

## **Optics Key Terms**

### **On-level Physics**

The following are the terms you should be familiar with in order to properly complete this unit. You are expected to be able to define each as well as apply these terms in any situation during this and subsequent units of study.

**convex** - A mirror/lens where the surface curves outward.

**concave** - A mirror/lens where the surface curves inward.

**virtual image** - An image that appears to be behind the surface of a mirror; cannot be projected on a screen.

**real image** - An image that appears where reflected light rays actually intersect; can be projected onto a screen.

**mirror** - A piece of glass with a reflective coating on the front and/or the back.

**lens** - A piece of transparent material that has two distinct surfaces, at least one is usually curved; used to focus or spread light.

**apex** - The point where the optical axis intersects a curved mirror.

**optical center** - The center of a lens.

**optical axis** - An imaginary line that passes through the center of a curved mirror.

**focal point** - The point on the optical axis of a concave mirror or convex lens where light rays parallel to the optical axis come together.

**center of curvature** - A point on the optical axis which represents the radius of a full circle drawn with respect to the apex of a curved mirror.

**normal line** - An imaginary line drawn perpendicular to a reflecting surface or medium that light

**angle of incidence** - Angle between an incident ray and the normal to a surface.

**angle of reflection** - Angle between a reflected ray and the normal to a surface.

**angle of refraction** - Angle between the normal and the refracted ray after entering a different medium.

**index of refraction** - The ratio of the speed of light in a vacuum to the speed of light in a given material.