

Exploring Apertures Worksheet

Observations

Aperture Diameter (cm)	f/#	Description of Image
Mirror alone 7.5		
5	4	
3.5	6	
2.5	8	
1.8	11.3	
1.2	16	
0.9	22.6	

Discussion Questions

1. Based on your observations, what can you conclude about the relationship between aperture size, f-stop number and the sharpness of the image?

2. Given that the diameter of the mirror used in this demonstration is 7.5 cm, and its focal length is 20 cm, it can be considered an aperture itself. Why? What would be its f-stop number?

3. What are the advantages and disadvantages of using an aperture?