

Optics



Name Class Date A student stands 2.0 meters in Which phenomena cause chromatic front of a vertical plane mirror. aberration to occur when polychromatic As the student walks toward light passes through a lens? the mirror, the image A diffraction and refraction decreases in size and B diffraction and reflection remains virtual c dispersion and refraction B decreases in size and remains real D dispersion and reflection remains the same size and remains virtua ains the same size and remains real 3 An incident light ray travels parallel to the The focal length of a concave spherical principal axis of a concave spherical mirror is 0.060 meter. What is the radius mirror. After reflecting from the mirror, the of curvature of the mirror? 5 **PREVIEW** Please Sign In or Sign Up to download the printable version of this worksheet 7 0.040 meter. The distance of the image from the lens is A real and inverted principal axis B real and erect ▲ 0.033 m C virtual and inverted B 0.050 m D virtual and erec 0.16 m **D** 0.20 m 9 Spherical aberration is a defect Compared to a photon of associated with photon of blue light has a A spherical mirrors, only A greater energy B plane mirrors, only **B** longer wavelength C both spherical mirrors and lenses C smaller momentum D both plane mirrors and lenses **D** lower frequency



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