

# Five Numbers that Describe a Telescope

**Name of Telescope:** \_\_\_\_\_

## Aperture

Measure the aperture of the objective or primary in millimeters and inches and record:

## Focal Length

Measure the focal length of the objective or primary in mm and record:

Measure the focal length of the eyepiece in mm and record:

## Magnification

Calculate the magnification of the telescope with a particular eyepiece:

$$\text{Magnification} = \frac{\text{focal length of objective}}{\text{focal length of eyepiece}}$$

## Focal Ratio

Calculate the focal ratio:

$$\text{Focal Ratio} = \frac{\text{focal length of objective}}{\text{objective diameter}}$$

## Resolving Power:

Calculate the resolving power:

$$\text{Resolving Power} = \frac{116}{D \text{ (arcseconds)}}$$