses the elements in equal amounts. It is divisible into equal parts. A symmetrical composition is more passive and expected.

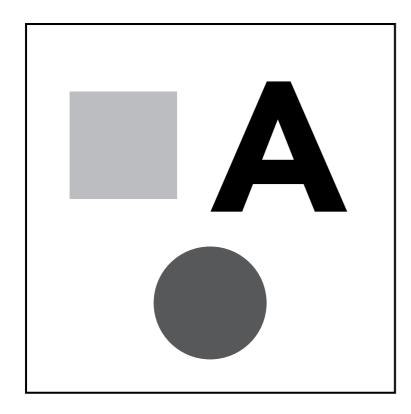
#### **ASYMMETRIC**

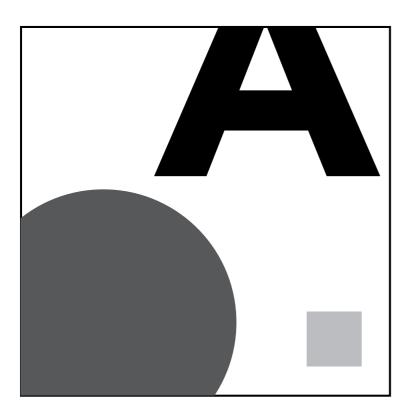
A composition that is not balanced and does not use the elements in equal amounts. It is not divisible into equal parts. An asymmetrical composition is active and dynamic and sparks emotions.



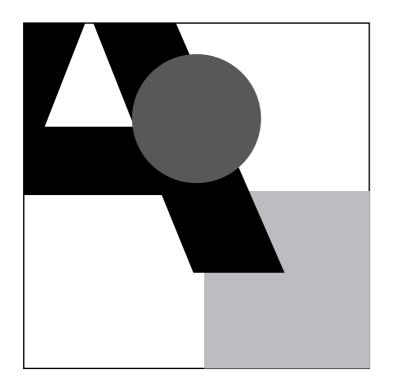


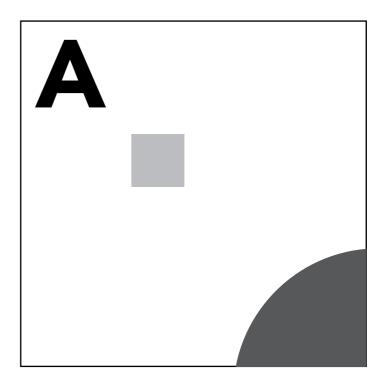
When any image or element on a page touches the edge of the page, extending beyond the trim edge, leaving no margin it is said to bleed. When you bleed an image you are cropping it. Bleeding images also helps make a composition more dynamic. Be careful not to place a graphic element too close to an edge but with no bleed. This often looks like a mistake.





Scale refers to overall size and proportion refers to relative size. Scale and proportion principles help the viewer organize an image and they can be used to create or minimize points of emphasis. If an object is out-of-scale or oddly proportioned, then it will create a point of emphasis. Also, large scale objects create obvious visual weight. We automatically perceive larger objects as closer and more important than smaller objects.



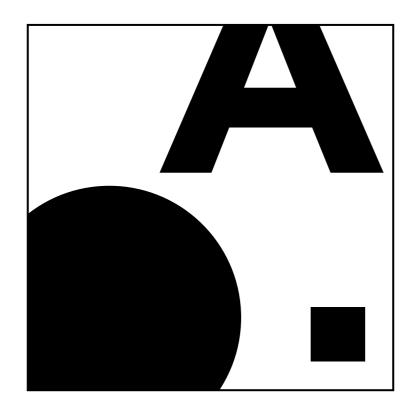


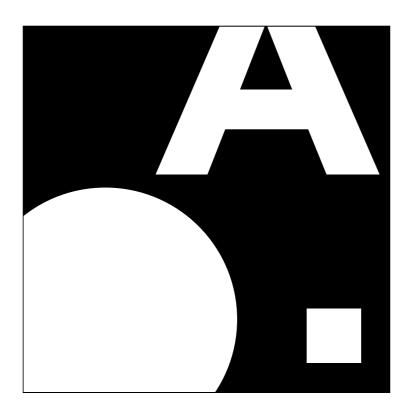
#### **OVERLAPPING**

When shapes are in front of other shapes. If one shape overlaps another it communicates an illusion of depth.

