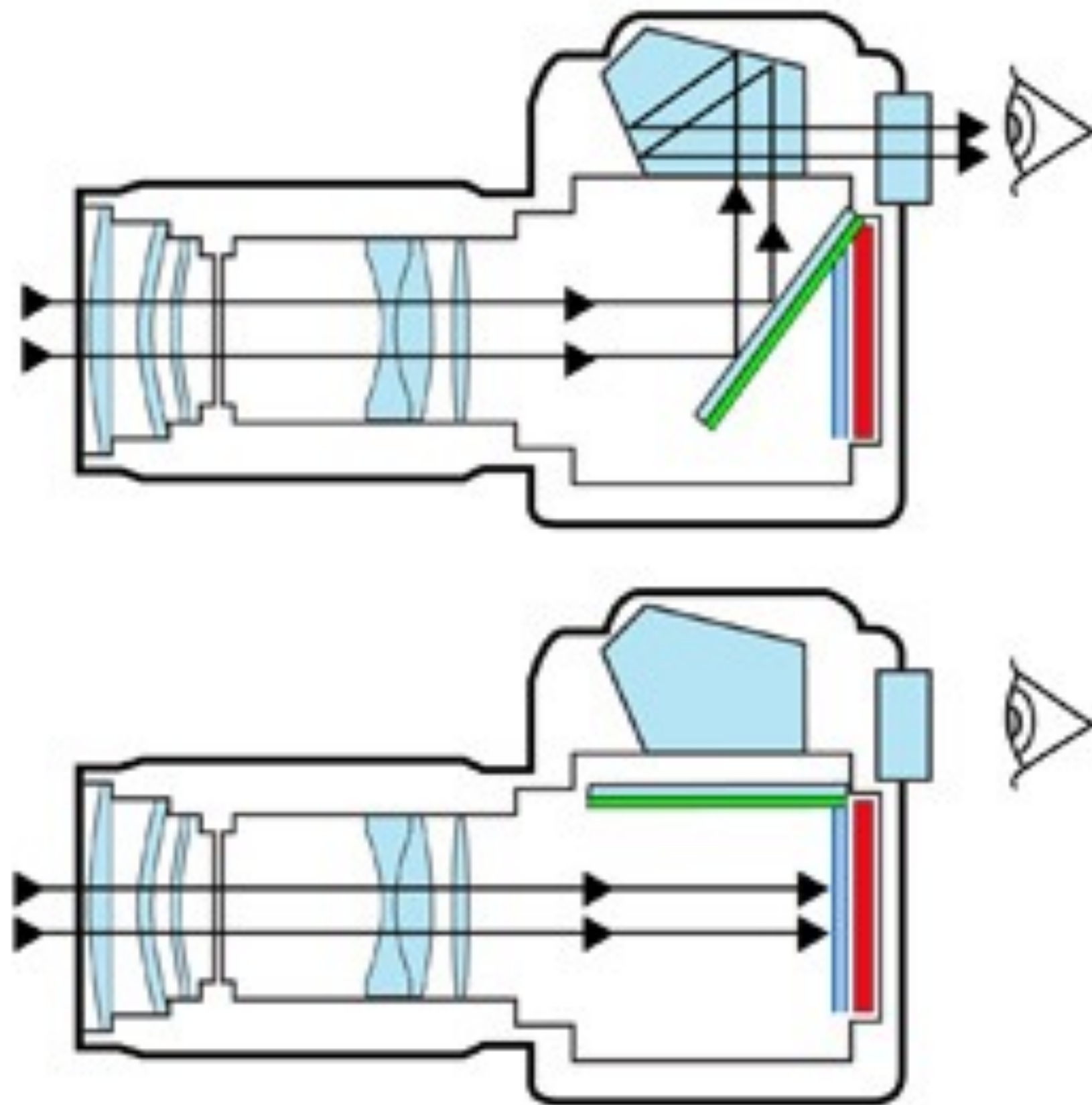




the photographic image

SLR?

SLR = Single Lens Reflex



The mirror in a slr camera reflects light upwards through a pentaprism to be viewed. The pentaprism turns the image the right way round for the eye to see.

When a picture is taken the mirror flips up to allow light to hit the film at the back of the camera. as the eye sees the image through the main lens it appears identical to that produced on the film.

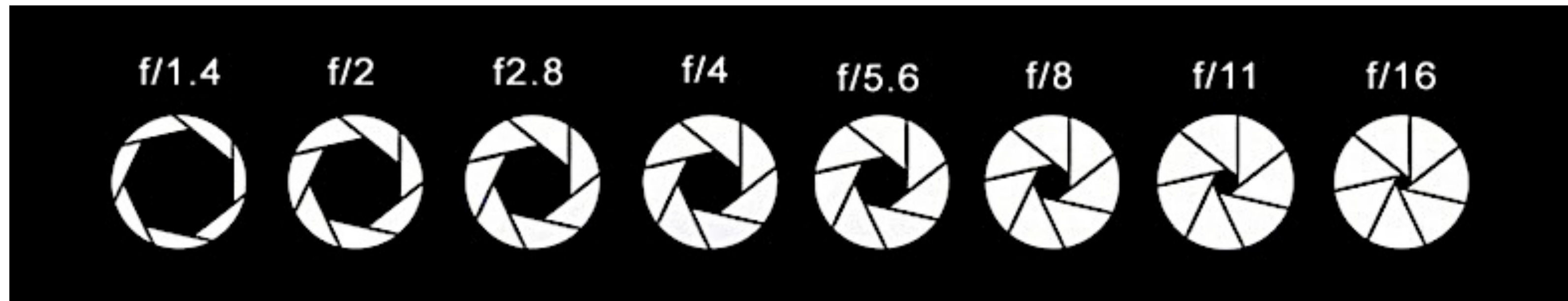
Aperture?

aperture

The size of the opening in the lens when a photo is taken.

A **larger** hole means **more** light hits the image sensor.

A **smaller** hole means **less** light hits the image sensor.



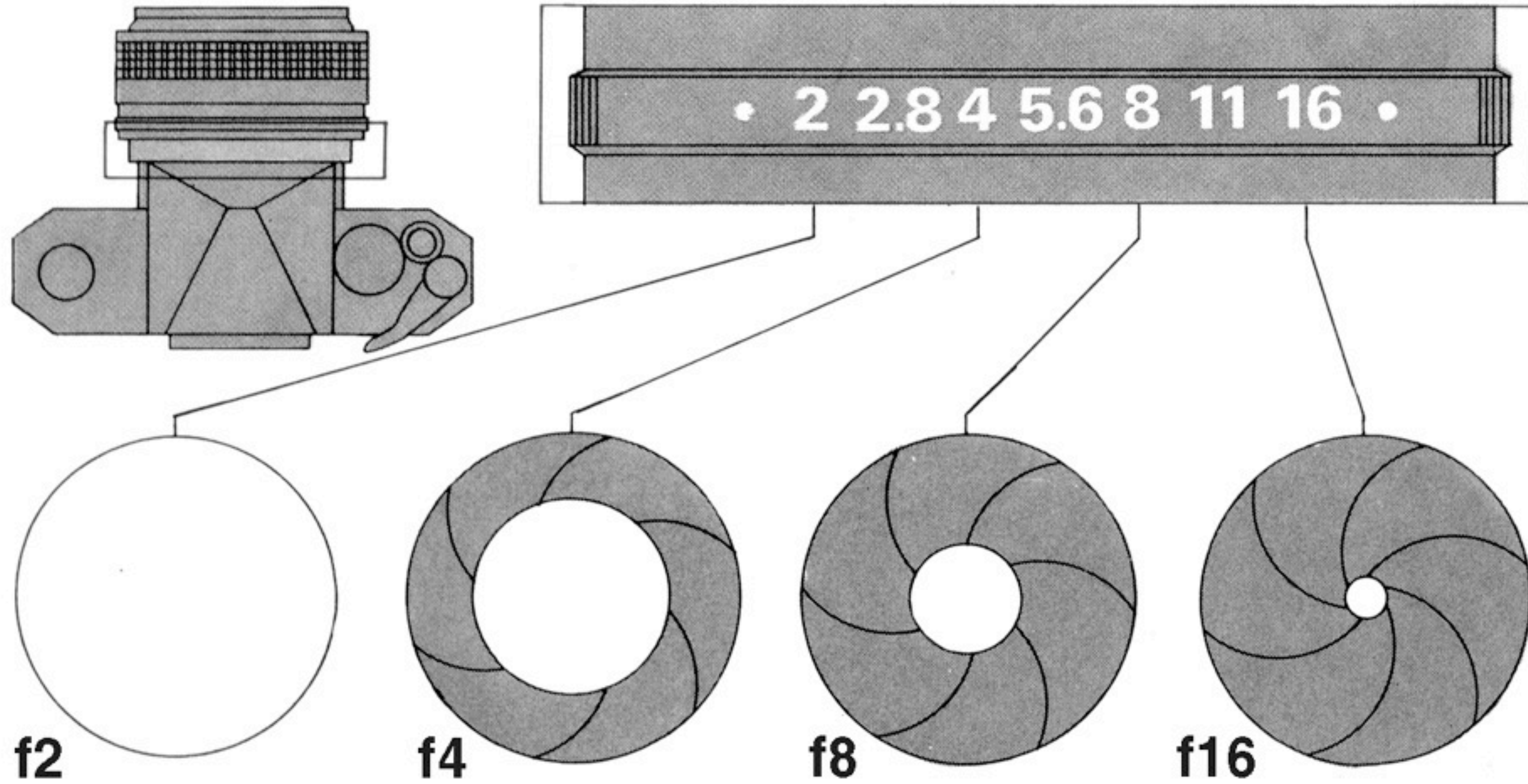
Measured in “f-stops”, expressed as $f/(\text{number})$

