8J Light

Draw a ring around a number of stars for each statement. If you are very confident about a statement, draw your ring around all the stars. If you do not know anything about a statement do not draw a ring.

| Topic | At the end of the unit: |  |
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| 8Ja |
|  | Recall the meanings of words that describe materials and how they affect light (transparent, translucent, opaque, transmit, absorb). | \* \* \* \* \* |
|  | Describe how light travels. | \* \* \* \* \* |
|  | Use the ray model of light, in diagrams, to explain how we see things. | \* \* \* \* \* |
|  | Describe some similarities and differences between light and sound. | \* \* \* \* \* |
| 8Jb Working Scientifically |
|  | Represent rays of light as straight lines with arrows showing the direction of travel. | \* \* \* \* \* |
| 8Jb |
|  | Describe some uses of plane mirrors. | \* \* \* \* \* |
|  | State the meanings of words connected with reflection (such as angle of incidence, normal, etc). | \* \* \* \* \* |
|  | Describe the difference between specular reflection and scattering. | \* \* \* \* \* |
|  | Recall the law of reflection and use it to make predictions. | \* \* \* \* \* |
|  | Use ray diagrams to explain the formation of an image in a plane mirror. | \* \* \* \* \* |
| 8Jc |
|  | Describe some uses of lenses. | \* \* \* \* \* |
|  | Recall that light travels at different speeds in different materials. | \* \* \* \* \* |
|  | Explain why refraction occurs, and use ray diagrams to describe the refraction of light as it passes into and out of different materials. | \* \* \* \* \* |
|  | Describe the effects of convex lenses on parallel beams of light. | \* \* \* \* \* |
|  | State the meaning of focal length, focus and principal axis and relate the power of a lens to its shape. | \* \* \* \* \* |
| 8Jd |
|  | State the parts of the eye and cameras, and explain their functions. | \* \* \* \* \* |
|  | Describe similarities and differences between eyes and cameras. | \* \* \* \* \* |
|  | Describe the way our eyes detect different colours, and recall the primary and secondary colours of light. | \* \* \* \* \* |
| 8Jd Literacy |
|  | Prepare effective presentations. | \* \* \* \* \* |
| 8Je |
|  | Describe how to split light into different colours using a prism, and recall the colours of the spectrum, in order. | \* \* \* \* \* |
|  | Explain how filters can be used to make coloured light. | \* \* \* \* \* |
|  | Explain why coloured objects appear coloured and why they look different in light of different colours. | \* \* \* \* \* |