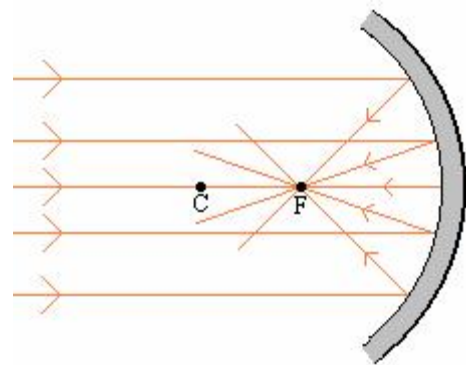







# Applications of Curved Mirrors

## Concave Mirrors

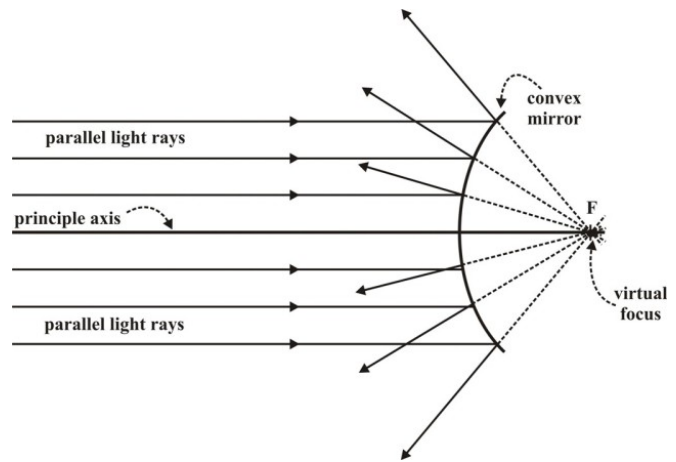
- Light rays converge at the focal point
- Creates real or virtual images




Application	Purpose	
Flashlights and Searchlights	Produce a parallel beam by placing the light bulb at the focal point.	
Telescopes	Collect and focus faint light from distant stars or planets. <i>The Hubble telescope has a 2.4 m diameter mirror!</i>	
Cosmetic / Shaving Mirrors	Produce an enlarged virtual image of the face for up-close inspection.	
Dental Mirrors	Produce an enlarged virtual image of the teeth.	
Car Headlights	Produce parallel beam of light that can be tilted down (low beam) or straight ahead (high beam).	

## Convex Mirrors

- Light rays diverge from the mirror with virtual reflected rays passing through  $f$
- Creates smaller, virtual images of a large area



Application	Purpose	
Security Mirrors	To view a large area of the store.	
Car Sideview Mirrors	Allows a wide area behind the car to be seen.	