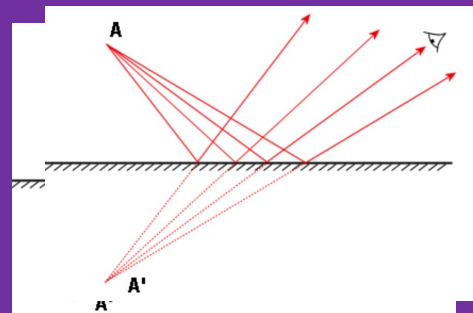
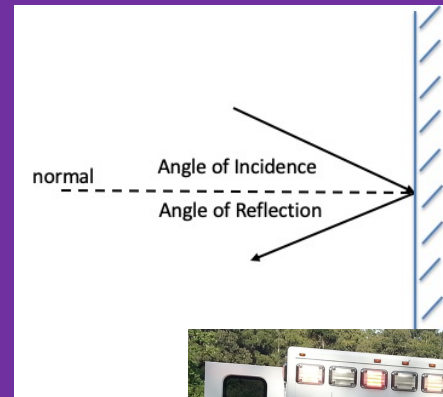


Introduction to Reflection and Plane Mirrors

- Reflection
- Terminology
- Types of Mirrors
- Law of Reflection
- Types of Reflection
- Ray Diagrams
- Locating Images in a Mirror
- Lateral Inversion
- Describing Images



Preview File

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- 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

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both Google Slides and PowerPoint and is
Google Classroom Ready**



Reflection

-

- The wavefront reflects off the second medium perpendicular to the surface and returns into the medium from which it originated

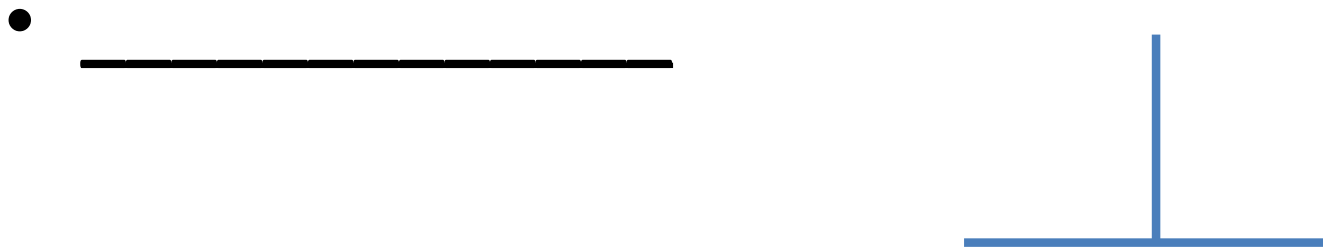


Reflection

- The clarity of the reflection depends on the mediums
- Examples include the reflection of light off an object as well as sound and water waves



Terminology of Reflection



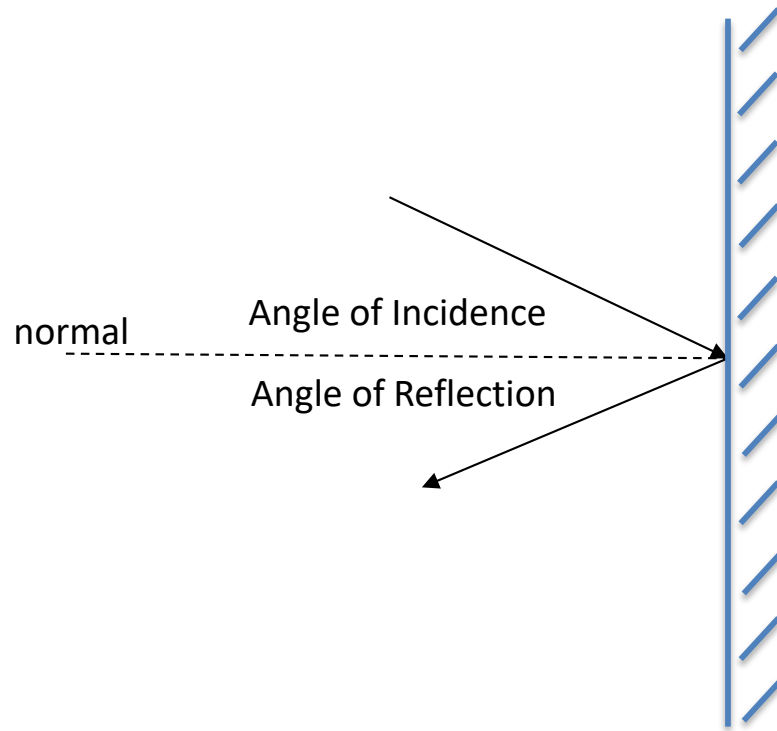
- Medium - A substance that makes possible the transfer of energy from one location to another

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The Law of Reflection

In other words, light gets reflected from a surface at the same angle it hits it.

