Basic Colour Theory and Blending

- The painter's colour wheel
- Neutralizing colours
- How colour is related to depth perception
- Blending to match the skin tone

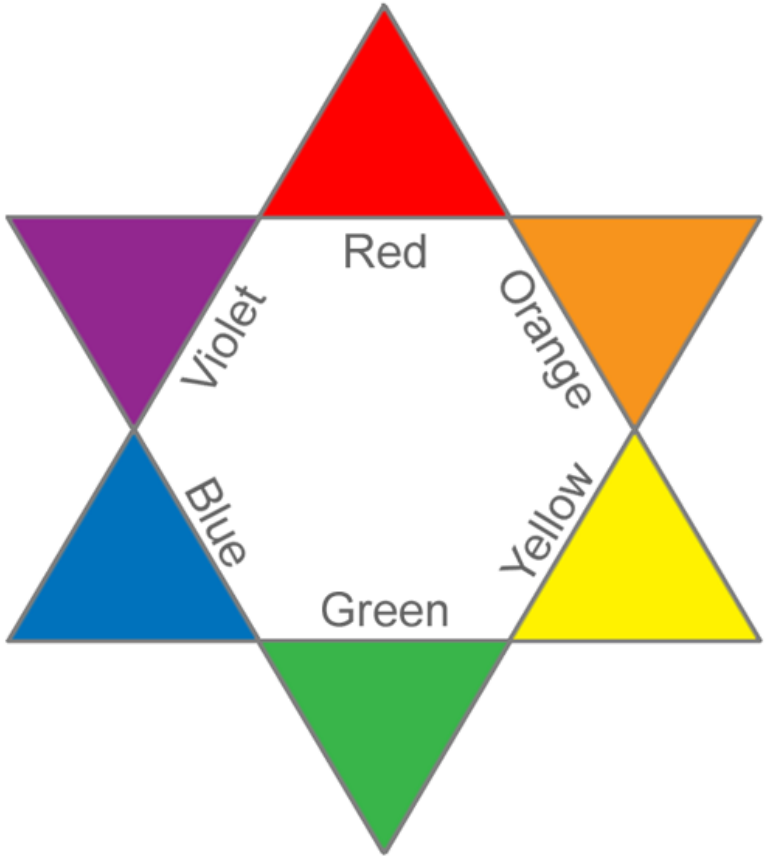
Painter's Colour Theory

A basic understanding of colour theory is necessary to choose and apply makeup correctly

Colour theory helps you to mix colours and adjust colours for many different skin tones.

Careful colour selection and application helps to sell the simulated wound

Painter's Colour Wheel



At the left is a simplified painter's colour wheel.

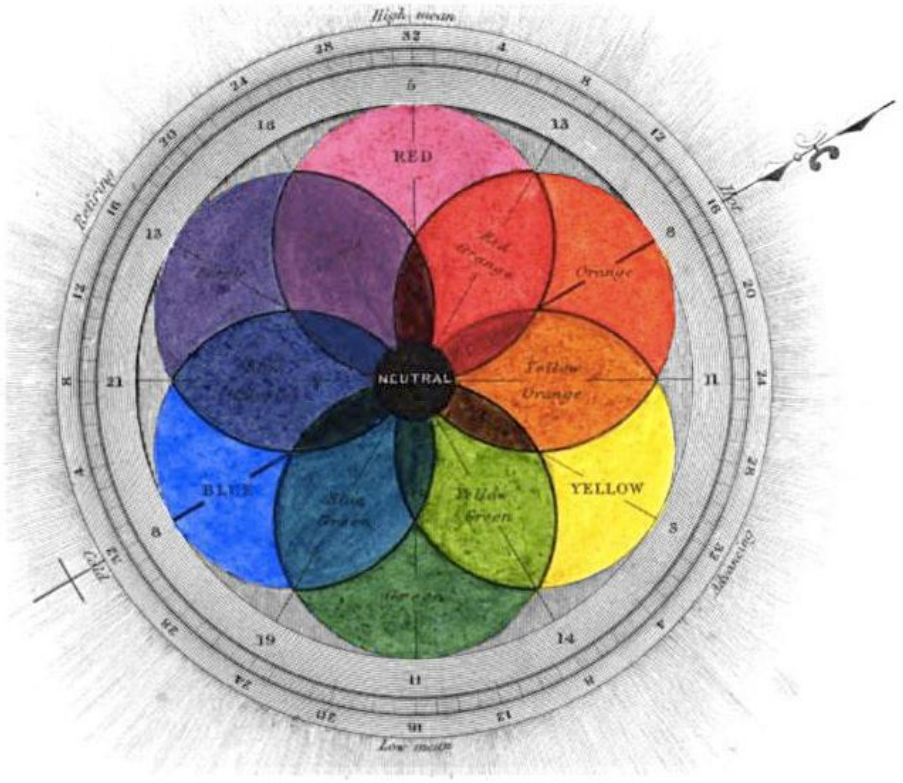
You can neutralize any colour by mixing or covering with the *complementary colour* (the opposite colour on the colour wheel)