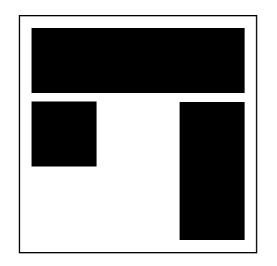
#### **FOCAL POINT**

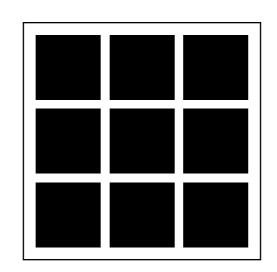
Using layout principles you can create the focal point of your composition.

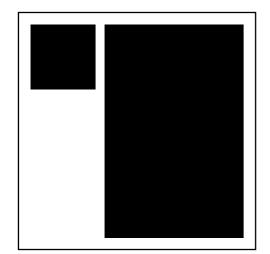


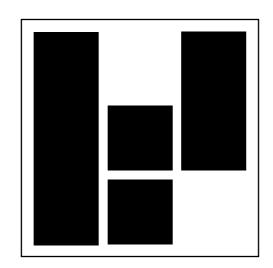


Positive space is best described as the areas in a work of art that are the subjects, or areas of interest. Negative space is area around the subjects, or areas of interest. Positive space does not have to be black, and negative space does not have to be white.

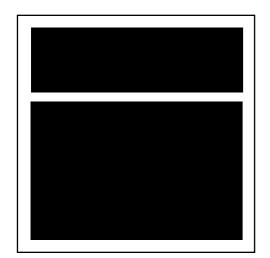


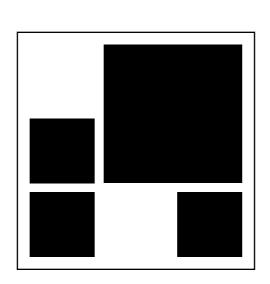




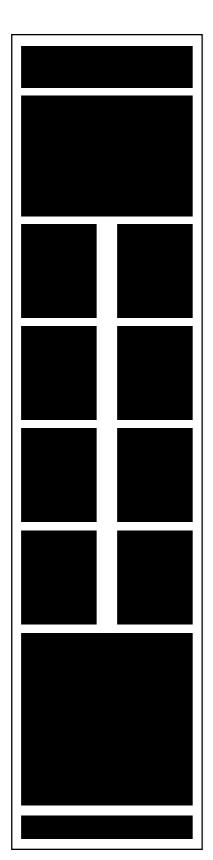


The grid serves as an armature on which a designer can organize graphic elements (images, paragraphs) in a rational, easy to absorb manner. A grid can be used to organize graphic elements in relation to a page, in relation to other graphic elements on the page, or relation to other parts of the same graphic element or shape. All layouts should start with a grid. Do you want a uniformed grid or non-uniformed?