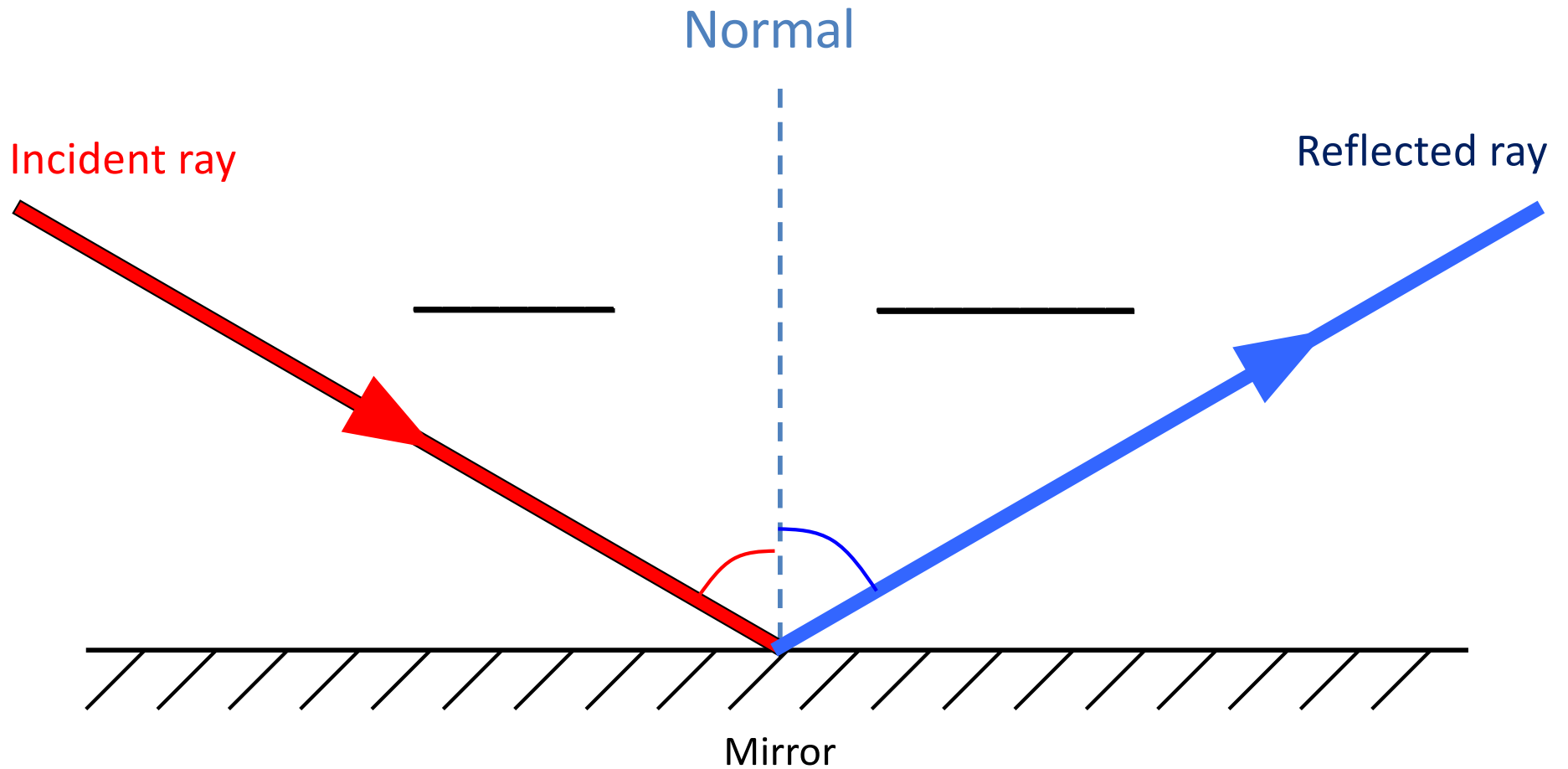
Each arrow represents a “ray” of light.



Note: The angles are not measured to the edge They are measured to the “normal”

The normal is a dotted line that is drawn perpendicular to the mirror.

