

Colour Theory

What is Colour Theory

The element of art that involves the reflection of light is colour. When an object reflects light, our eyes detect those wavelengths and translate them into colours.

Colour theory is a set of principles used to understand how to use colour effectively in visual design. It's based on the concept that colours can be combined to create pleasing schemes.

This theory explains how humans perceive colours and how they mix, match and contrast with each other.

Colour theory is divided into three main categories: the colour wheel, colour value, and colour schemes.



The Colour Wheel

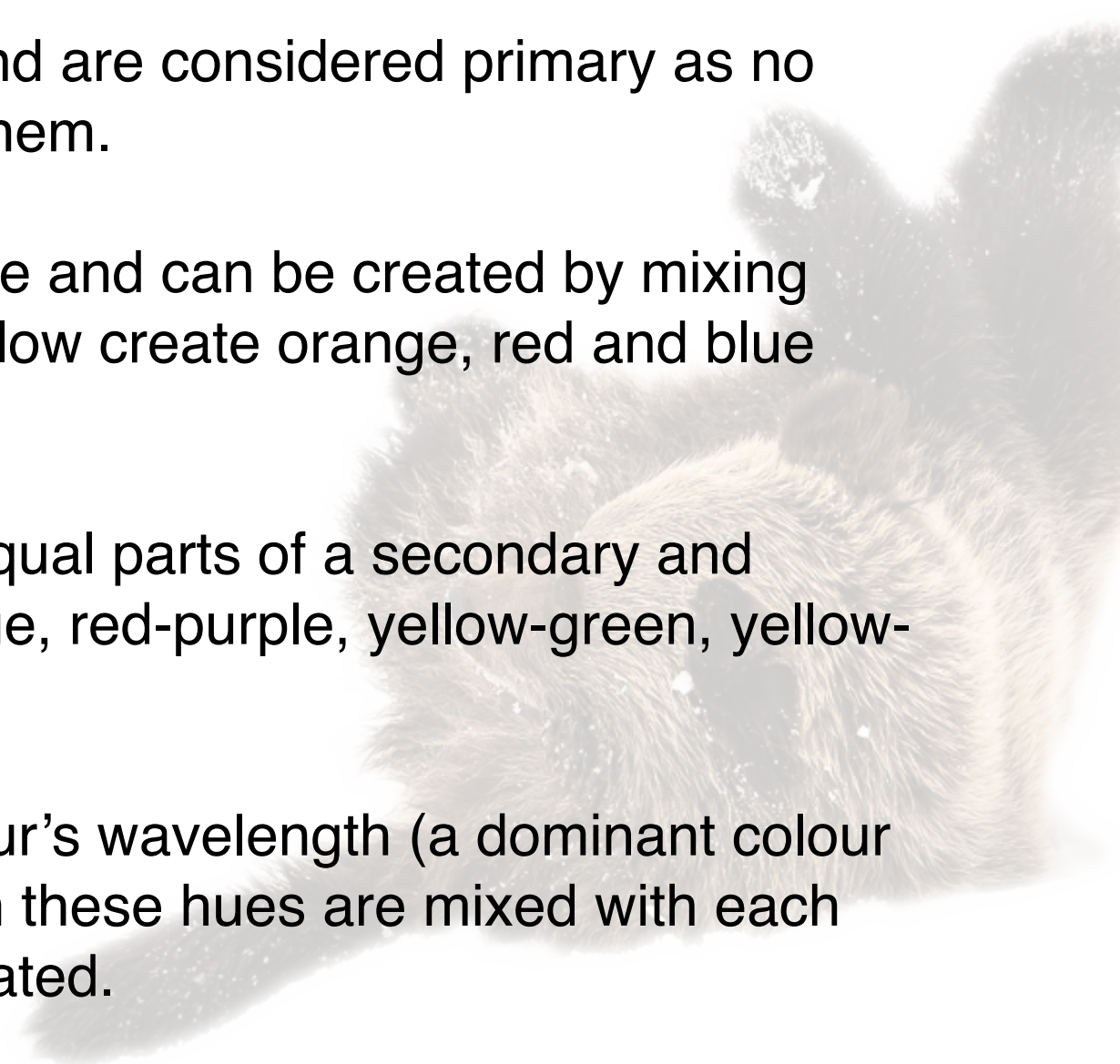
Sir Isaac Newton formalized the theory of the colour wheel to explain how different mixtures of light create colours. He took the spectrum of light (ROYGBIV) and formed it into a circle, or wheel. Today, the colour wheel is used as a tool to help artists, designers and other creatives understand how colours can be combined and used effectively in visual design. The wheel consists of three types of colours - primary, secondary and tertiary.

