

Microscope Calculations

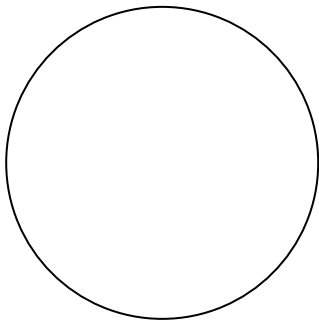
Complete the following table:

Lens	Magnification	Total Magnification	Field Diameter (mm)	Field Diameter (µm)
ocular	10X			
low power	4X			
medium power				
high power				

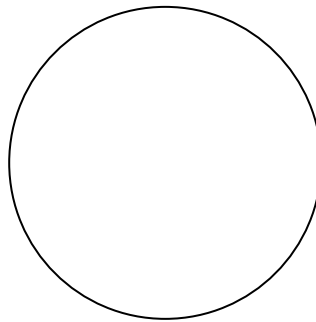
******Note: as the magnification increases, the diameter of the field of view decreases proportionally**

Field of View (FOV)

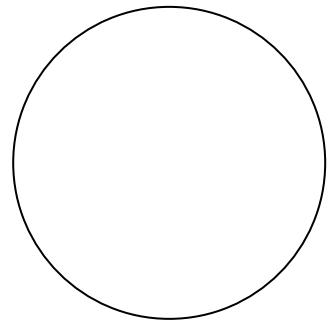
- An object will look much different when seen through the ocular at each magnification



Low Power



Medium Power



High Power

Calculating the Size of a Specimen

It is possible to determine the approximate size of a specimen (its length or width) if you know the diameter of the field of view.

$$\text{Actual size} = \frac{\text{Diameter of FOV}}{\text{\# of specimens that fit across FOV}}$$