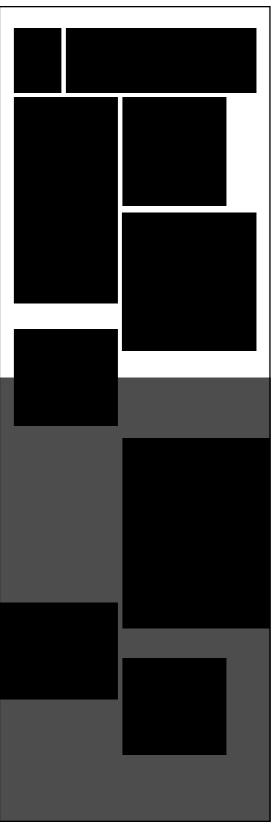




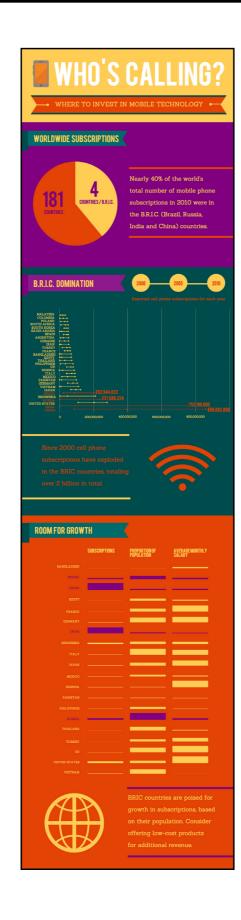


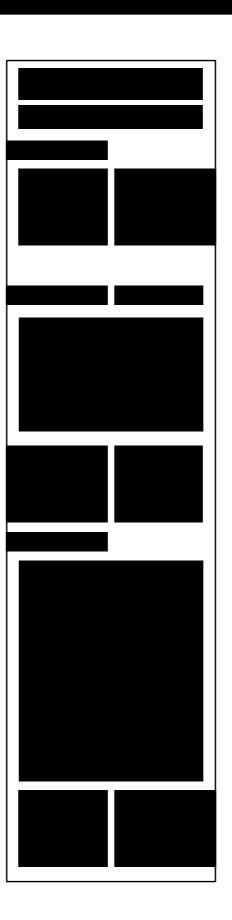






### COMPOSITION: USING COMPOSITION IN PIKTOCHART THE ART OF INFOGRAPHICS



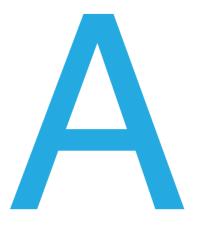


# TYPOGRAPHY



#### **SERIF**

Serif typefaces have little feet or wings at each end. Serif fonts are seen as TRADITIONAL, STABLE, PRACTICAL, SERIOUS, MATURE, FORMAL, SCHOLARLY, CORPORATE, and BUSINESS-LIKE.



#### **SANS SERIF**

Sans Serif fonts are typefaces without feet, which makes them look clean and understated. Their personality is **CONTEMPORARY**, and sometimes **SLEEK** and **ELEGANT**.



#### **SLAB SERIF**

Slab Serif is a certain kind of serif typeface that has thick, squared-off serifs. Slab Serif fonts are more MODERN, but can also be perceived as BOLD, HARSH, RUDE, ASSERTIVE, COARSE, or MASCULINE.



#### **SCRIPTS**

Script typefaces look like handwriting or calligraphy. They can range from casual to formal. They have **SOFT ORGANIC** and **HUMANISTIC** qualities that give them a **WARM PERSONALITY.** 

# KERNING KERNING KERNING KERNING

# TRACKING TRACKING TRACKING TRACKING TRACKING

This is tight leading. This is tight leading.

This is loose leading. This is loose leading. This is loose leading. This is loose leading. This is loose leading. This is loose leading. This is loose leading. This is loose leading. This is loose leading. This is loose leading. This is loose leading. This is loose leading. This is loose leading. This is loose leading. This is loose leading.

#### **KERNING**

Kerning is an adjustment of space between two specific letters.

#### **TRACKING**

Tracking is the uniform spacing between all of the letters in a group of text.

#### **LEADING**

Leading is the space between lines of text.

#### **1 TYPE FAMILY: AVENIR**

#### **2 TYPE FAMILIES: AVENIR AND ROCKWELL**

#### **HEADING TO APPEAR HERE**

#### Subhead to Appear Here.

Body copy goes here. Apienit hic te ius. Bus utem qui volesti offic to quunt endandios aut dolorios etur? Cusa. Voluptasiti officip iducipsant dolum. Body copy goes here. Apienit hic te ius. Bus utem qui volesti offic to quunt endandios aut dolorios etur? Cusa. Voluptasiti officip iducipsant dolum.

Footnote to appear here. Apienit hic te ius. Bus utem qui volesti offic to quunt endandios aut dolorios etur.

#### **HEADING TO APPEAR HERE**

Subhead to Appear Here.

