

Finger LED colour mixing

(Ireland)

Background

Colour mixing can be now easily demonstrated with coloured Light Emitting Diodes (LED). These Finger LEDs which are disco lights for your fingers are readily available, easy to use, inexpensive and fun.

Additive mixing of the three primary colours red, green and blue can produce the secondary colours of yellow, cyan or magenta. And with suitable intensities white light can be formed.



You will need:

- ✓ Some Finger LEDs- ideally enough for a whole class working in pairs small groups
- ✓ White surfaces such as paper sheets to act as a screen
- ✓ Ability to darken the room

What next?

- Students could view the pixels of their mobile-phones or plasma televisions.
- Students explore the subtractive process of coloured paint mixing and the colours used in coloured printing.



Follow these steps:

1. Darken the room
2. Shine the LED lights on the white surface
3. Vary the colours and distances (intensities)
4. Observe the secondary colours and white light that can be formed.

