reflection, abrupt change in the direction of propagation of a wave that strikes the boundary between different mediums. At least part of the oncoming wave disturbance remains in the same medium. Regular reflection, which follows a simple law, occurs at plane boundaries. The angle between the direction of motion of the oncoming wave and a perpendicular to the reflecting surface (angle of incidence) is equal to the angle between the direction of motion of the reflected wave and a perpendicular (angle of reflection). Reflection at rough, or irregular, boundaries is diffuse. The reflectivity of a surface material is the fraction of energy of the oncoming wave that is reflected by it. *See also* total internal reflection.