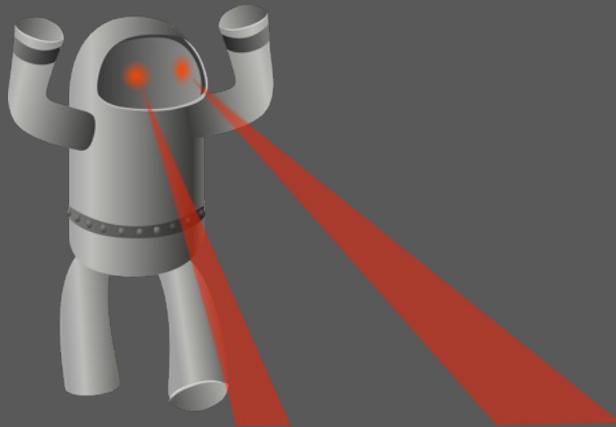


Absorption, Reflection and Transmission of Light



- Light Rays
- Geometric Optics
- Reflection
- Transmission/Refraction
- Absorption
- Categories of light
- Lasers

Preview File

Please enjoy this preview of your Student Version of the presentation. Please note within this sample file:

- Some slides appear blank because they have been removed
- Student versions have portions of the text removed which is given in the teacher version and appear as _____ which the students are to fill in
- Other slides may have on them, this represents writing that has been removed on this sample

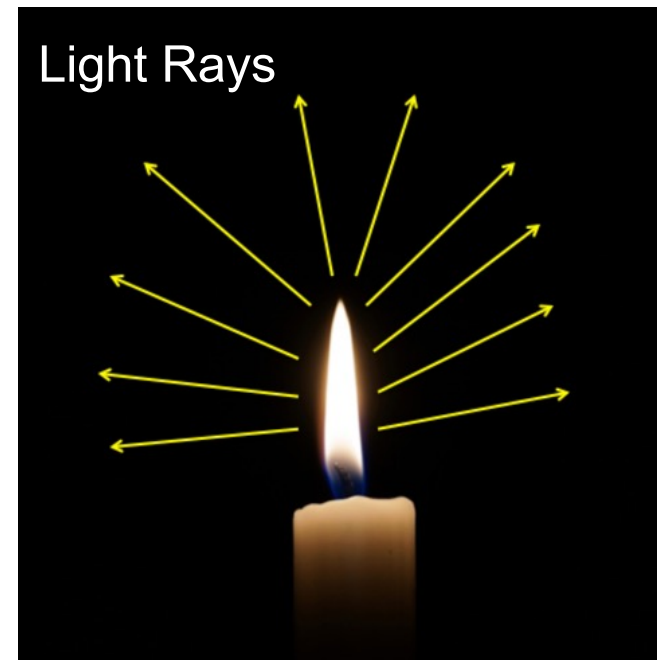
**The paid full version of your resource includes
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Light Rays

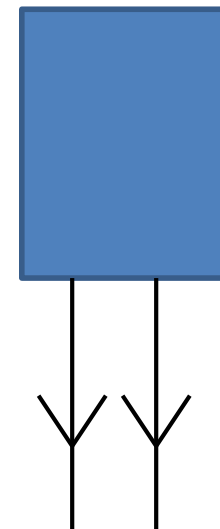
- A luminous object like a candle, radiates light

- A light ray is a line and arrow representing the direction and straight-line path of light



Light Rays

- Because a candle radiates light in all directions, there should be an _____
- However, you only need to draw a few in all directions to represent this
- A laser however emits light rays all in the same direction (parallel)
 - More on lasers later



Some Key Terms

- _____ – the use of light rays to determine how light behaves when it strikes an object
 - E.g. reflected back, goes through object, etc.
- Incident Light – _____
 - E.g. light from the Sun striking the Earth

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Materials

List the materials that come to mind that:

Absorb Light –

Transmit Light –

Reflect Light –

The reality is that most objects reflect, transmit and absorb light in different ratios. On a glass window for example (30% of light may be reflected 5% absorbed and 65% Transmitted)

Light

Matter can also be classified into three categories depending on how it behaves when light strikes it. All materials can be classified as:

1) _____

2) _____

3) _____

Transparent

- _____
- Objects behind are easily seen
 - E.g. Clear Glass



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An open, empty cardboard box, shown from a three-quarter perspective. The box is made of brown corrugated cardboard and is completely empty. The top flaps are open, and the box is set against a plain white background.

-



Lasers

- Lasers is actually an acronym – LASERS stands for:
Light
- The first one was built in 1960 by Theodore H. Maiman
- Some Applications Include:
 - Lasers can be focused to a microscopic dot of extremely high energy density. This makes it useful as a cutting and cauterizing instrument in medicine and industry

- _____
- _____
- _____
- _____



Incandescent Bulbs vs. Lasers

- Incandescent bulbs emit light of many energy levels (many colours produced)
- Lasers produce electromagnetic waves of 1 energy level

— _____

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Lasers

- A high energy laser is so intense and so concentrated that _____
- Also they can be used to measure the distance from the Earth to the Moon with an accuracy of 3 cm