Primary colours include red, blue and yellow, and are considered primary as no other colours can be mixed together to create them.

Secondary colours are orange, green and purple and can be created by mixing equal parts of two primary colours. Red and yellow create orange, red and blue create violet, and yellow and blue make green.

The six tertiary colours are created by mixing equal parts of a secondary and primary colour together. They include red-orange, red-purple, yellow-green, yellow-orange, blue-green, blue-purple.

The hue of a colour refers to the dominant colour's wavelength (a dominant colour is always a primary or secondary colour). When these hues are mixed with each other, countless numbers of colours can be created.





Colour Value

Colour value refers to the lightness or darkness of a colour. If white is added to a colour, it adds a **tint**. Adding black produces a **shade**. A colour value is created based on its relation to white or black.

If grey is added, it impacts the intensity of that colour - what's known as the **tone**. The chroma, or **saturation**, of a colour refers to how “pure” that colour is, or how little white, black or grey has been added to achieve the colour.

Using different colour values adds lightness and depth to artwork, helping convey emotion and space effectively.

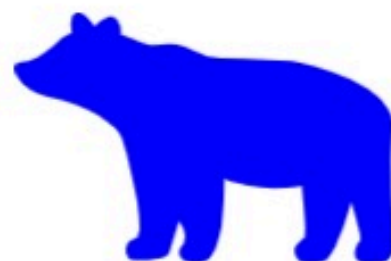


COLOUR
VALUE



WHITE
TINT

BLACK
SHADE



WHITE
TINT

BLACK
SHADE



GREY
ADDED



TONE



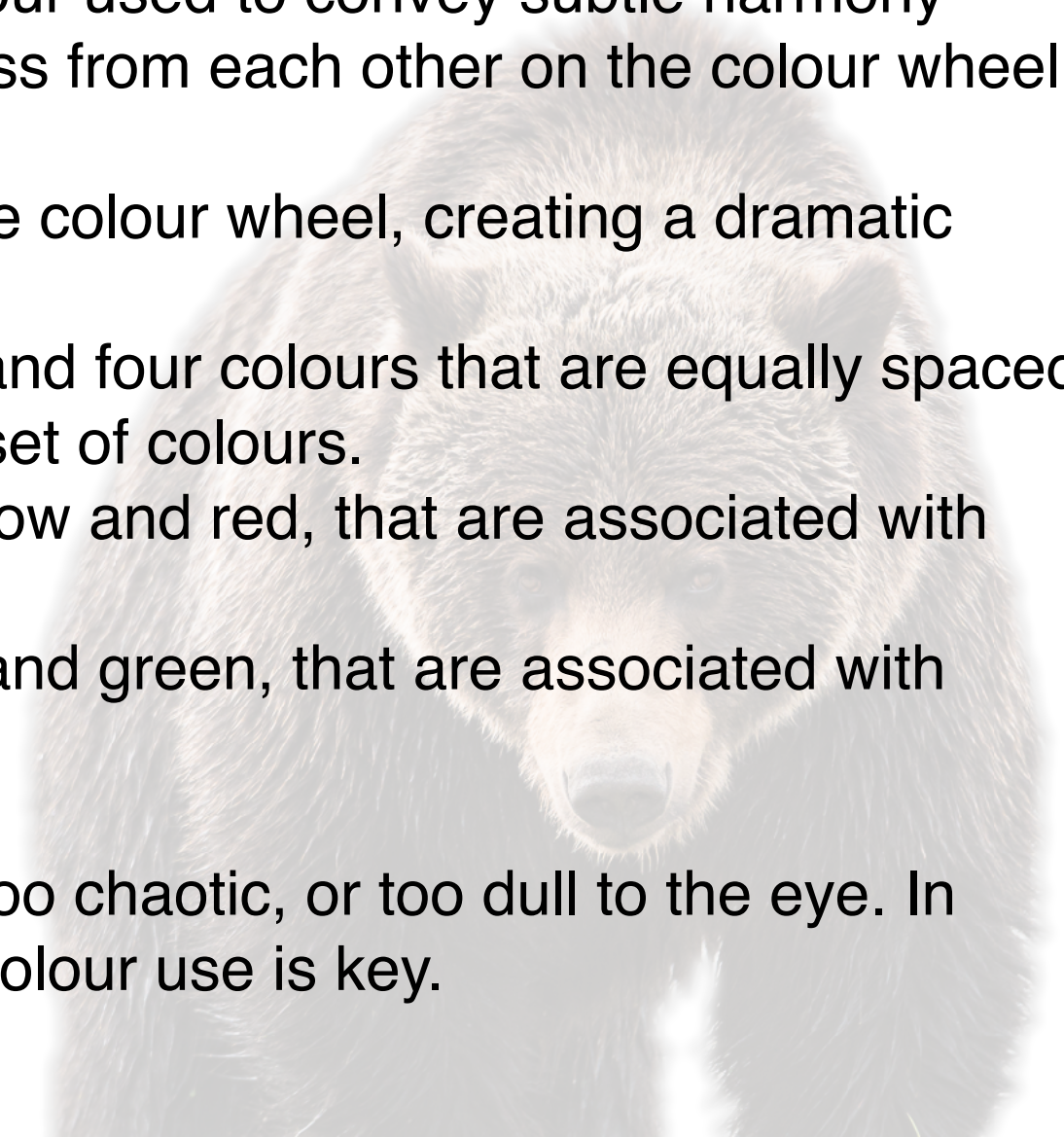
Colour Schemes

A colour scheme is created to describe how different colours are placed together in a coherent and pleasing way.

Colour schemes include the following:

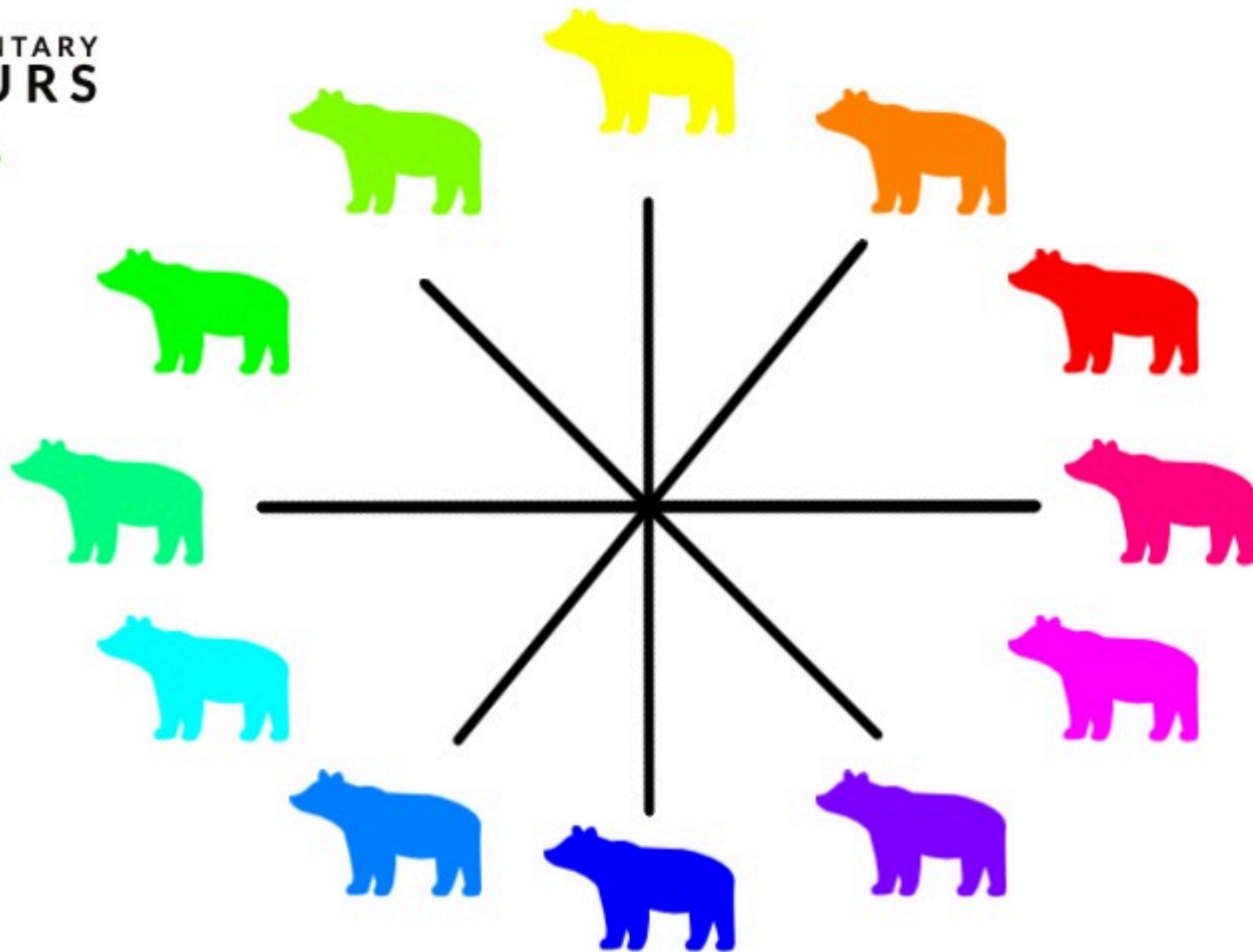
- Monochromatic - different shades of one colour used to convey subtle harmony
- Complementary - colours found directly across from each other on the colour wheel, providing contrast
- Analogous - colours next to each other on the colour wheel, creating a dramatic effect
- Triadic and Tetradic - combinations of three and four colours that are equally spaced apart on the colour wheel, producing a bold set of colours.
- Warm colours - colours, such as orange, yellow and red, that are associated with warmth
- Cool colours - colours, such as purple, blue and green, that are associated with coolness