Green neutralizes red

Violet neutralizes yellow

Orange neutralizes blue

Using the Painter's Colour Wheel



The painter's colour wheel shows the principle behind colour mixing

A nearly infinite range of colours can be mixed from the three *primary colours*: red, yellow and blue

A *hue* is a pure colour; one of the primary colours or a secondary colour formed by mixing two of the primary colours

Shades

A *shade* is a hue mixed with black. A shade can also be produced by mixing in the opposite hue in the colour wheel.

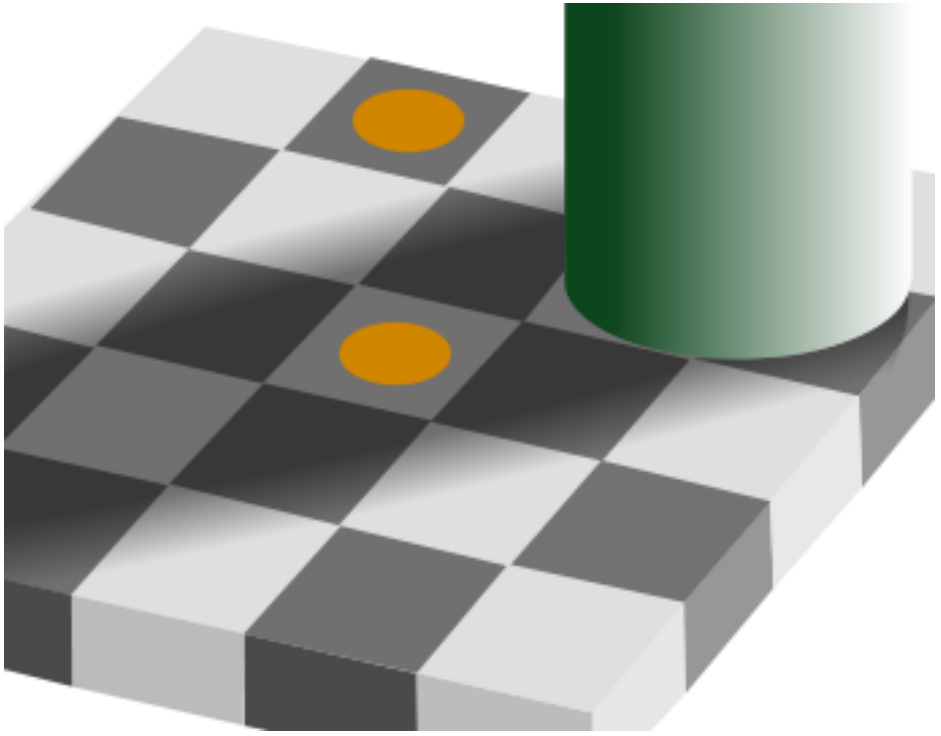
One common example of a shade is brown (orange mixed with black)

Tints

A *tint* is a hue mixed with white.

One common example of a tint is pink (red mixed with white)

