

When Light Strikes

Goal • Classify various materials as transparent, opaque, or translucent, and describe the behaviour of light when it strikes different materials.

What to Do

Answer the following questions in the space provided or on a separate page.

1. What does a sharp shadow tell us about the way light travels?

2. Describe how light is affected by

(a) a transparent object _____

(b) an opaque object _____

(c) a translucent object _____

3. Why is frosted glass often used for bathroom windows instead of clear glass or a solid wall?

4. Complete the table below. In the second column, classify each material as transparent, opaque, or translucent. In the third column, state whether light is absorbed, reflected, transmitted, or scattered when it strikes the material. In the last two boxes of the first column, write your own examples.

Material	Classification	Behaviour of light
glass		
white clouds		
stained glass window		
aluminum foil		
fog		
cellophane		
cardboard		
wax paper		
black chalkboard		
mirror		
	transparent	
		scattered