Body copy goes here. Apienit hic te ius. Bus utem qui volesti offic to quunt endandios aut dolorios etur? Cusa. Voluptasiti officip iducipsant dolum. Body copy goes here. Apienit hic te ius. Bus utem qui volesti offic to quunt endandios aut dolorios etur? Cusa. Voluptasiti officip iducipsant dolum.

Footnote to appear here. Apienit hic te ius. Bus utem qui volesti offic to quunt endandios aut dolorios etur.

# VERTICAL VERTICAL

AVOID
TYPOGRAPHIC
CRIMES

HORIZONTAL

AVOID
TYPOGRAPHIC
CRIMES

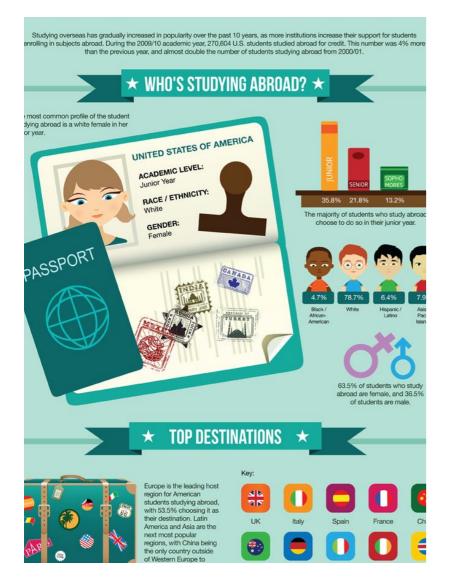
#### **VERTICAL/HORIZONTAL SCALING**

#### **SCALE**

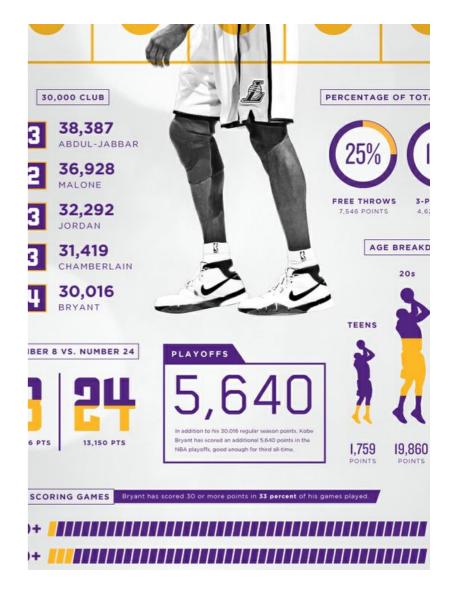
#### **STACKING**

Don't scale type vertically or horizontally, instead select a typeface the is condensed or extended.

Minimal differences in scale can look tentative and appear to be a mistake. Strong contrast in scale gives a dynamic feel. Never stack lowercase letters. They are not designed to stack. If you are stacking letters please be sure they are the same width.







#### **4 POINT SIZES**

Try to only 4 points sizes on your entire infographic, this does not have to include headlines. Be sure these vary enough in scale.

#### **2 TYPE FAMILIES**

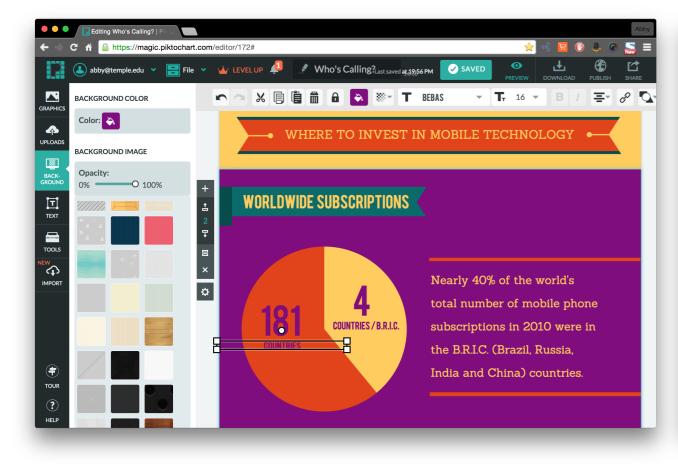
Stick to two type families. These should not be too similar. Try to vary the type classifications, so a serif and sans serif, or a script and sans serif.

