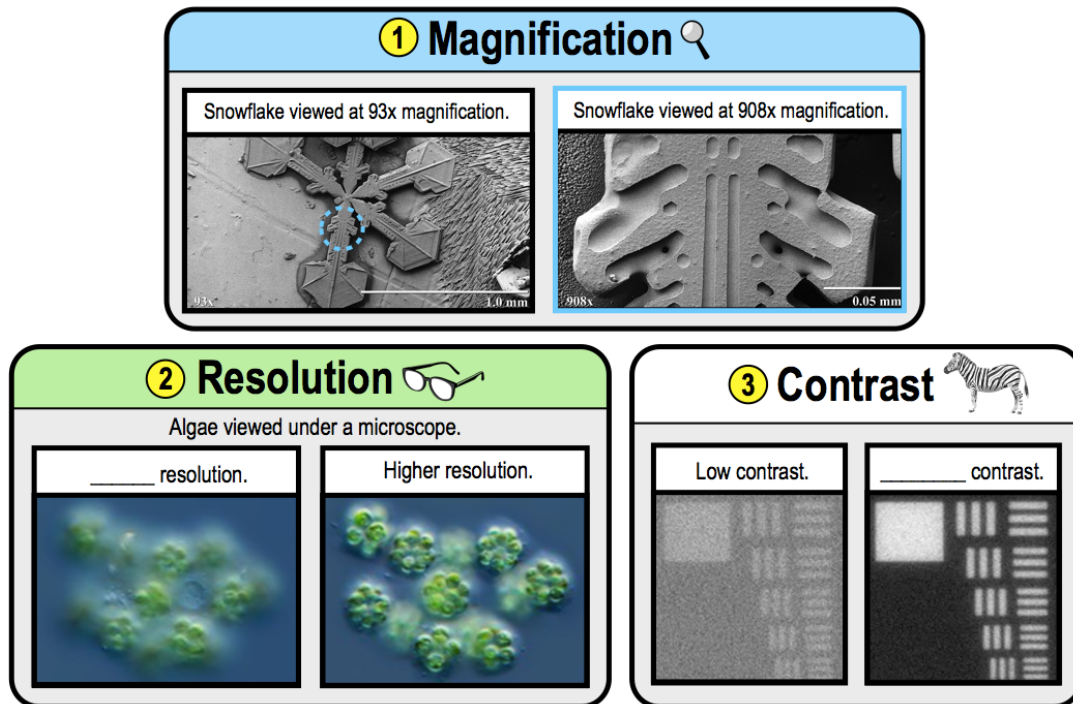


CONCEPT: MAGNIFICATION, RESOLUTION, & CONTRAST

● Effective microscopy requires a balance of the following _____ terms:

- 1) **Magnification**: an apparent increase in the size of an image through the use of _____.
- 2) **Resolution**: the _____ distance two objects must be to observe them as being *separate*.
 - **Resolving Power**: a measure of the ability to *distinguish* _____ objects that are very close together.
- 3) **Contrast**: *difference in color/light intensity* between an object and its _____.
 - Determines how easily cells & cell structures can be seen.



PRACTICE: The resolving power of a microscope is described as the ability of the microscope to...

- a) Visually separate two objects that are very close together.
- b) Magnify an object.
- c) Differentiate the colors of the specimen from the background.
- d) See structures at various depths in a tissue.

PRACTICE: If you can only increase one of the following, which would you increase to observe more details of the microscopic specimen?

- a) Increase the magnification.
- b) Increase the resolution.