

Biophysics Flash Cards


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Light Microscopy Flash Cards

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Instructions

Print the flash cards from the templates on pages 2-3. Each page has 4 flash cards.
The concept is on the left side of the template and the explanation is on the right side.

To create individual flash cards:

- 1) Trim the margins on the top, bottom, and sides of the page where you see the scissors icon 
- 2) Cut between the cards where you see the scissors icon to create individual cards.
- 3) Fold the cards in half at the dashed "Fold" line and align the front and back edges of each card.
- 4) Each template makes 4 flash cards of 2.5 x 3.75 inch (H x W). There are 8 cards in a set.

The colored border indicates that the cards are in the same set.

Objectives & Grade Level

Teach students basic concepts about biophysics. Appropriate for middle school to high school students. Students can use the flash cards singly or in groups by studying the cards and testing themselves or others on concepts from the cards.

Acknowledgements

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What is a Microscope?



Microscopes enlarge or magnify objects so details can be seen more clearly



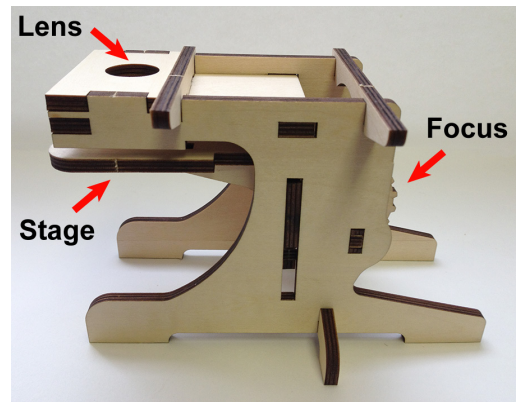
www.microscopeworld.com/

Types of Microscopes



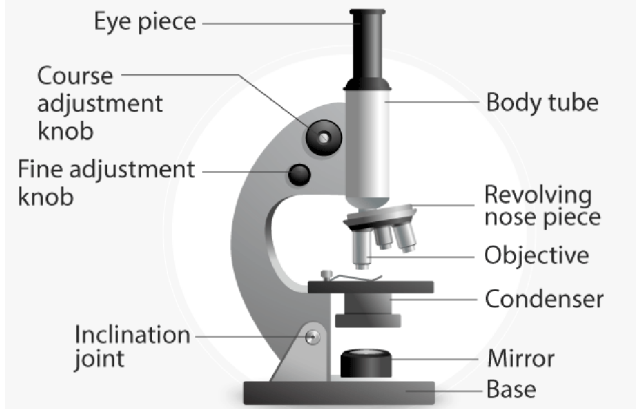
Simple Microscopes consist of a lens, stage and focusing mechanism
Compound Microscopes contain additional lens or lenses

Parts of a Simple Microscope



Gift from Echo Laboratories & Chroma Technology Corp to the BPS

Parts of a Compound Microscope



byjus.com/physics/compound-microscope/

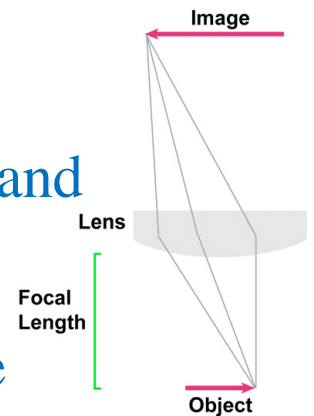
Lens

What is a lens?



Lenses are glass or plastic

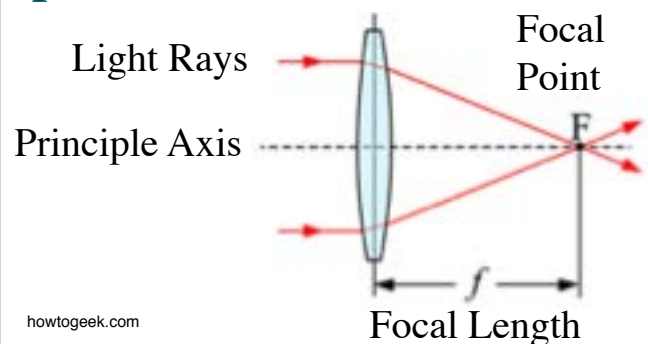
Lenses collect and refocus light forming an enlarged image



Focal Point



An object at the lens focal point will be in focus

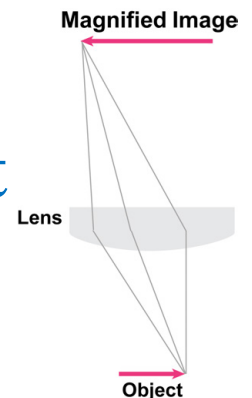


howtogeek.com

Magnification



Magnification is the enlargement of an object relative to its **ACTUAL** size



Formula for Magnification



$$M = S_F / S_A$$

M , magnification =
 S_F , final specimen size /
 S_A , actual specimen size