If colours aren't in harmony, they can become too chaotic, or too dull to the eye. In order to properly engage an audience, proper colour use is key.



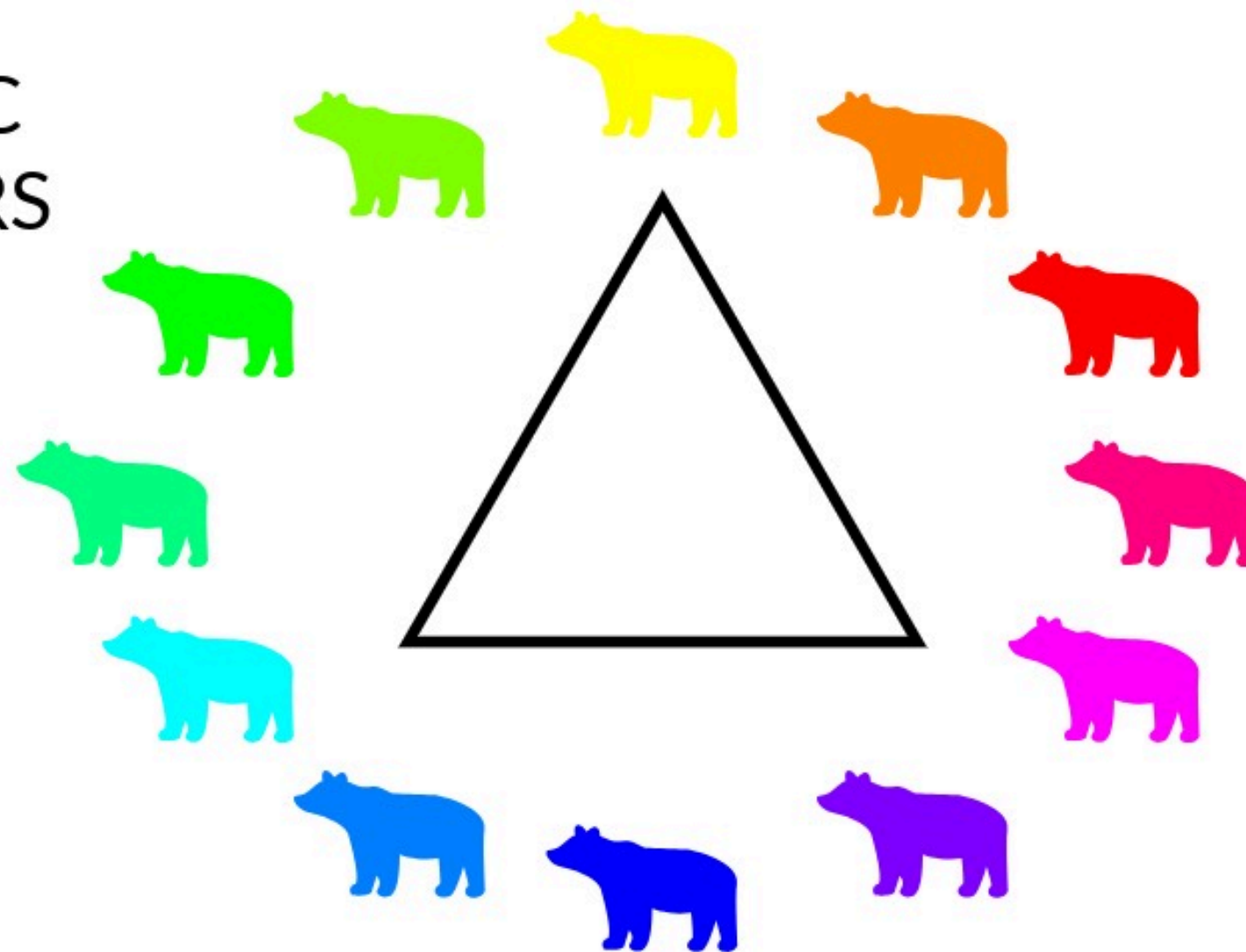


COMPLIMENTARY
COLOURS





TRIADIC
COLOURS



WARM & COOL
COLOURS

