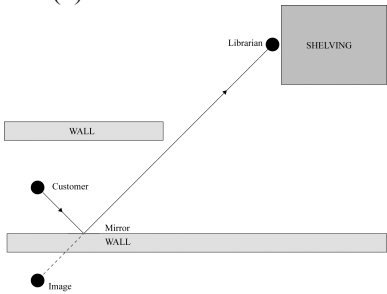
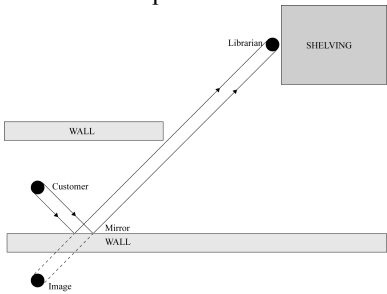
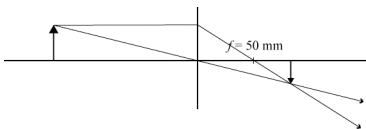
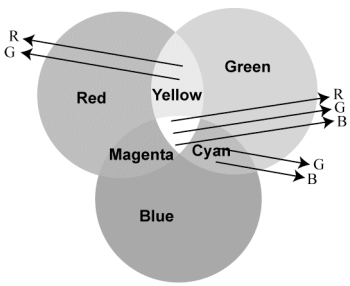
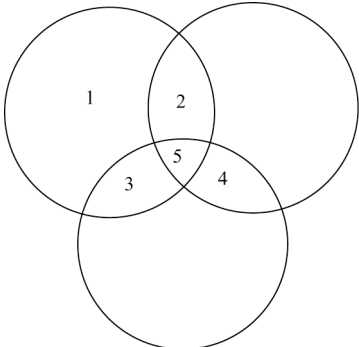
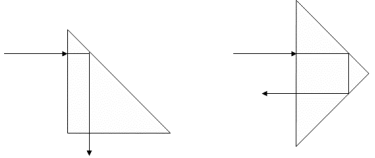
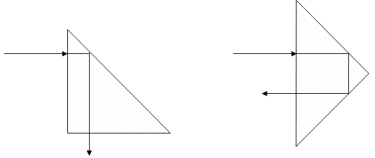
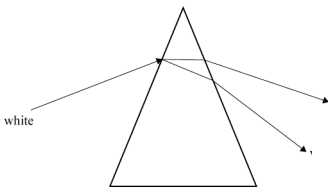
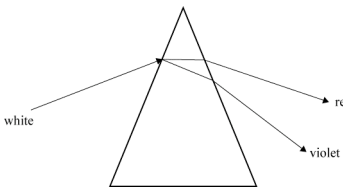


Assessment Schedule – 2007**Science: Use physics concepts and principles to describe the behaviour of light (90768)****Evidence Statement**

1(a)	<p>(a) Position of mirror on the wall that solves problem.</p> <p>(b)</p> 	<p>(c) Correct position of image and sufficient rays drawn to explain.</p> 	
2(a)	Converging OR Convex lens.		
(b)	 <p>Object in correct position AND focal point inserted correctly AND at least one light ray drawn accurately.</p> <p>If ray diagram is incorrect but student has image (real, diminished, inverted (at least 2)) described correctly.</p>	<p>Object in correct position AND focal point inserted correctly AND TWO light rays drawn accurately AND image shown correctly.</p> <p>Object and image are consistent: Eg Object has arrow then image has arrow.</p>	<p>ALSO image size correct (18 ± 2 mm) AND image distance correct (86 ± 5 mm) behind mirror. AND nature of image real, diminished, inverted (at least TWO) described</p>
3(a)	 <p>Correct rays from ONE at least of cyan, yellow or white.</p>	<p>THREE correct rays from white AND two correct rays from ONE of at least of cyan or yellow.</p> <p>(Ray directions irrelevant.)</p>	

(b)	 <p>Colours of at least THREE parts correct.</p> <p>1 no colour/black 2 green 3 blue 4 cyan 5 cyan</p>		
(c)	<p>Filters absorb certain selected colours / wavelengths OR allow other colours / wavelengths of light to travel through.</p>	<p>Filters absorb certain selected colours / wavelengths AND allow other colours / wavelengths of light to travel through.</p> <p>One correct example of a blue, green or red filter given.</p>	<p>Filters absorb certain selected colours / wavelengths AND allow other colours / wavelengths of light to travel through.</p> <p>A red filter absorbs blue and green wavelengths but red can pass through. A blue filter absorbs red and green wavelengths but blue can pass through. A green filter absorbs red and blue wavelengths but green can pass through.</p> <p>THREE examples correct.</p>
4(a)	<p>(i)</p>  <p>Both diagrams correct.</p> <p>OR</p> <p>(ii)</p> <p>The light rays strike the surfaces of the prisms at angles of incidence greater than the critical angle of the glass-air interface. Therefore the light rays reflect rather than refract.</p>	<p>(i)</p>  <p>Both diagrams correct.</p> <p>AND</p> <p>(ii)</p> <p>The light rays strike the surfaces of the prisms at angles of incidence greater than the critical angle of the glass-air interface. Therefore the light rays reflect rather than refract.</p>	
(b)	 <p>Refraction at both interfaces. Spectrum produced.</p>	 <p>Correct Refraction at both interfaces. Spectrum produced.</p> <p>AND</p> <p>Violet refracts more than red/red refracts less than violet.</p>	<p>Correct Refraction at both interfaces. Spectrum produced.</p> <p>AND</p> <p>Violet refracts more than red/red refracts less than violet.</p> <p>BECAUSE</p> <p>Different colours travel at different speeds. OR the refractive index is different for different colours.</p>

Judgement Statement

Achievement	Achievement with Merit	Achievement with Excellence
FIVE opportunities answered correctly. Minimum of $5 \times A$	FIVE opportunities answered correctly, including at least THREE at Merit level. Minimum of $3 \times M + 2 \times A$	FIVE opportunities answered correctly, including at least TWO at Excellence level and at least ONE at Merit level. Minimum of $2 \times E + 1 \times M + 2 \times A$