## Element of Design: COLOUR

## HOW WE "SEE" COLOUR

Without light there would be no colour. Things we identify as being red, green or orange, for example, are not innately those colours, but we perceive them as such because of what happens when light hits its surface.
As an experiment, Isaac Newton, in 1666, directed a beam of sunlight into a glass prism. The light bent as it passed through and separated into colours! In other words, the surface of an object reflects some colours and absorbs others. We perceive only the reflected colours.

1. Light waves enter the eye through the pupil.
2. Light hits the retina and a message is sent through the nerves to the brain.

Therefore, the eye and brain work together to translate light into colour. Light
 receptors within the eye transmit messages to the brain, which produces the familiar sensation of colour.
***An object appears white when it $\qquad$ all light waves.
An object appears black when it $\qquad$ all light waves. ONLY REFLECTED LIGHT WAVES PRODUCE COLOUR!


## COLOUR HAS THREE QUALITIES:

1. Hue
2. Value
3. Intensity

## HUE

The name given to a pure colour. Example:

## VALUE

The lightness or darkness of a colour.

- TINT: Made by adding white to a colour so that it is lighter. Example:
- SHADE: Made by adding black to a colour so that it is darker. Example:


## INTENSITY

The saturation or purity of a colour. Colours that have been tinted, thinned out or darkened will be less intense.
Example:

## THE COLOUR WHEEL

The color wheel fits together like a puzzle - each colour in a specific place. Being familiar with the colour wheel not only helps you mix colours when painting, but in adding colour to all your art creations.


## Primary Colours

Primary colours are not mixed from other elements and they generate all other colours.
Example:

## Secondary Colours

Created by mixing two primary colours together.
Example:

## Tertiary/Intermediate Colours

Created by mixing a primary and a secondary.
Example:

## Neutral Colours

White, Gray, Black and Brown

## COLOUR SCHEMES

## Monochromatic

"Mono" means "one", "chroma" means "colour"... monochromatic colour schemes have only one colour and its values. (adding white and black)
Example:

## Complementary

Complementary colours are opposite on the colour wheel and provided a high contrast.
Example:

## Analogous

Colours that are beside each other on the colour wheel.
Example:

## Warm

Warm colours are found on the right side of the colour wheel. They are colours found in fire and the sun. Warm colours make objects look closer in a painting or drawing.
Example:

## Cool

Cool colours are found on the left side of the colour wheel. They are the colours found in snow and ice and tend to recede in a composition.
Example:

## EMOTIONAL QUALITIES OF COLOUR

Red - evil, anger, fire, heat, courage, love, and often thought of as sexy.
Blue - calm, soothing, tranquil, cool, heavenly, spiritual, sadness or depression.
Yellow - cheery, embodies warmth and light.
Purple - symbol of royalty or wealth.
Green - envy, signifies life or hope, cool and restful colours of nature.
White - symbolizes purity, truth, innocence, and light.

