

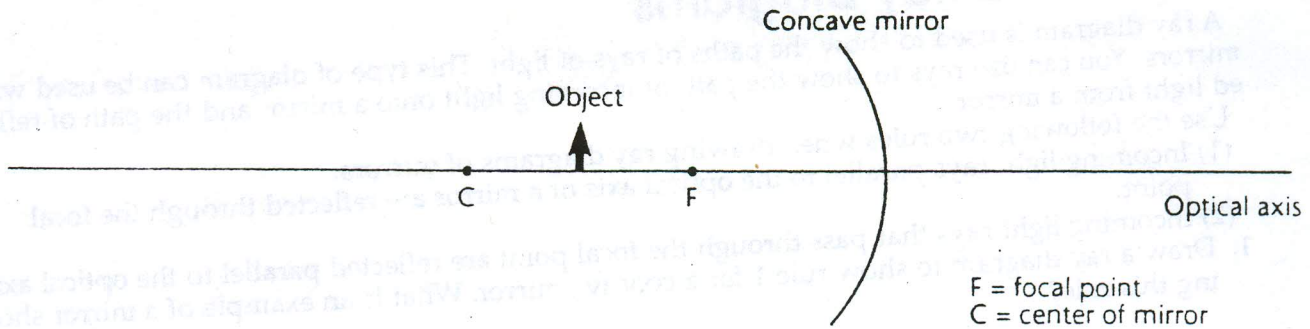
## Chapter 20

Use with Text Pages 558-563

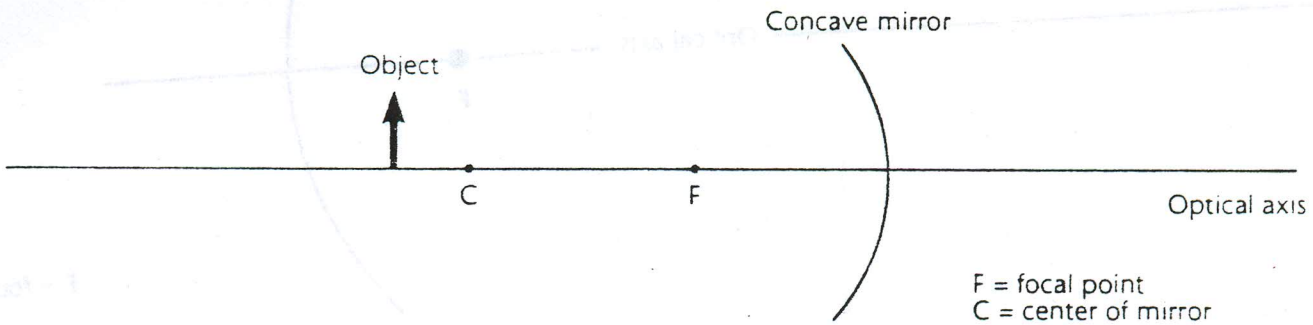
## REINFORCEMENT

## ● The Optics of Mirrors

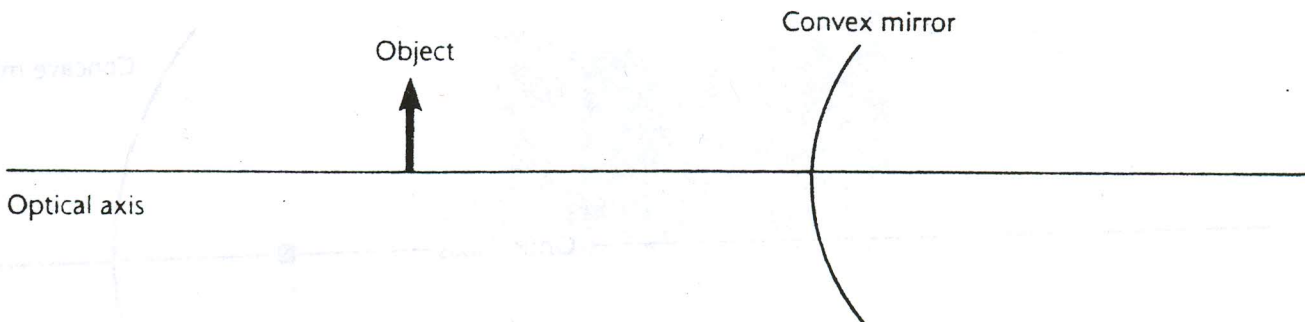
1. *Locate the image* of an object placed between the focal point and the center of a concave mirror by drawing *two rays*. Draw the image and describe this image with words.



