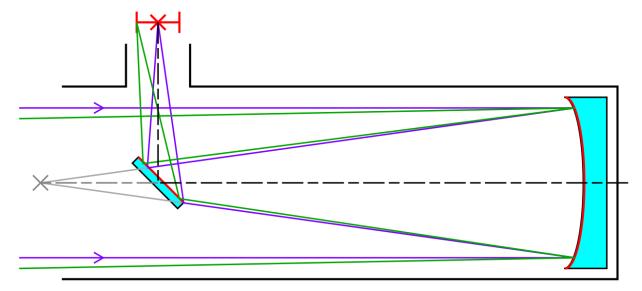
## **Telescopes and Cameras Week Two**

## Name:

This week we will be continuing to experiment with telescopes. Last week we worked with refracting telescopes, telescopes built around lenses, for the most part. Now we'll be looking at a telescope built with mirrors and comparing the imaging capabilities of our cell phones. Time permitting, we can experiment with catadioptric telescopes, telescopes with combinations of lenses and mirrors.



The telescope we are going to work with today is the Newtonian telescope. Essentially a mirror is placed near the focal plane of a curved mirror. This offsets the image formed to a location that is able to be observed by the user. To magnify the image you will need to add an eyepiece. A simple convex lens will do.

Questions:	
1)	Take a photo of something as far away as possible with your cell phone. What issues do you see? Why do you think it looks the way it does?
2)	Compare your photo to photos taken by two other people. If you take a photo of the same subject, who's looks better and why? This may require you to google the specs of your camera and your partners'

3) Was it easier to build this week's telescope or the one from the previous weeks?