AQA GCSE Physics

Student Checklist

P14 Light

Name ..... Class ..... Date .....

Lesson	Aiming for 4		Aiming for 6		Aiming for 8	
P14.1 Reflection of light	I can state the law of reflection.	☐	I can construct accurate ray diagrams showing the reflection of light rays.	☐	I can draw a ray diagram showing the position of an image in a plane mirror.	☐
	I can describe the properties of an image in a mirror in simple terms and investigate reflection with guidance.	☐	I can explain why some surfaces form images during reflection but other do not.	☐	I can use a ray diagrams to discuss why some surfaces form images during reflection but others do not.	☐
	I can state that a real image can be formed on a screen but a virtual image cannot.	☐	I can investigate the law of reflection through practical techniques.	☐	I can evaluate the data from an investigation to discuss the precision and accuracy of any results.	☐
P14.2 Refraction of light	I can state that the path of a ray of light will change at a boundary between two transparent materials.	☐	I can construct a ray diagram showing the refraction of a ray of light at a boundary between two different media.	☐	I can explain how the refraction of light can cause the depth of a material to appear less than it actually is.	☐
	I can identify the angle of incidence and angle of refraction in a ray diagram.	☐	I can describe the dispersion of white light as it passes through a prism.	☐	I can explain the dispersion of light as it passes through a prism in terms of different changes of speed for different wavelengths of light.	☐
	I can measure the angle of incidence and angle of refraction for a simple refraction.	☐	I can investigate the refraction of light through a glass or Perspex block.	☐	I can analyse the data from a refraction investigation to test different substances to determine whether it fits a suggested relationship.	☐
P14.3 Light and colour	I can describe the visible spectrum as a continuous series of colours or wavelengths.	☐	I can describe the colours of objects in different colours of light.	☐	I can explain the apparent colour of surfaces using the concept of reflection and absorption when illuminated by white light or combinations of primary colours.	☐
	I can explain the colour of objects in white light in terms of reflection of parts of the spectrum.	☐	I can describe how combinations of filters transmit light.	☐	I can describe the effects of combinations of coloured light and filters on the appearance of a variety of coloured objects.	☐
	I can explain the effect of a single filter on white light.	☐	I can determine the appearance of a white object when illuminated by combinations of primary coloured light.	☐	I can determine the apparent colour of a coloured surface when illuminated by different combinations of red, green, and blue light.	☐