ex: $f/2.8$ $f/4$ $f/5.6$ $f/8$ $f/22$

Moving from one f-stop to the next doubles or halves the size of the amount of opening in your lens and thus the amount of light getting through.

aperture

REMEMBER: smaller numbers = larger apertures



aperture

depth of field



$f/2.8$ = shallow = selective focus



$f/22$ = deep = all in focus

Shutter Speed?

shutter speed

The amount of time the shutter is open when the picture is taken.

Measured in seconds, or fractions of a second.

ex: 1/8 1/15 1/30 1/60 1/125 1/250 1/500

Generally speaking, anything slower than 1/60 will require a tripod to avoid camera shake.

shutter speed



Increase shutter speed to reduce motion blur (1/350th in this photo)



Decrease shutter speed to increase motion blur (1/180th in this photo)

shutter speed



ISO

The measure of a digital camera sensor's sensitivity to light (in digital photography).

Measured in numbers like **50, 100, 200, 400, 800, 1600**, etc.

The lower the number the less sensitive your camera is to light and the finer the grain.

Higher ISO settings are generally used in darker situations to get faster shutter speeds.

ISO



100 ISO (fine grain)



1600 ISO (coarse grain)

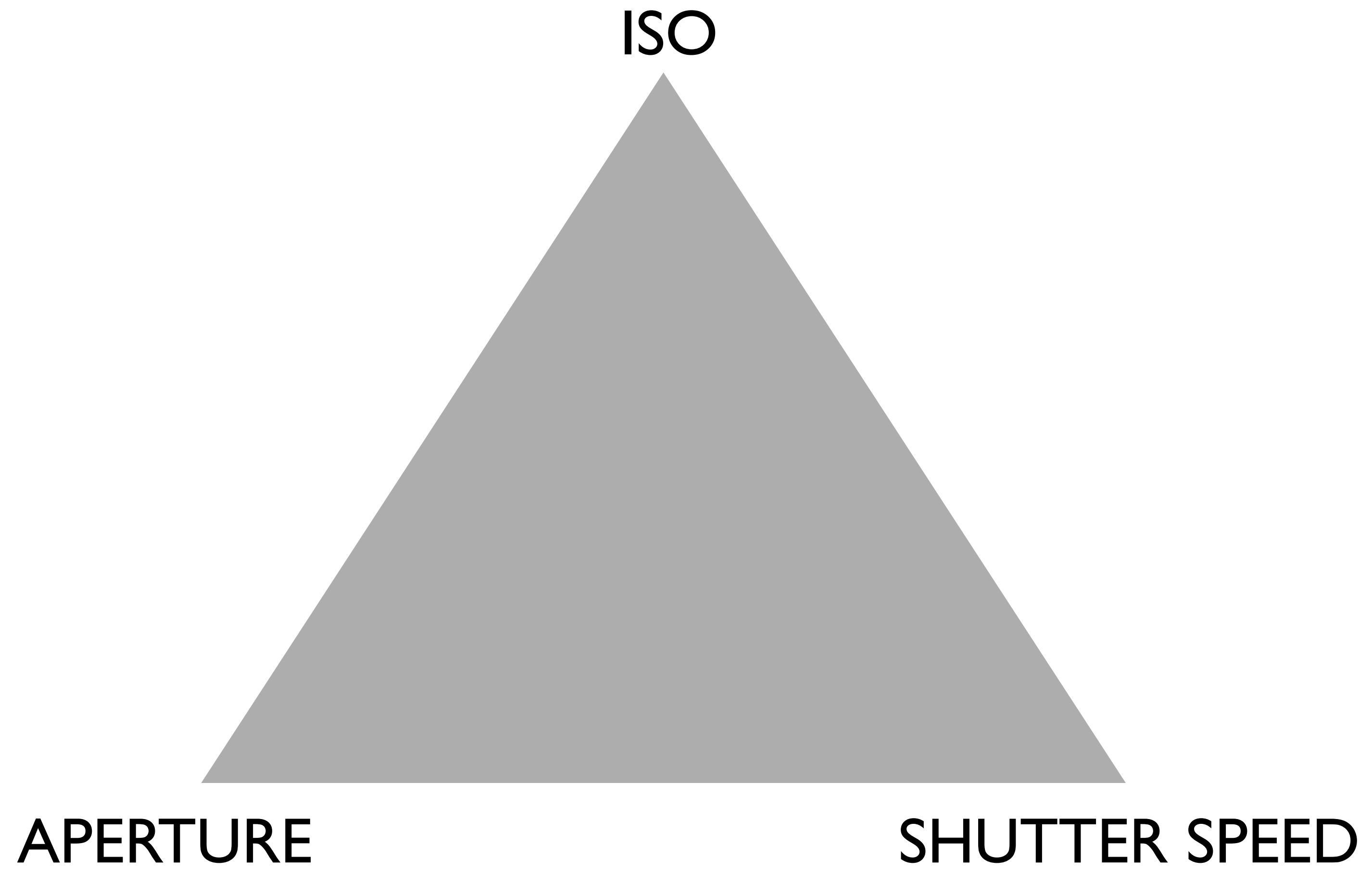
rule of thumb:

use the lowest ISO setting you can to get the shot.

lower ISO = tripod, good light, still subjects

higher ISO = motion, darkness, no tripod

the exposure triangle



photographic techniques

All sharp focus (deep depth-of-field)

Selective Focus (shallow depth-of-field)

Motion Blur (longish exposure)

Required: A digital camera that provides full control of the focal length, focus, aperture, shutter speed and white balance, and include:

- an **image sensor** capable of recording a minimum of 7 megapixels (*10mp or more is preferred*)
- a **memory card** with a minimum capacity of 1GB
- a close-focus (*aka: **macro***) capability
- an **optical zoom lens** with a (*35mm equivalent*) range of **28-80mm**
- a lens with a **minimum aperture f 2.8** (*smaller is better*)





