



# Section 5.1

## The Ray Model of Light

### Study Notes

By the end of section 5.1 you should be able to understand the following:

- Ray diagrams help explain how beams of light travel in straight lines and how various materials can be opaque, translucent, or transparent.
- Mirrors reflect light according to the law of reflection, which states that the angle of incidence equals the angle of reflection.
- Light rays bend when they pass between two materials of different density.

### NOTES

Describe the difference between transparent, translucent and opaque materials.

1.

2.

3.

Describe why shadows form.

1.

**Do the Reading Check on page 171**

## NOTES

Describe how light reflects from smooth and rough surfaces.

1.

2.

Describe the law of reflection.

1.

State what refraction is and give examples of refraction in water and air.

1.

2.

3.

**Do the Reading Check on page 175**