## Colour theory

Colour theory can be defined in many ways. Here are a few basic concepts.

## The colour wheel



A colour circle, based on red, yellow and blue, is traditional in the field of art. In 1666 Sir Isaac Newton developed the first circular diagram of colours. Scientists and artists have studied and designed many variations of this colour circle. Different opinions are expressed and debated by scientists all over the world. Any opinion about colour circle or colour wheel has merit.

## Primary colours

## Secondary colours



## RED, YELLOW AND BLUE

Traditionally red, yellow and blue are the 3 pigment colours that can not be mixed or formed by other colours. All other colours are derived from these 3 hues.
 GREEN, ORANGE AND PURPLE
These are the colours formed by mixing the primary colours.


## Tertiary colours

YELLOW-ORANGE, RED-ORANGE, RED-PURPLE, BLUE-PURPLE, BLUE-GREEN AND YELLOW-GREEN.
These are the colours formed and obtained by mixing a primary and a secondary colour. That's why they have a two word name, such as blue-green, red-violet, and yellow-orange.

## Colour harmony

A pleasing arrangement of parts crates harmony. In the visual world harmony is something that is pleasing to watch. It captures the viewer and it creates an inner sense of order. It is boring and chaotic something that has not harmony. Colour harmony gives visual interest and a sense of order. Harmony is a dynamic equilibrium. Nature provides a perfect departure point for colour harmony

Any three colours which are side by side on a 12 part colour wheel are considered analogous colours.
Yellow-green, yellow, and yellow-orange are analogous colours.
Usually one of the three colours predominates.
Any two colours which are directly opposite each other are complementary colours.
Red and green and red-purple and yellow-green are complementary colours.

## Activities

## True (T) or False (F)?

T F 1) A colour circle, based on red, yellow and blue, is traditional in the field of art.
T F 2) Complementary colours are any two colours which are directly opposite each other.
T F 3) Analogous colours are any six colours which are side by side on a 12 part colour wheel.
T F 4) Red, yellow and blue are the 3 pigment colours that can not be mixed or formed by any combination of other colours.
T F 5) Red, orange and purple are the colours formed by mixing the primary colours.
T F 6) Blue-green, red-violet and yellow-orange are some of the colours formed by mixing a primary and a secondary colour.

## Tick the correct answer

1) Sir Isaac Newton developed the first circular diagram of colours:
a) in 1566 .
b) in 1666 .
c) in 1766 .

## 2) Nature provides a perfect departure point for:

a) body harmony.
b) nature harmony.
c) colour harmony.

## Complete the sentences with the correct word

1) A colour $\qquad$ based on red, yellow and blue, is traditional in the field of art.
2) Colour harmony delivers visual $\qquad$ and a sense of order.
3) Any three colours which are side by side on a 12 part colour wheel are considered
$\qquad$ colours.
4) Any two colours which are directly opposite each other are colours.

## Keys

True (T) or False (F)?


1) A colour circle, based on red, yellow and blue, is traditional in the field of art.
2) Complementary colours are any two colours which are directly opposite each other.
3) Analogous colours are any six colours which are side by side on a 12 part colour wheel.
4) Red, yellow and blue are the 3 pigment colours that can not be mixed or formed by any combination of other colours.
T 8
5) Red, orange and purple are the colours formed by mixing the primary colours.
6) Blue-green, red-violet and yellow-orange are some of the colours formed by mixing a primary and a secondary colour.

## Tick the correct answer

1) Sir Isaac Newton developed the first circular diagram of colours:
a) in 1566 .
b) in 1666 .
c) in 1766 .
2) Nature provides a perfect departure point for:
a) body harmony.
b) nature harmony.
c) colour harmony.

## Complete the sentences with the correct word

1) A colour CIRCLE, based on red, yellow and blue, is traditional in the field of art.
2) Colour harmony delivers visual INTEREST and a sense of order.
3) Any three colours which are side by side on a 12 part colour wheel are considered ANALOGOUS colours.
4) Any two colours which are directly opposite each other are COMPLEMENTARY colours.