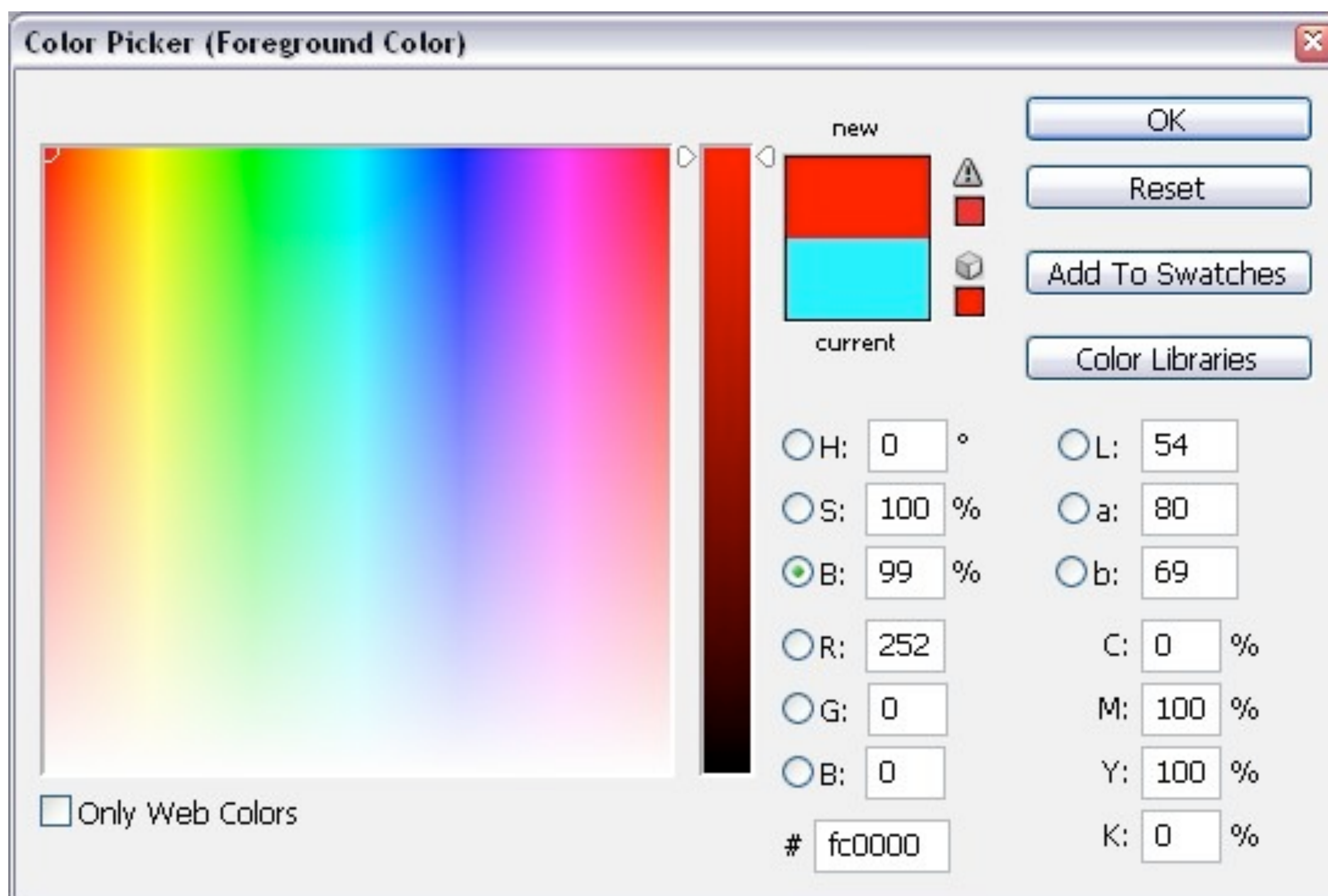


Let's Go Digital

Color for Screen? for Print?

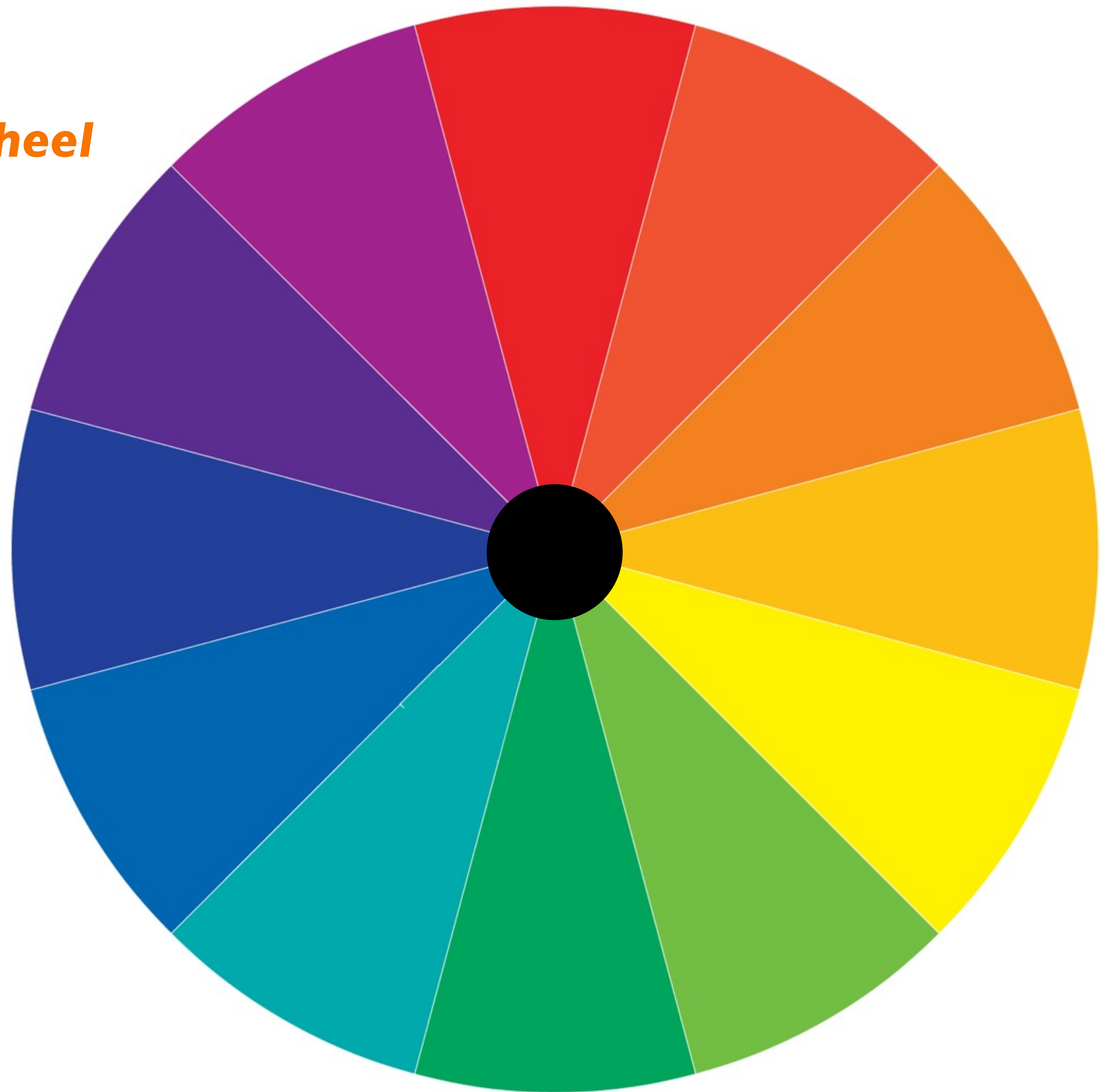
Resolution for Screen? for Print?

