

Skills Worksheet

Concept Review

Section: Reflection and Color

1. **Contrast** the reflection of light from rough surfaces with that from smooth surfaces. Why do rough surfaces cause diffuse reflection?

2. **Use** the law of reflection to draw a sketch showing the incoming and reflected light rays when light shines on a mirror at an angle of 30° to the normal. Label the angle of incidence and the angle of reflection.

3. **Describe** the images produced by each of the following types of mirror:

a. convex mirror

b. concave mirror

4. **Draw** a diagram that shows how a plane mirror forms a virtual image.

5. **Indicate** what color a yellow cloth would appear to be if it were illuminated with

_____ a. sunlight.

_____ b. yellow light.

_____ c. blue light.

Skills Worksheet

Concept Review

Section: Refraction, Lenses, and Prisms

1. Indicate the direction that light is bent in each of the following situations.

a. Light passes from air to water.

b. Light passes from water to air.

2. Explain what causes a mirage.

3. Define total internal reflection, and give an example of its use in a practical device.

4. Name the type of lens that creates either virtual or real images, and state how light rays are bent by this type of lens.

5. Describe the function of each of the following parts of the eye.

a. cornea

b. pupil

c. lens

6. Explain why prisms disperse white light.