Colour and the surround



Colour is not absolute It depends upon surrounding values

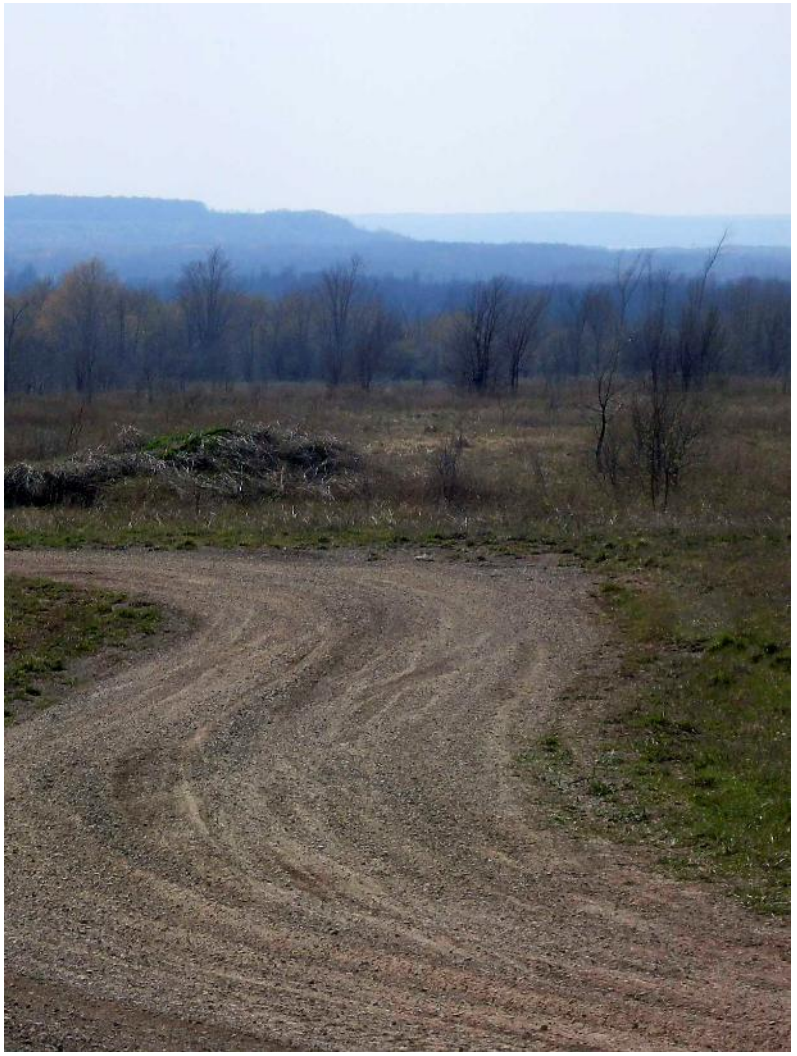
Both of the orange circles to the left are the same colour but appear to be different: an orange and a brown

Shadow Detail

When colouring a wound, keep the shading gradual for more realism. Add the shading first (blue/purple) then layer translucent colours on top and blend.

Notice the detail in the shadow areas and the sparse use of absolute black on this painting by Chardin.

Colour in Nature



Air molecules scatter shorter wavelengths of light (blue/violet) giving objects distant from us a cooler appearance

Objects closer to us appear warmer

Shading and Depth Perception

The deeper a hole in an object is, the darker the hole will appear.

Shade the deeper parts of a wound darker to give the illusion of depth. Don't use black, instead use dark blue or dark purple.