digital color



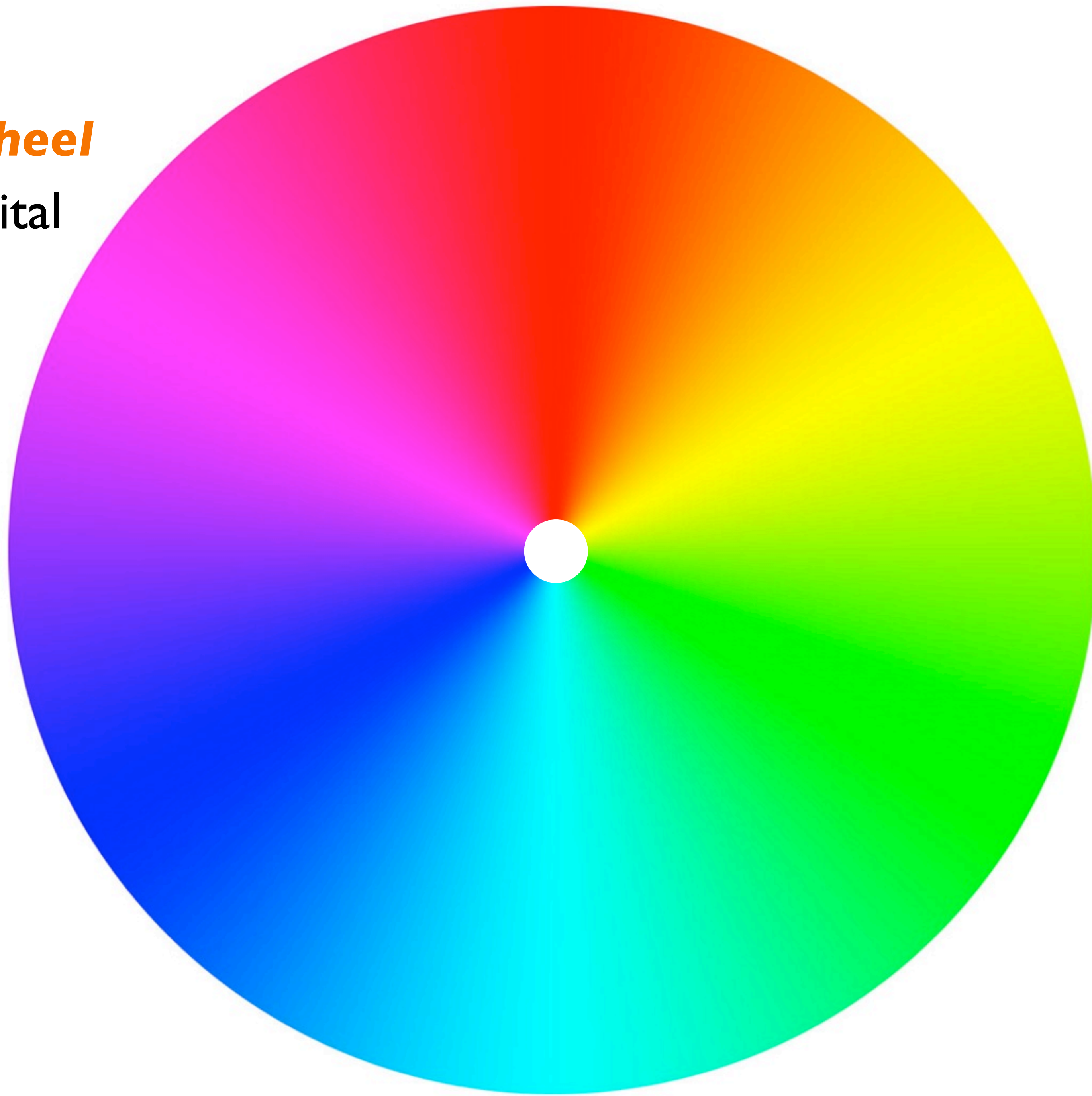
your dad's color wheel

color mixing
for paint

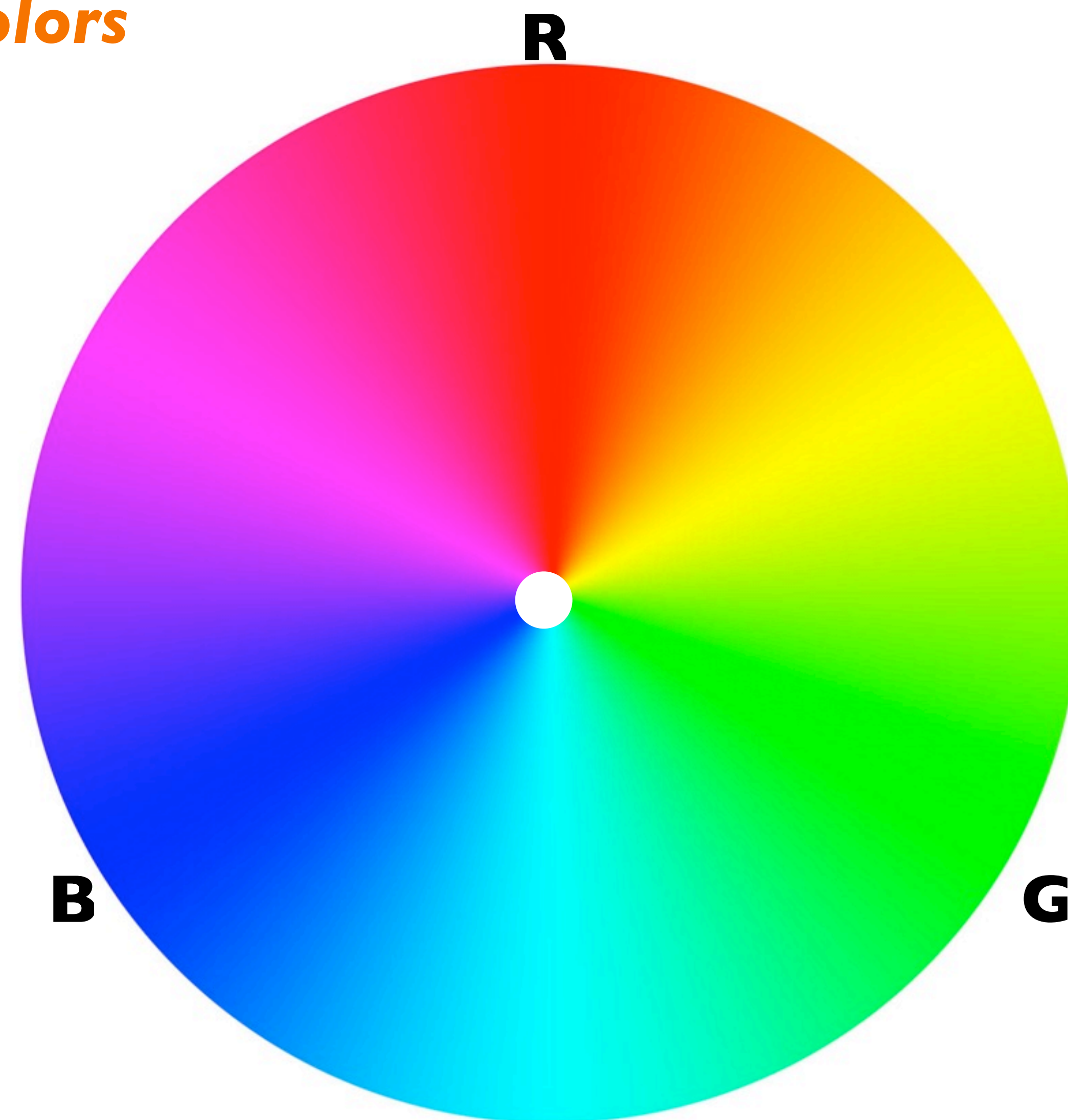
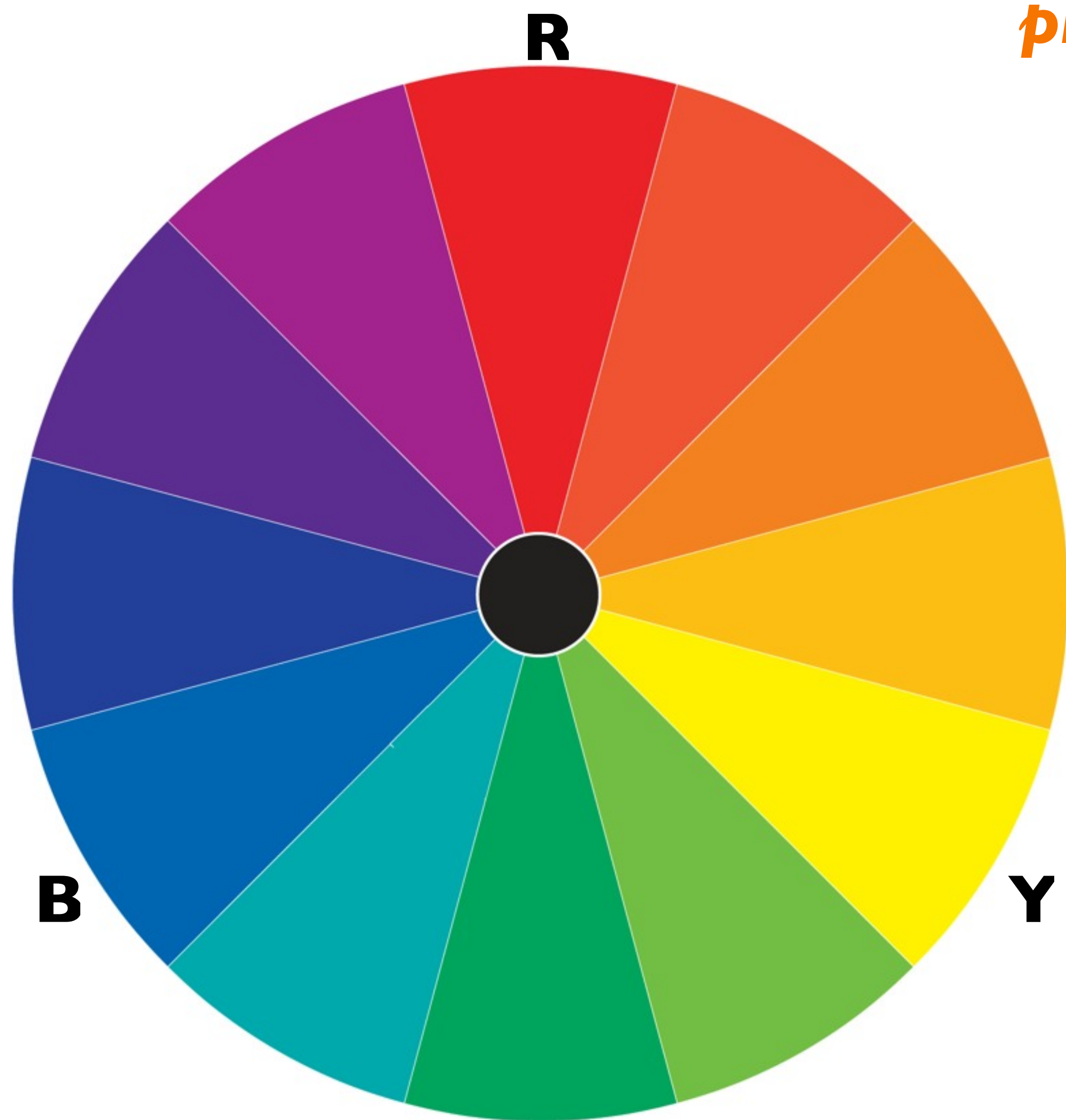


