## COLOUR-MIXING THEORY

The first principles of colour theory were introduced by Italian humanist and artist Leon Battista Alberti circa 1435, in his treatise, De Pictura ('On Painting'). Leonardo da Vinci developed the work further, followed by other artists, until Sir Isaac Newton created the first colour wheel in 1706. The wheel continued to evolve, sometimes involving unexpected contributors such as German philosopher Johann Wolfgang von Goethe in 1809, who added another dimension by attributing different feelings to colours. In 1861, a French chemist, Michel Eugène Chevreul, published what I see as the ultimate colour wheel, which comprises 72 colours beautifully graduated around the disc.
Let's explore how these colourful wheels relate to colour mixing today and what principles we can extract from them in order to help us with our petals and blooms.

## The bias colour wheel

The most popular colour-mixing theory is based on a wheel that comprises three primary colours (yellow, red and blue) alternating with three secondary colours (orange, violet and green). This system however, has its limitations. Mix the wrong blue with the wrong red and the violet looks more maroon than purple. This is where the bias system comes in.
The core principle is that there is no such thing as a pure primary colour. Let's take yellow as an example. On one side of yellow is green, on the other side is orange. There is no pure, mid-yellow that will mix an equally vivid green and a saturated orange. It will do one or the other. If the yellow leans towards green (with a green bias, like Lemon Yellow), it will make a vivid green but a muted orange. If the yellow leans towards orange (with an orange bias, like New Gamboge), it will make a bright orange but a more muted green.

The same principle applies to red, with its orange bias on one side and violet bias on the other side.


Bright orange Muted violet

Violet-bias red


Muted orange Bright violet

Finally, it applies in the same way to the third primary colour blue, with violet on one side and back to green on the other side.