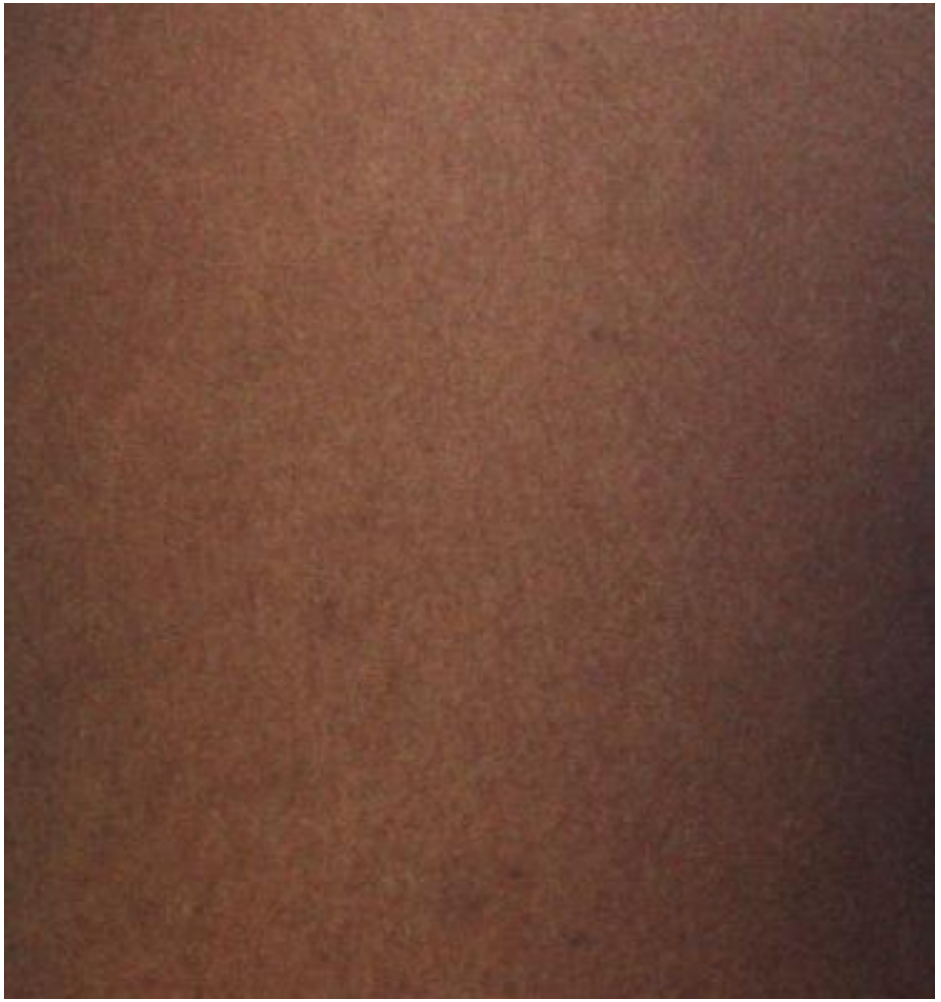
Skin Tones - Light

Phenomelanin is responsible for the red in human skin

Women tend to have more phenomelanin than men

Skin colour is influenced by subcutaneous fat

Skin Tones - Dark



Eumelanin is a brown-black pigment in skin

Varies among human populations

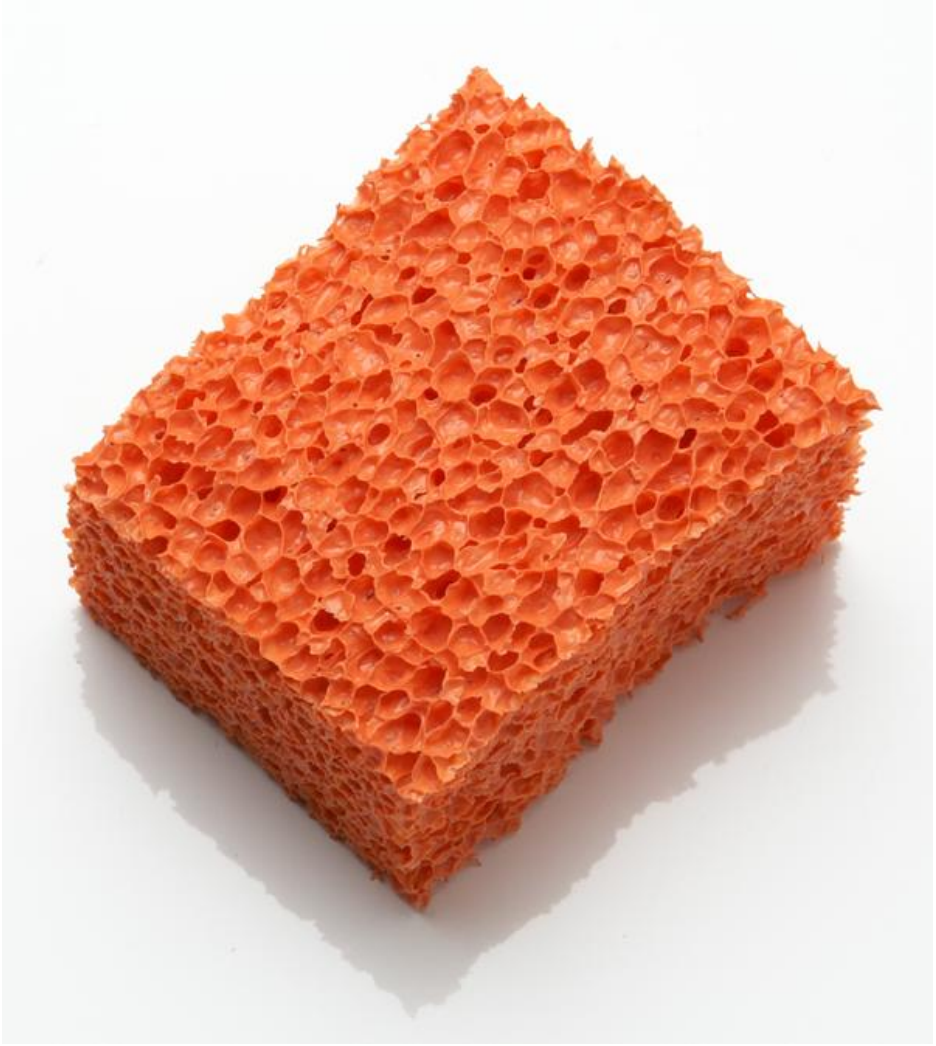
Skin exposed to sunlight can darken and have uneven pigmentation