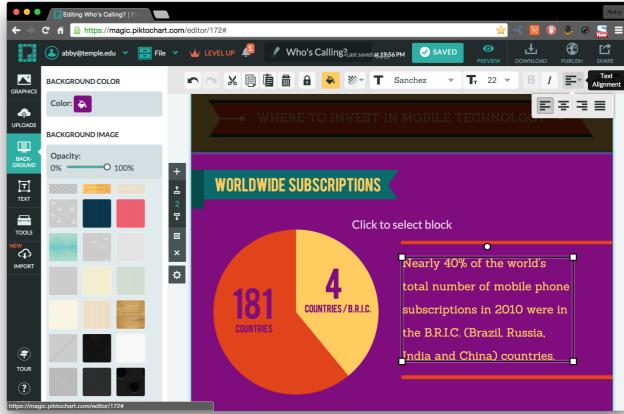
#### **AT LEAST 2 CHANGES**

Your hierarchy should have at least 2 changes. For example, all caps and different tracking, or bold and different color. If they are too similar it will look like a mistake.

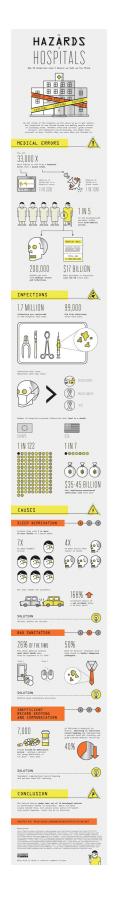
#### **DIFFERENT TEXT BOXES**

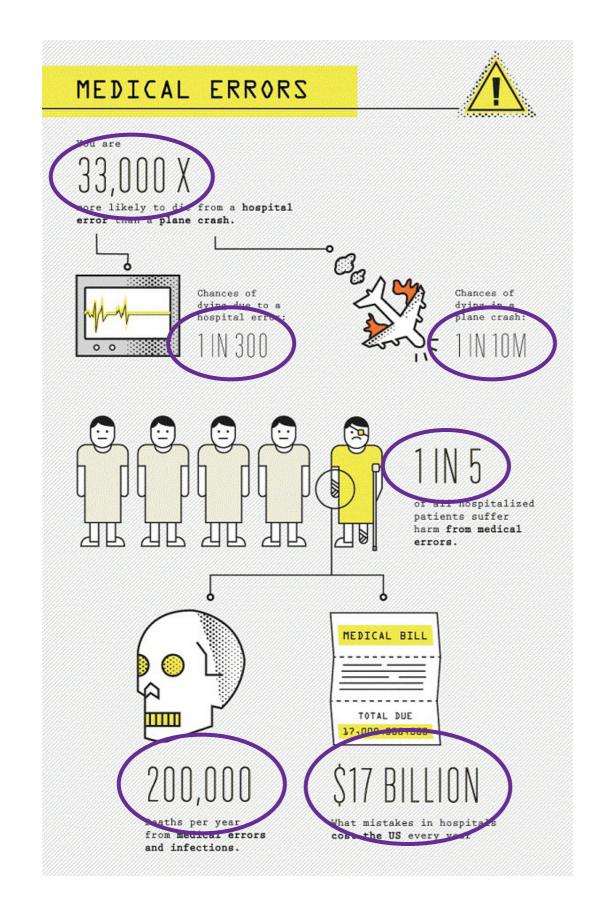
#### **ALIGNMENT**





# STORYTELLING USING NUMBERS





### USE NUMBERS TO LEAD THE VIEWER THROUGH YOUR STORY.

33,000 X

You are 33,000 X more likely to die from a hospital error than a plane crash.

1 IN 300

Chances of dying due to a hospital error: 1 in 300.

1 IN 10M

Chance of dying in a plane crash: 1 in 10 Million.

1 IN 5

1 in 5 of all hospitalized patients suffer here from medical errors.

200,000

200,000 deaths per year from medical errors and infections.

\$17 BILLION

\$17 billion, what mistakes in hospitals cost the US every year.

# WEDNESDAY'S IN OCTOBER

1PM-2PM