

# Light and Sound Study Guide

Science · Answer Key · 16 Questions

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## 1. What is the main source of natural light?

- A) The Moon
- B) The Sun**
- C) Fire
- D) Stars

## 2. At what speed does light travel?

- A) 186,000 miles per second**
- B) 1,000 miles per second
- C) 500 miles per second
- D) 10,000 miles per second

## 3. What is it called when light bounces off a smooth, shiny surface?

- A) Absorption
- B) Refraction
- C) Reflection**
- D) Diffraction

## 4. When light waves bend as they travel from one material to another, it is called:

- A) Absorption
- B) Reflection
- C) Refraction**
- D) Vibration

## 5. What happens when light is absorbed by an object?

- A) It passes through
- B) It bounces off
- C) It cannot pass through**
- D) It changes color

## 6. Which color of visible light has the smallest wavelength?

- A) Red
- B) Yellow
- C) Violet**
- D) Green

7. Which color of visible light has the largest wavelength?

- A) Blue
- B) Orange
- C) Red**
- D) Violet

8. Which type of lens magnifies an object?

- A) Concave
- B) Convex**
- C) Flat
- D) Cylindrical

9. What type of lens makes an object look smaller?

- A) Convex
- B) Concave**
- C) Flat
- D) Bifocal

10. Why does a basketball appear orange?

- A) It produces orange light
- B) It absorbs orange light
- C) It reflects orange light**
- D) It refracts orange light

11. Sound is a form of energy created by what?

- A) Heat
- B) Vibrations**
- C) Light
- D) Gravity

12. What are back-and-forth movements called?

- A) Reflections
- B) Vibrations**
- C) Refractions
- D) Absorptions

13. What is the measure of how high or low a sound is?

- A) Volume
- B) Pitch**
- C) Frequency
- D) Amplitude

**14. What is the measurement of how loud or soft a sound is?**

- A) Pitch
- B) Volume**
- C) Intensity
- D) Speed

**15. Through which of these can sound waves travel?**

- A) Air
- B) Water
- C) Solid objects
- D) All of the above**

**16. What part of the ear vibrates when sound waves reach it?**

- A) Eardrum**
- B) Ear canal
- C) Outer ear
- D) Inner ear