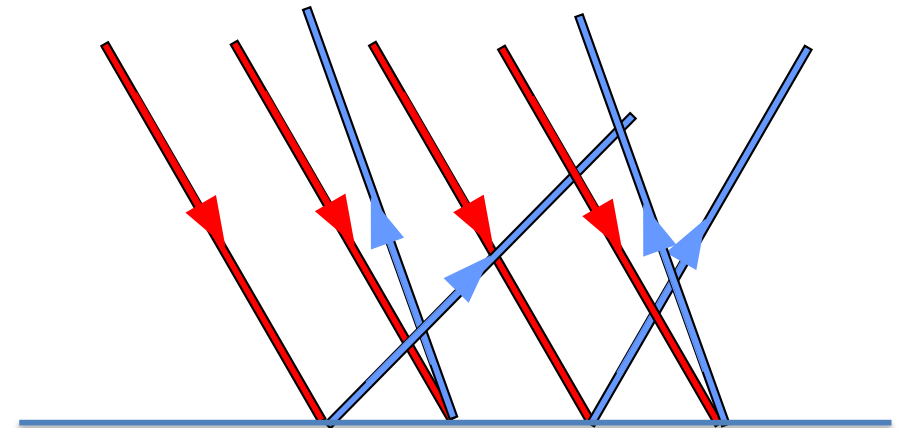
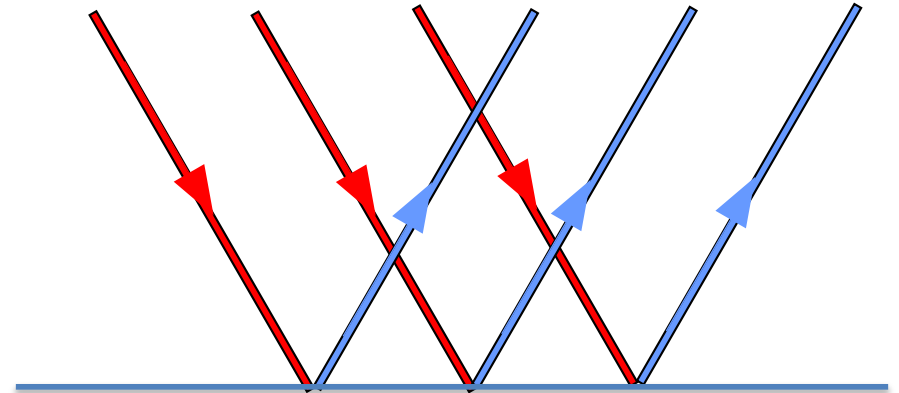
Reflection From a Mirror



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Clear vs. Diffuse Reflection

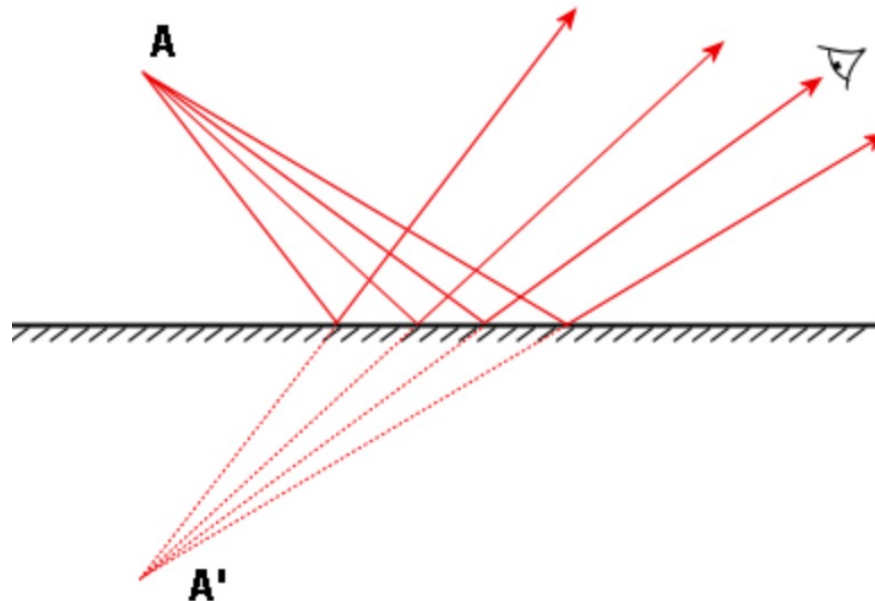
- Smooth, shiny surfaces have a clear reflection
- Rough, dull surfaces have a diffuse reflection
- Diffuse reflections occur when



Ray Diagrams

- A ray diagram is a method used to determine where an image (A') will appear when an object (A) is viewed through a mirror or lens