2. *Locate the image of an object* placed beyond the center of a concave mirror by drawing *two rays*. Draw the image and describe this image with words.



3. *What type of mirror would you use* to allow a large area to be viewed? \_\_\_\_\_  
Use rays to show how a *virtual image* is formed by a convex mirror.



*Why do you often see the phrase "Objects are closer than they appear!" written on convex mirrors?*

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## ENRICHMENT

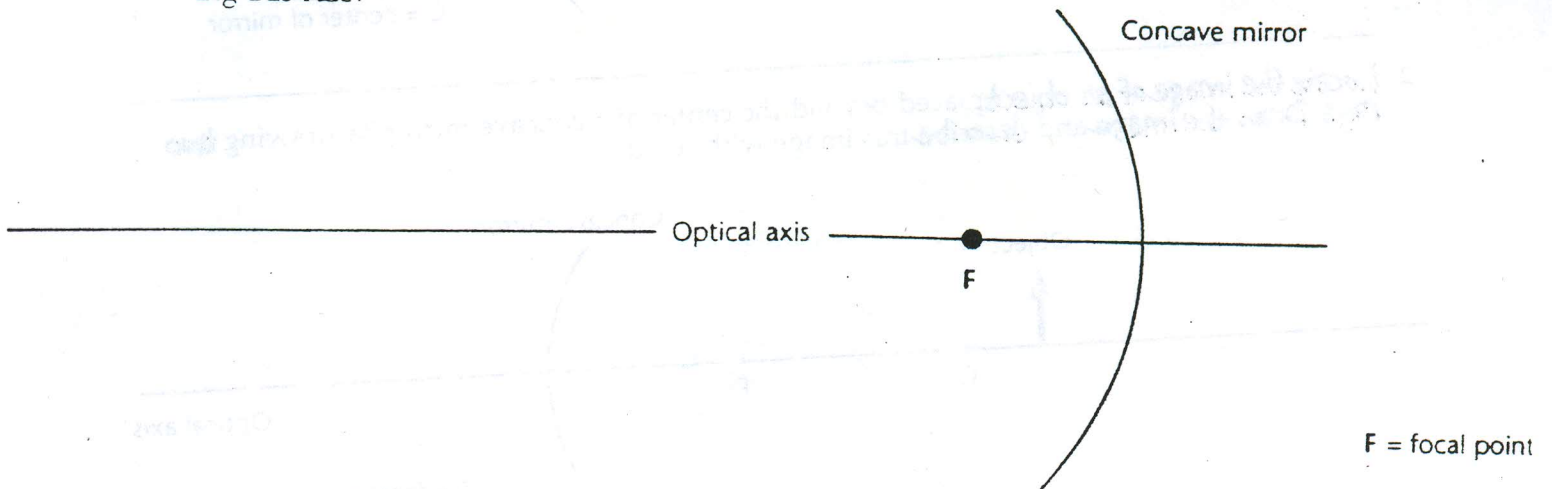
## • The Optics of Mirrors

## Mirrors and Ray Diagrams

A ray diagram is used to show the paths of rays of light. This type of diagram can be used with mirrors. You can use rays to show the path of incoming light onto a mirror and the path of reflected light from a mirror.

Use the following two rules when drawing ray diagrams of mirrors.

- (1) Incoming light rays parallel to the optical axis of a mirror are reflected through the focal point.
  - (2) Incoming light rays that pass through the focal point are reflected parallel to the optical axis.
1. Draw a ray diagram to show rule 1 for a concave mirror. What is an example of a mirror showing this rule?



2. Draw a ray diagram to show rule 2. What is an example of a mirror showing this rule?