Skin and Age

Genetics, exposure to sunlight and other factors (smoking) age the skin

The colour of skin becomes uneven with age. Spots appear and the skin wrinkles due to the loss of elasticity and subcutaneous fat

Stippling



Stippling is a useful technique to blend to skin tones

Use a textured sponge. Load with colour and stamp the colour onto the surface.

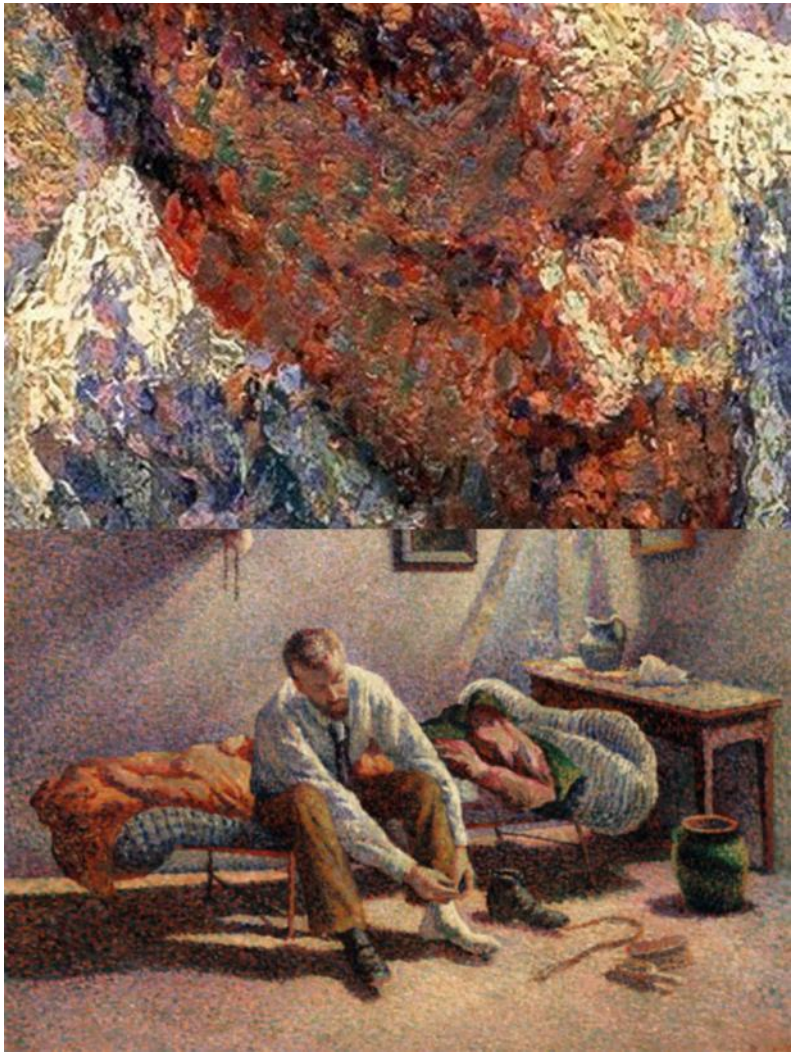
Vary the angle and rotate the sponge to give a random texture. Tear the sponge into a non-uniform shape

Matching Skin Tones

Use two colours, one slightly darker and one slightly lighter than the skin you're trying to match

Stipple the colours onto the area you're matching with a textured sponge. Don't blend the colours too much or the result will look artificial.

Matching Skin Tones



Morning Interior (1890) by the French painter Maximilien Luce employs a similar blending technique. Compare the detail (upper image) with a larger portion of the painting. At a distance, the eye blends the individual spots of colour into a smooth tone.

Patterns

Humans see patterns in nearly everything. It is difficult for us to create things which are asymmetric.

Randomness in Wounds

Wounds often exhibit randomness and asymmetry.