not
your dad's color wheel

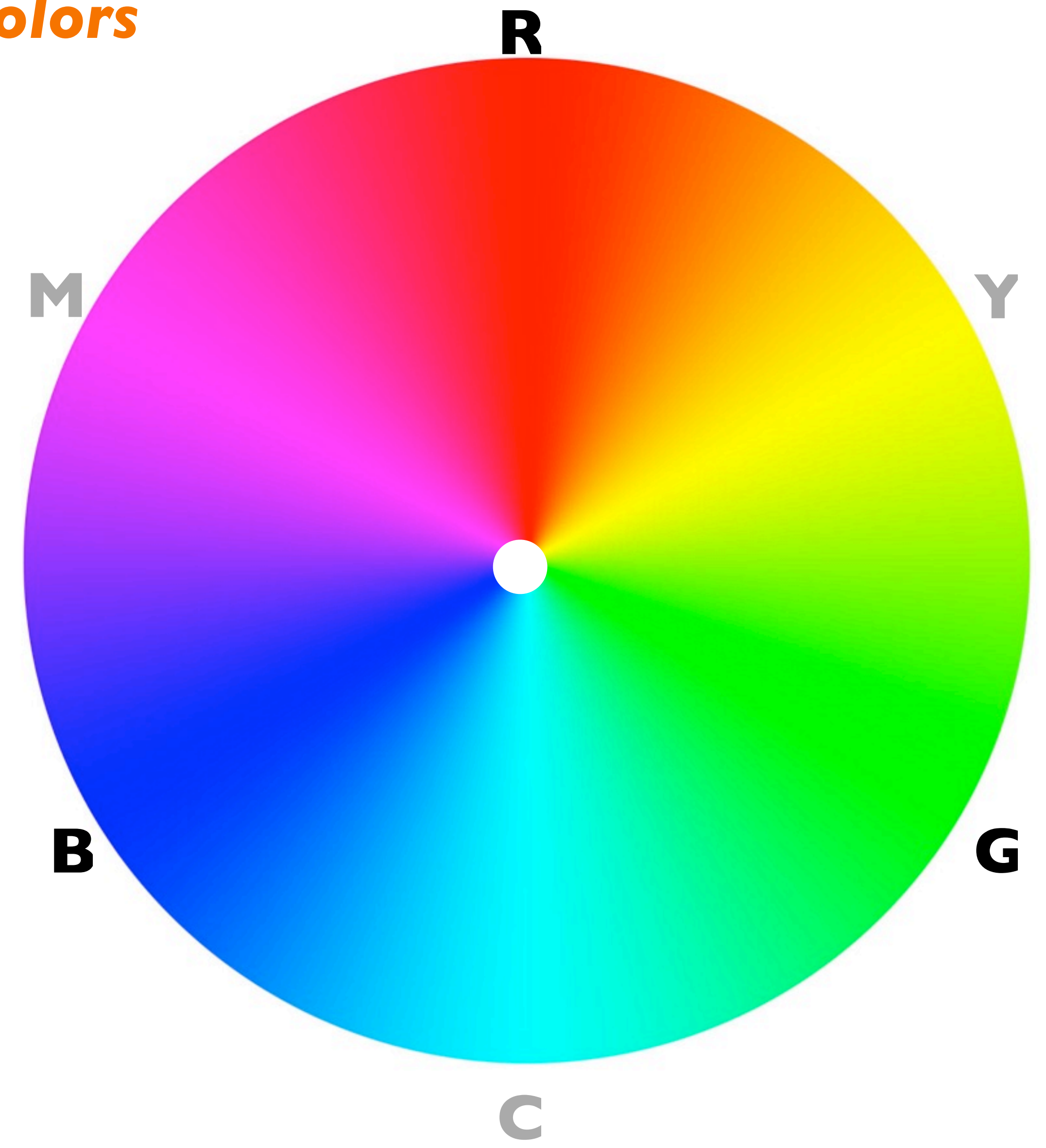
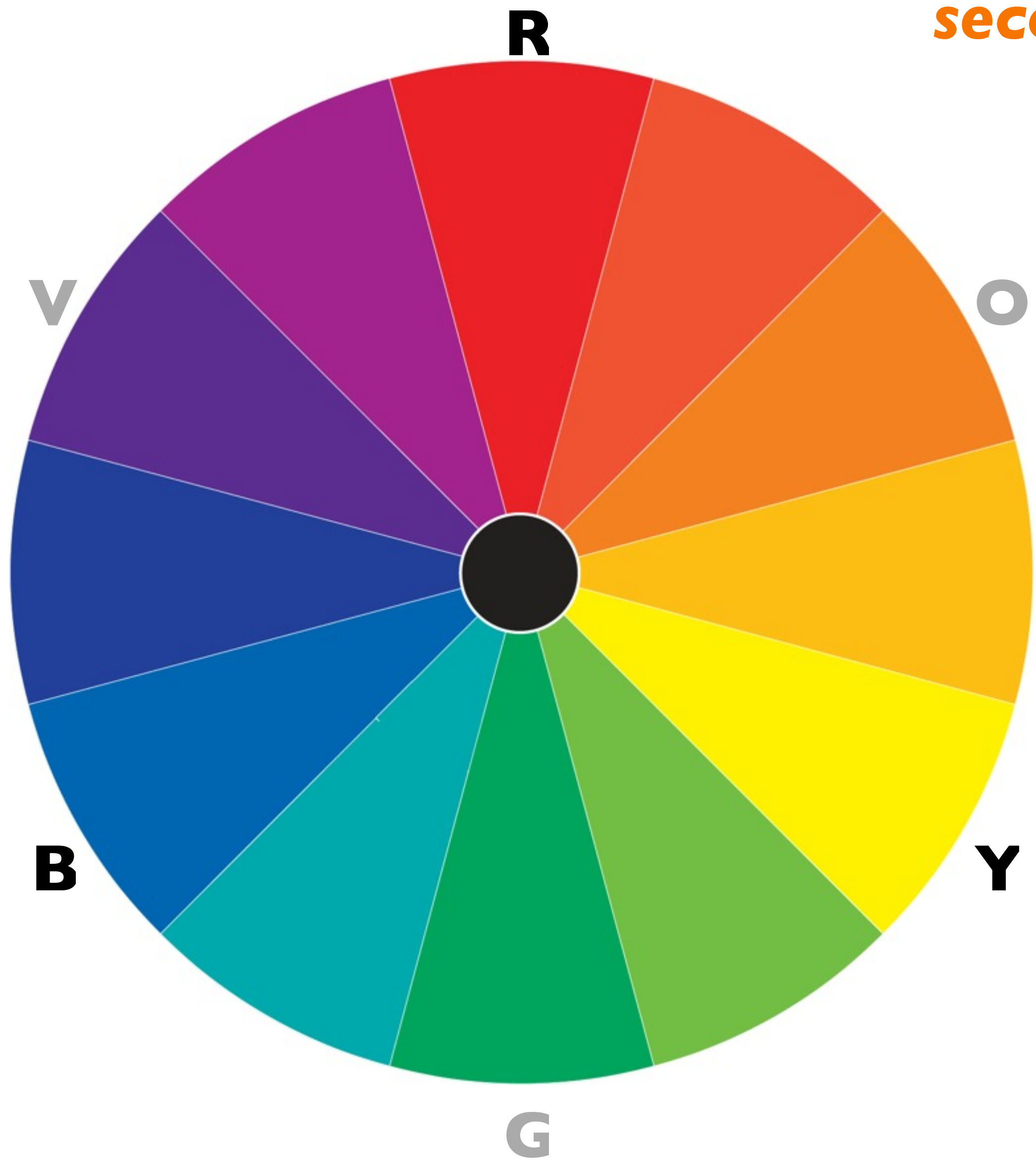
color mixing in digital
environment



