

Reflection and Refraction Worksheet

|                    |                |             |               |
|--------------------|----------------|-------------|---------------|
| Incidence          | Material       | Normal      | Plane mirror  |
| Ray model of light | Reflected ray  | Reflection  | Refracted ray |
| Refraction         | Sheet of paper | Transparent | Translucent   |
| Opaque             |                |             |               |

Use the terms in the box above to complete the following sentences.

- In the \_\_\_\_\_, light is described as a ray that travels in a straight path.
- When light strikes \_\_\_\_\_ materials, it passes through them.
- When light strikes \_\_\_\_\_ materials, it passes through them, but it is scattered from its straight path.
- \_\_\_\_\_ materials do not allow light to pass through them.
- The angle of reflection is equal to the angle of \_\_\_\_\_.
- Light rays bounce off of a \_\_\_\_\_ with a regular reflecting pattern.
- The angle of \_\_\_\_\_ is the angle of a light ray that comes out of the boundary between two materials.
- The angle of refraction is measured between the \_\_\_\_\_ and the normal.

Match each term on the left with the best descriptor on the right.

|                              |  |
|------------------------------|--|
| 1. _____ normal              | a. equal to the angle of reflection                            |
| 2. _____ angle of refraction | b. measured between the refracted ray and the normal           |
| 3. _____ angle of reflection | c. angle of reflected ray                                      |
| 4. _____ angle of incidence  | d. imaginary line that passes through materials at right angle |
| 5. _____ ?                   | e. the surface that reflects                                   |