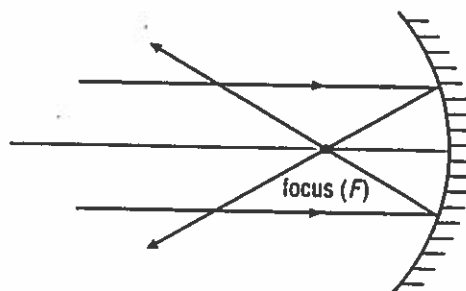


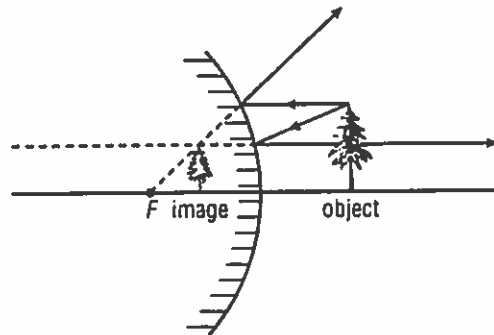
CHECK YOUR LEARNING**Suggested Answers**

1. Sample answers: Concave mirrors are used for parking lot lighting, and are found in reflecting telescopes in the science classrooms. Convex mirrors are used in the library to provide wide angle views.
2. Light rays actually arrive at the location of a real image, so it can be formed (projected) on a screen. Light rays that form a virtual image do not pass through or come from the image location; they just appear to.
3. The diagram should show that rays entering the mirror parallel to the principal axis are reflected through the focus.

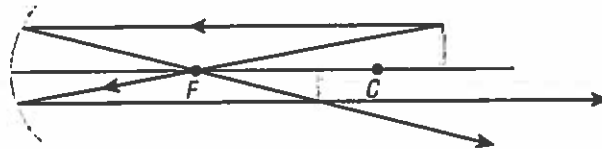


4. Sample answer: Rays that are parallel to the principal axis will reflect through the focus. Rays that pass through the focus as they head toward the mirror reflect parallel to the principal axis. Rays that pass through the centre of curvature heading toward the mirror will reflect back upon themselves. A ray that strikes the vertex will obey the laws of reflection.
5. My head is between the focus and the mirror.

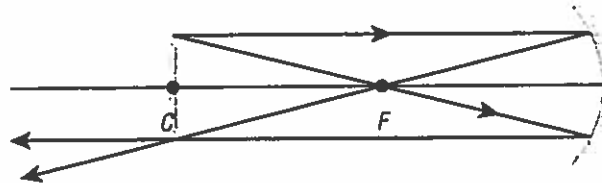
6. Diverging rays can only be traced back by the observer's brain to an apparent point of origin, and thus never come from or pass through the image location. Reflected rays from a convex mirror always diverge. Real images can only form when reflected rays from a mirror converge.



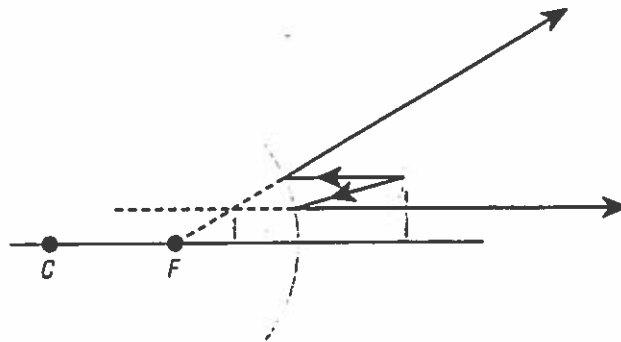
7. (a) This is a convex mirror.
 (b) The image is located behind the mirror.
 (c) This is a virtual image.
8. (a) image = smaller, inverted, between C and F, real



- (b) image = same size, inverted, at C, real



- (c) image = smaller, upright, on the other side of the mirror between the mirror and F, virtual



9. Real images are inverted, and virtual images are upright.
10. (a) Drivers can 'see around corners' due to the wide angle view the mirrors provide.
 (b) Sample answers: right hand side-view mirror on a car, security mirrors in stores, decorations in homes.