primary colors

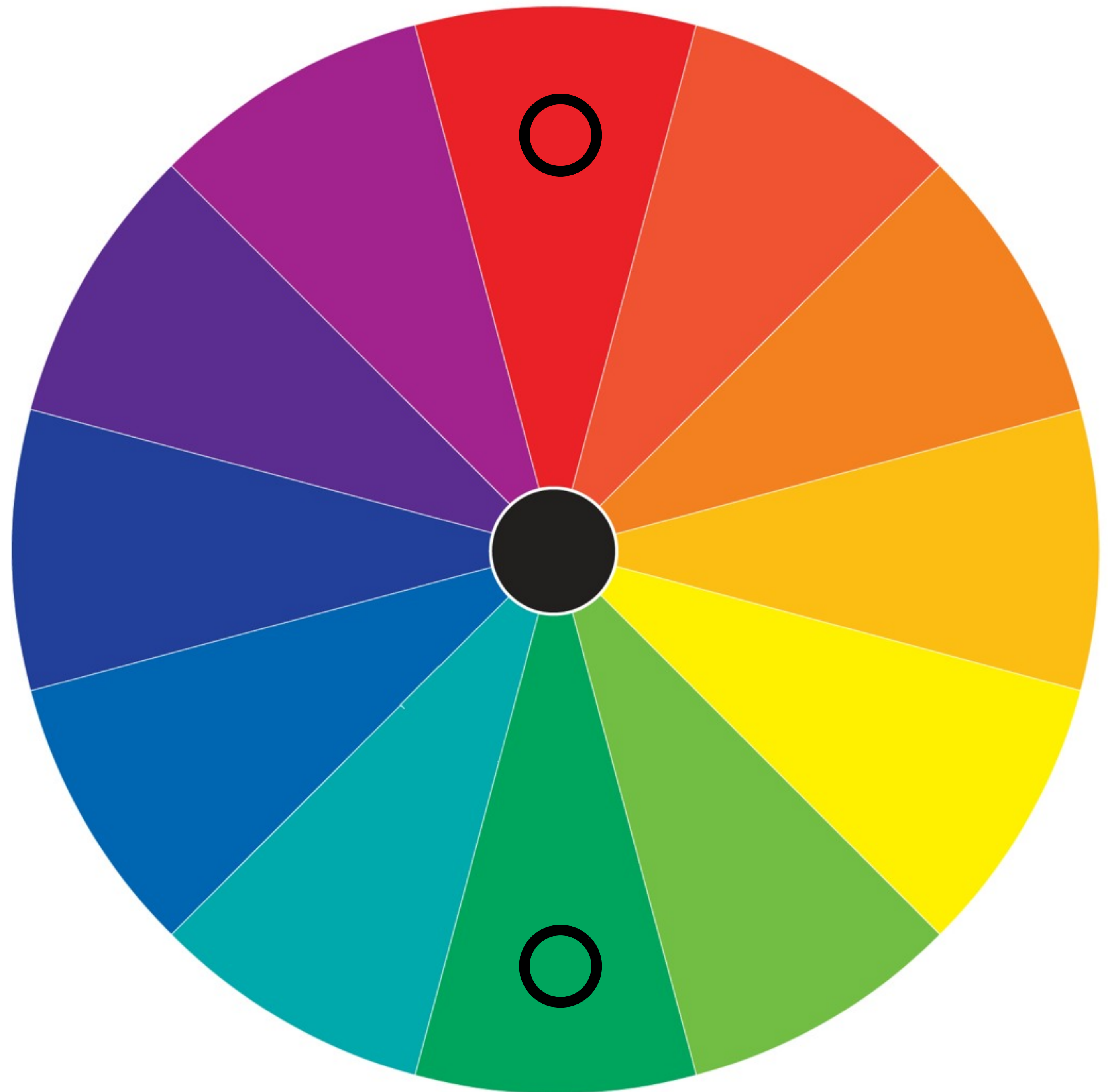


secondary colors



color harmonies

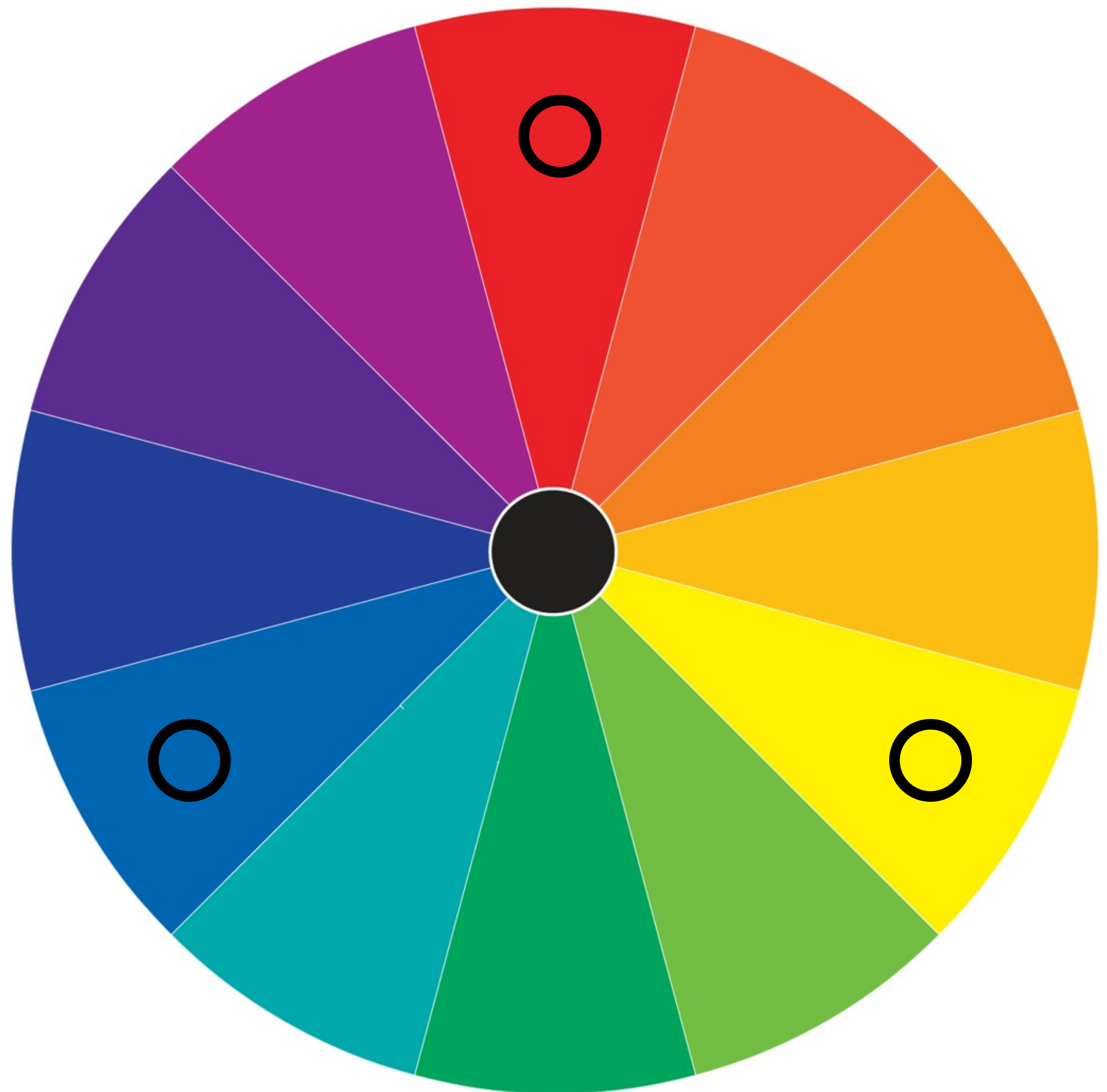
Complementary



color harmonies

Complementary

Triad

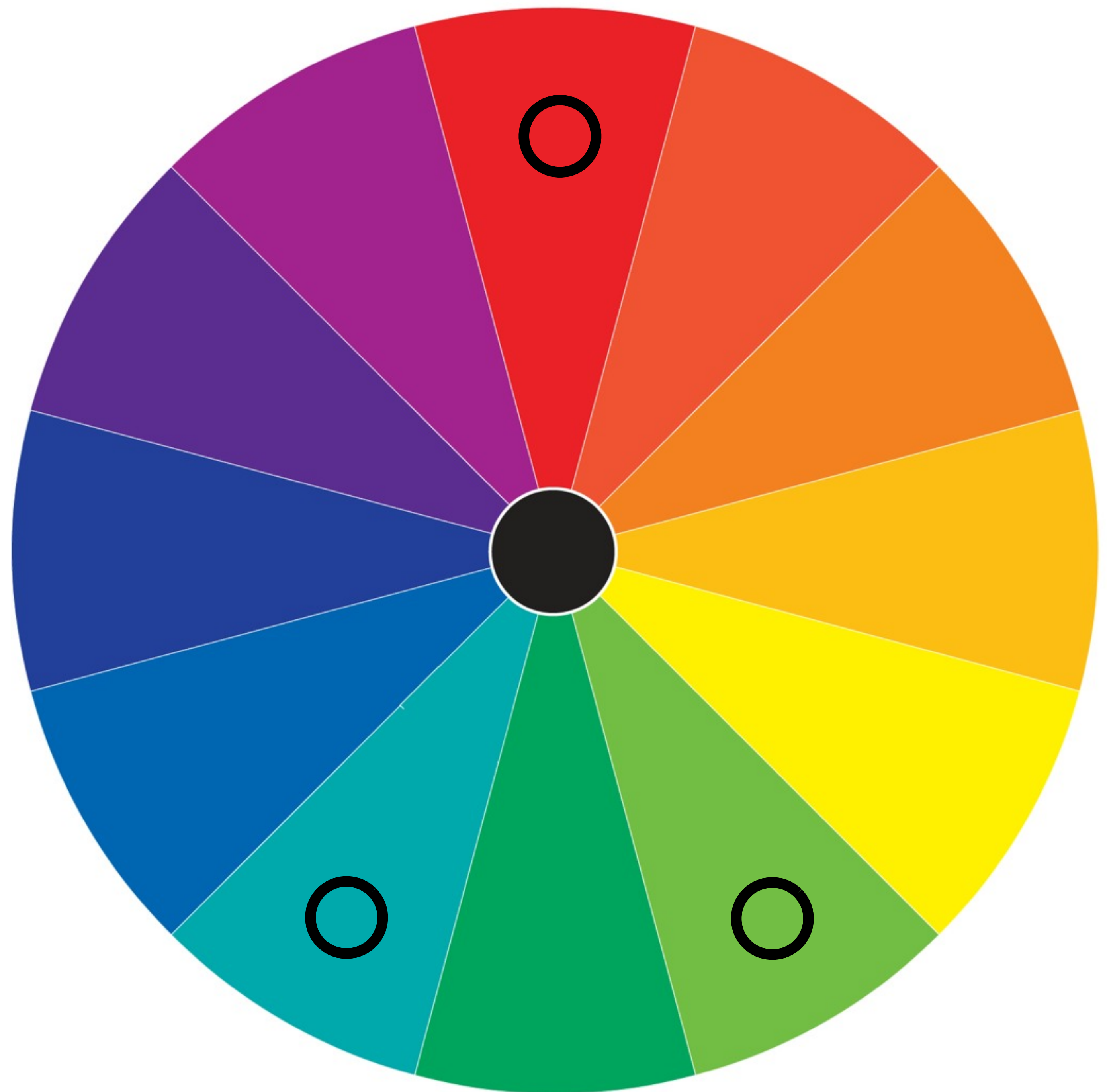


color harmonies

Complementary

Triad

Split Complementary



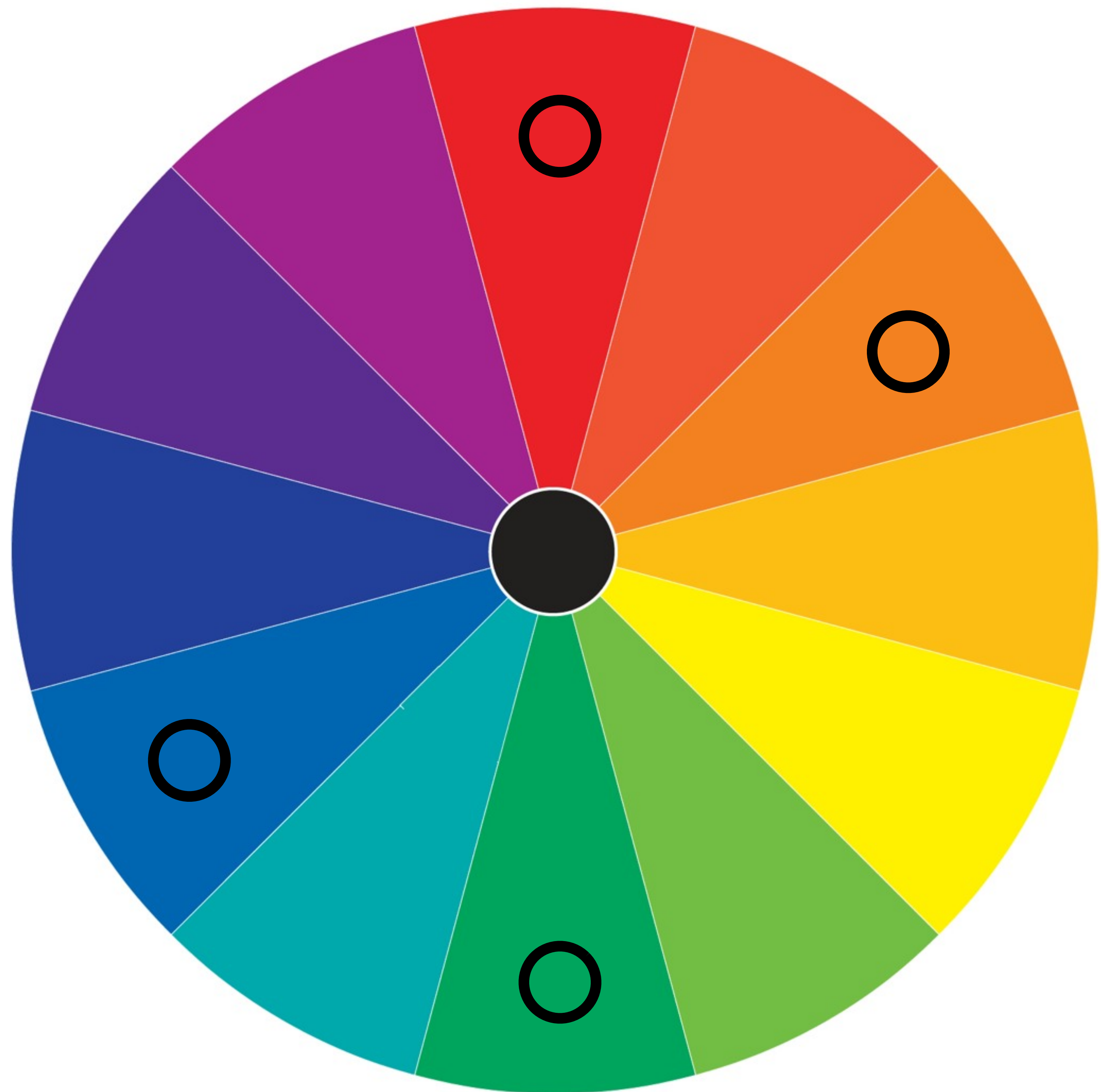
color harmonies

Complementary

Triad

Split Complementary

