## Coloured Shadows

## How many different coloured shadows can you see when you dance in front of the screen?



Where is the light coming from and what colours does it have?

What colours do you get if you block out just one of the spotlights?

What do you have to do to get a completely black or yellow shadow?

The light from the red, green and blue spotlights mixes and produces white light. When you stand in front of the spotlights, you produce shadows. The colour of them depends on which of the spotlights is blocked out. If you block out just the green beam with your hand, for example, its shadow is still lit with the blue and red beams so it appears magenta coloured.
Television pictures are also produced by mixing red, green and blue light pixel by pixel as required.