- _____

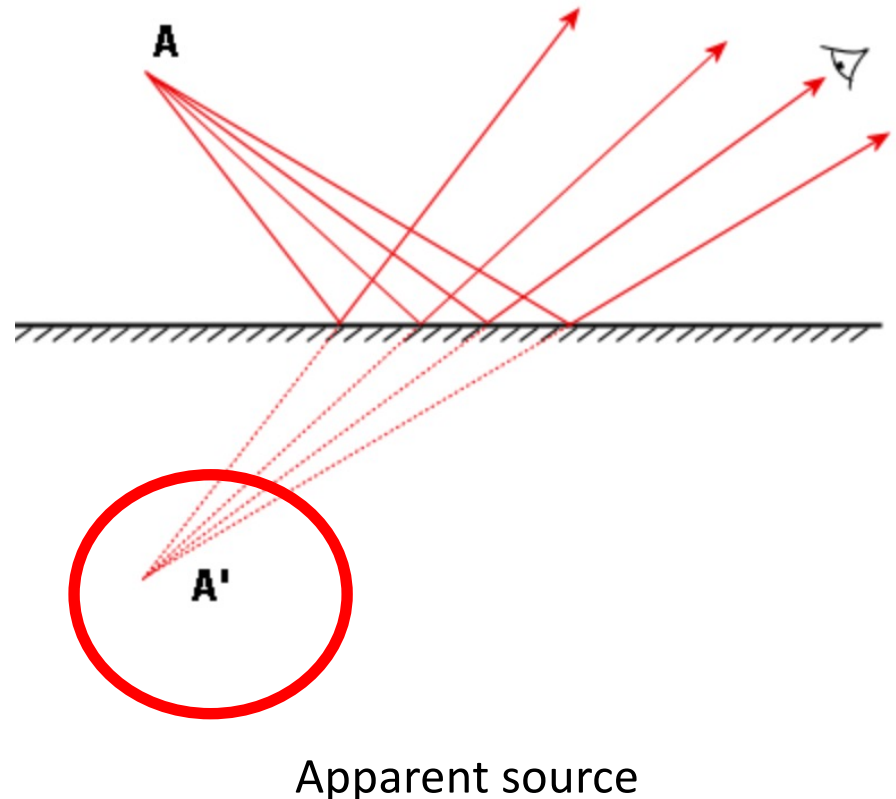


Locating an Image in a Mirror

- Since we know light travels in a straight line, our brains think that the source is actually _____

- _____

- Note, dashed or dotted lines indicate light rays behind the mirror

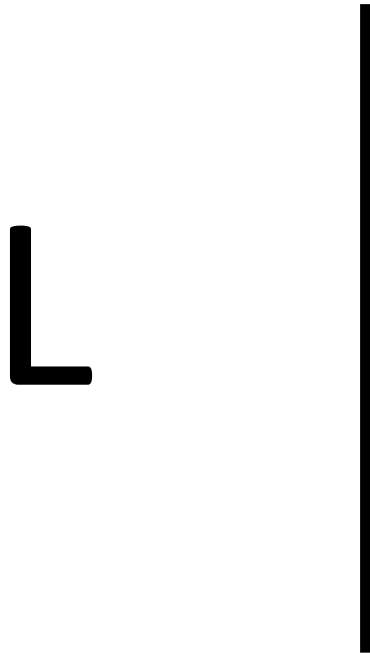


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The Result - Lateral Inversion

The orientation of an image in a plane mirror is flipped horizontally and in reverse order

Try it for yourself using object-image lines



Lateral Inversion

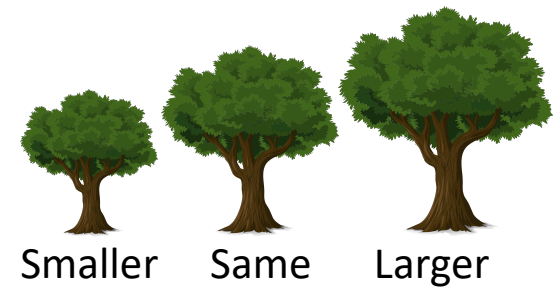
Why do you think
it is written
backwards?



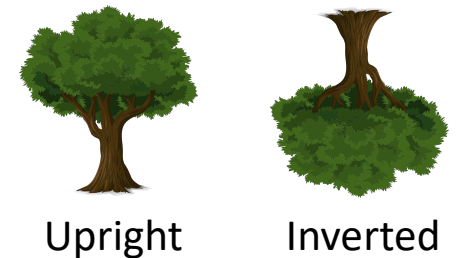
Describing Images Using SALT

When you describe the properties of an image, you need to examine four characteristics and compare them to the object.

1) _____



2) **A**ttitude of image (which way the image is orientated compared to the object: upright or inverted)



3) **L**ocation of image (distance from mirror)

4) _____

SALT

An image in a plane mirror is **ALWAYS** the

