

School Name _____

Student Name _____

Teacher Name _____

Date ____/____/20____

Per. ____

Light - Color - Value

- *Fill in the blanks with the following words:*

chiaroscuro

Hue

retina

color-blind

Intensity

Secondary

constrasts

Light

shade

duller

Primary

spectrum

expressive

relation

value

_____ is what lets you experience color. The _____ inside the normal human eye has pigments (coloring agents) that are sensitive to different lengths of light waves. The colors you see as red have long wavelenghts. The colors you call blue have short wavelenghts. The wavelenghts you see as green have medium wavelenghts.

People who are _____ - _____ are not able to respond to certain wavelenghts of light. They may be unable to see red, green or blue. Some people are only able to see grays, white and black. Some animals – bees, for example – are sensitive to light waves that people cannot see.

The wavelenghts of light that humans can see are called the visible color _____. You see this spectrum in a rainbow. The



spectrum was first identified by Sir Isaac Newton. He found that a prism splits sunlight – white light – into colors. A prism is a clear, wedge-shaped form. A color wheel shows the spectrum of colors arranged in a circle.

Color Facts and Terms

In order to use color expressively, artists learn some of the following basic facts and terms about color. Many are easiest to remember by using a color wheel diagram.

_____ refers to the common names for the colors in the spectrum: red, orange, yellow, green, blue, and violet, etc. A pigment is a coloring agent such as paint or dye that reflects certain wavelengths and absorbs others. White pigments reflect all wavelengths equally.

_____ hues in pigments are red, yellow and blue. These hues cannot be mixed from other hues. With the primary hues, along with black and white, you can mix almost every color.

_____ hues – orange, green and violet – are mixed from primary hues. You mix red and yellow for orange, red and blue for violet, yellow and blue for green. Intermediate colors are mixed from a primary hue and a secondary hue that is next to it on the color wheel. You mix red and orange for red-orange, blue and violet for blue-violet, and so on.

Artists refer to differences in light or dark as differences in _____. Values can be changed very gradually to create shading. They can be used to create a strong contrast, or difference, in areas of light and deep shadow. You can change the value of any color by adding white. A light value is called a tint. To darken a color, add black. A dark value of a hue is called a shade. Artworks dominated by tints are called high-key works. They are usually seen as cheerful, bright, and sunny. Low-key works are dominated by dark values or shades. They are often seen as dark, mysterious or gloomy.

Sudden changes in value from light to dark create _____. Strong contrast is often called chiaroscuro (Italian for light and dark). Chiaroscuro gives a work drama or excitement. Gradual changes in value can make shadows contouring a form, or to show that the atmosphere is misty, or that the mood is calm and quiet.

_____ refers to how bright or dull a color is. Bright, high-intensity colors are like those in the spectrum. Mixing complementary colors (colors that are opposite on the color wheel) creates dull, or low intensity, colors. If you mix a small amount of green with its complement, red, the resulting red is _____. Many grays, browns and muted, neutral colors can be mixed from complements.

Color interactions can be used to create expressive qualities in artwork. For example, complementary hues such as blue and orange tend to “vibrate” and create visual excitement if placed side by side. Changing the value or intensity of hues changes the _____ quality.

Simultaneous contrast refers to the way you perceive one hue in _____ to another. For example, a yellow-orange square in the middle of an orange square will appear to be more orange than if it is in the middle of a yellow square.