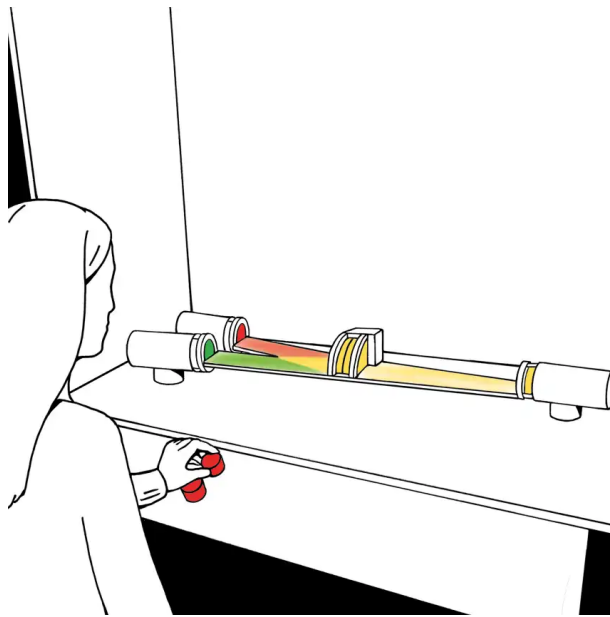


Two Yellows?

Can you mix the matching yellow light?



Turn the knobs to adjust the red and green lights on the left.

Stop when the yellow strips match.

Use the red/green filters to look at the yellow strips.

Notice that you see red and green only on the left strip.

Your eyes have only three types of colour sensors, called cone cells. Each responds best to a particular wavelength of light. Your detection of colour is based on the combination of cone cells that respond to incoming light.

At this exhibit, the yellow light and the mixed red and green light stimulate the cones equally well – so you see them as the same colour. Here, pure yellow light shines on the right-hand strip, and combined red and green on the left.

Using the red/green filters you can notice that the two yellows are different, even if they look identical. The red filter blocks green, letting red and yellow through. The green filter blocks red, letting green and yellow through.