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| Goal • Use this page to review the main points of Unit 2, Optics. |

Chapter 5 Optical systems make use of mirrors and lenses.

◼ Ray diagrams help explain how beams of light travel in straight lines and how various materials can be opaque, translucent, or transparent. (5.1)

◼ Mirrors reflect light according to the law of reflection, which states that the angle of incidence equals the angle of reflection. (5.1)

◼ Light rays bend when they pass between two materials of different density. (5.1)

◼ Simple mirrors can be plane (flat), convex (curving out), or concave (curving in). (5.2)

◼ The image formed by a concave mirror depends on the distance of the object from the mirror. (5.2)

◼ Convex mirrors form images that are upright and smaller than the object. (5.2)

◼ Concave lenses are thinner in the middle than at the edge and diverge light rays. (5.3)

◼ Convex lenses are thicker in the middle than at the edge and converge light rays. (5.3)

**Chapter 5:** Key terms

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| (5.1) Vocabulary | (5.2 Vocabulary) | (5.3 Vocabulary) |
| Particle model of lightRay model of lightTransparentTranslucentOpaqueIncident rayReflected rayNormalAngle of incidence ( *i* )Angle of reflection ( *r* )Law of reflectionAngle of refractionMirage | Plane mirrorConcave mirrorFocal pointConvergingConvex mirrorDiverging  | LensConcave lensesConvex lensesFocal length |