Tetrad



color harmonies

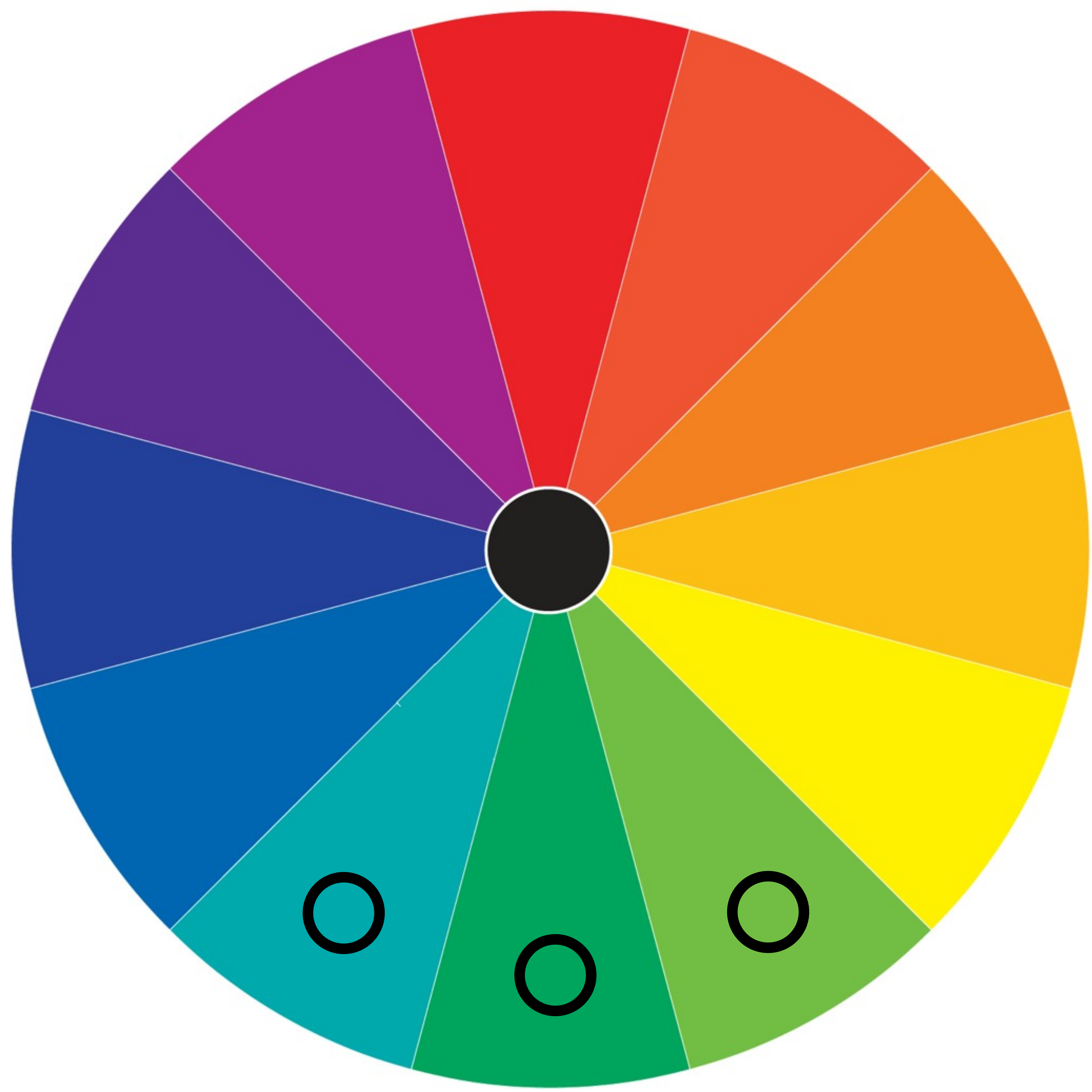
Complementary

Triad

Split Complementary

Tetrad

Analogous



color harmonies

Complementary

Triad

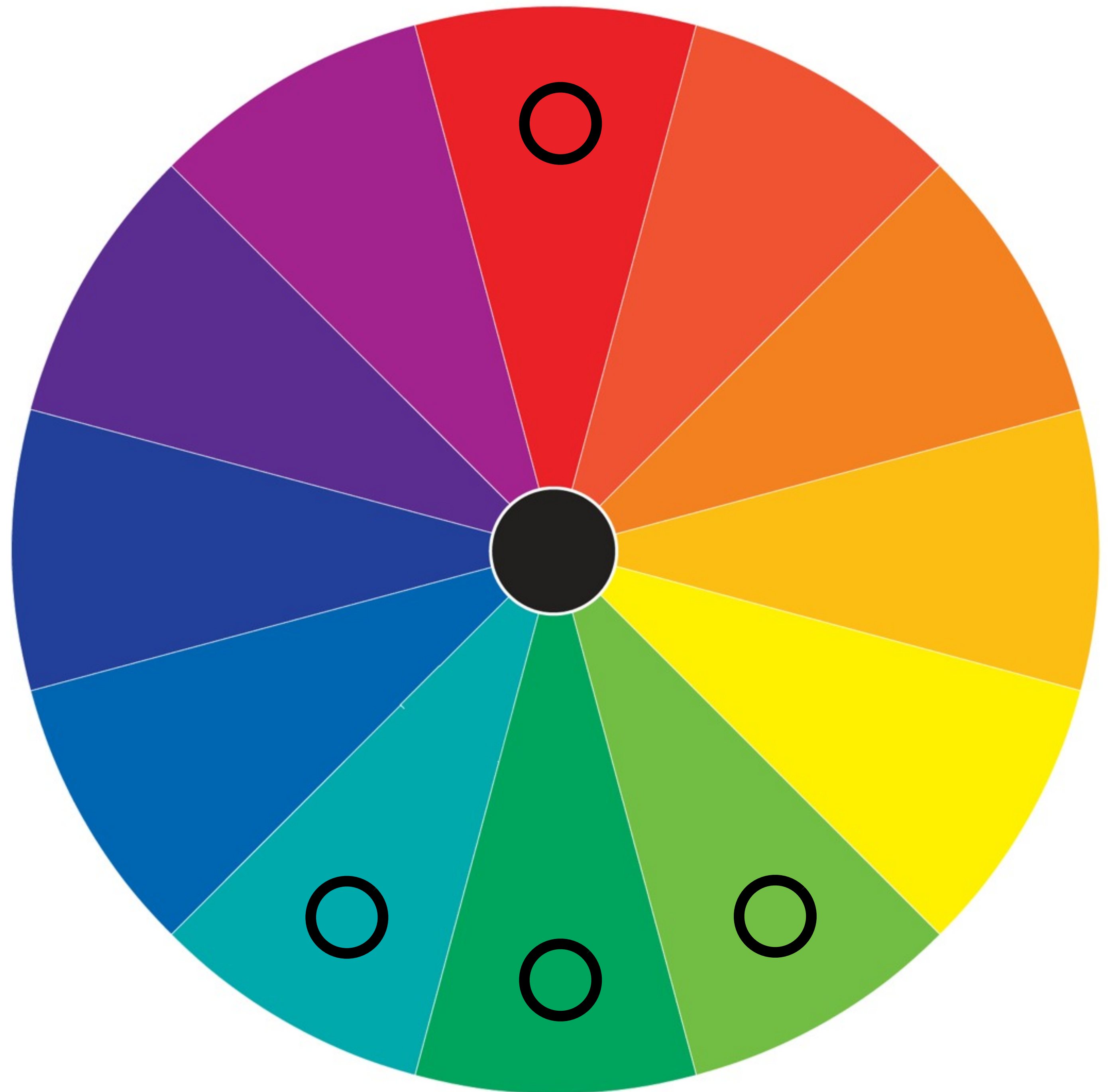
Split Complementary

Tetrad

Analogous

Accented Analogous

interactive color wheel



color harmonies

Complementary

Triad

Split Complementary

Tetrad

Analogous

Accented Analogous

interactive color wheel



The background features a vibrant, abstract design with wavy, flowing lines in shades of pink, purple, and yellow. The lines are layered and have a soft, glowing appearance, creating a sense of movement and depth. The colors transition smoothly from a bright yellow at the top to deep purples and pinks towards the bottom.

<http://fl2image.wordpress.com/>