

Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

The local college runs a course that trains the technicians who are in charge of lighting and special effects in theatres and on film sets. Prepare a presentation to explain the points below. Your presentation should consist of visual aids (such as a computer presentation or a series of posters), and notes to remind the instructor what to say about each topic.

- how stage lighting helps us to see what is on the stage
- how light can be reflected or bent, and some examples of how this can be used to produce special effects
- why coloured objects appear coloured, and how appearances can be changed using coloured lighting
- how cameras and eyes work, and why this means that photographs can sometimes detect things that eyes cannot.

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Now that you have completed the activity, circle the number of stars next to each of these sentences to describe how well you did.

<b>I have...</b>	
described how opaque, translucent and transparent materials can affect light, and given examples of these materials.	* * * * *
stated how coloured light can be made, and that this can change the appearance of coloured objects.	* * * * *
described how shadows are formed.	* * * * *
described at least two uses of plane mirrors.	* * * * *
suggested at least one possible use of mirrors in a theatre.	* * * * *
described how mirrors reflect light, and the characteristics of the image in a mirror.	* * * * *
explained the difference between even reflection and scattering.	* * * * *
identified all the parts of a camera and of an eye.	* * * * *
described how to split light into different colours using a prism.	* * * * *
used a ray diagram to explain how we can see things that are not sources of light.	* * * * *
used a ray diagram to explain the formation of different sized shadows.	* * * * *
explained how lenses focus light through refraction.	* * * * *
used a labelled ray diagram to show what happens in refraction.	* * * * *
explained the functions of different parts of cameras and of eyes, and how our eyes detect colours.	* * * * *
explained how filters make coloured light.	* * * * *
explained why coloured objects appear coloured.	* * * * *
suggested some uses for lenses in the theatre or in films.	* * * * *
explained why cameras can sometimes produce images that the eye cannot see.	* * * * *
explained why coloured objects appear different in different coloured light, and suggested some uses for this.	* * * * *

What could you do to improve? \_\_\_\_\_