

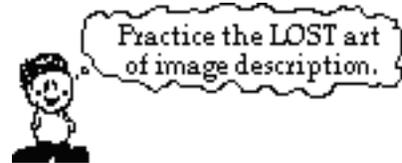
Ray Diagrams for Concave Mirrors

Read from **Lesson 3** of the **Reflection** chapter at **The Physics Classroom**:

<http://www.physicsclassroom.com/Class/refln/u13l3d.html>
<http://www.physicsclassroom.com/Class/refln/u13l3e.html>

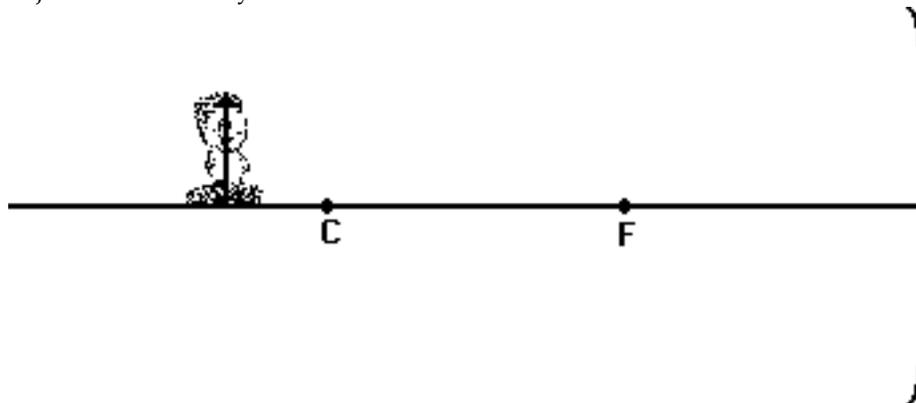
MOP Connection: Reflection and Mirrors: sublevels 5 and 6

For the following mirrors and corresponding object positions, construct ray diagrams. Then describe the Location of the image, Orientation (upright or inverted) of the image, the relative Size of the image (larger or smaller than object), and the Type of image (real or virtual). For **Case 4**, merely construct the ray diagram.



NOTE: 1) All light rays have arrowheads that indicate the direction of travel of the ray.
 2) Always draw in the image once located (an arrow is a good representation).
 3) Exactness counts. Use a straightedge and be accurate.

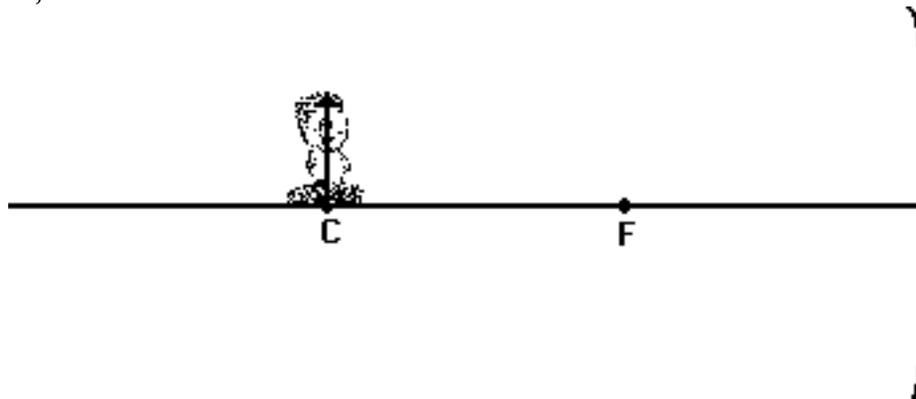
Case 1: If the object is located "beyond" the center of curvature.



Description of Image:

Location: _____
 O: Upright or Inverted S: Magnified or Reduced T: Real or Virtual

Case 2: If the object is located at the center of curvature.

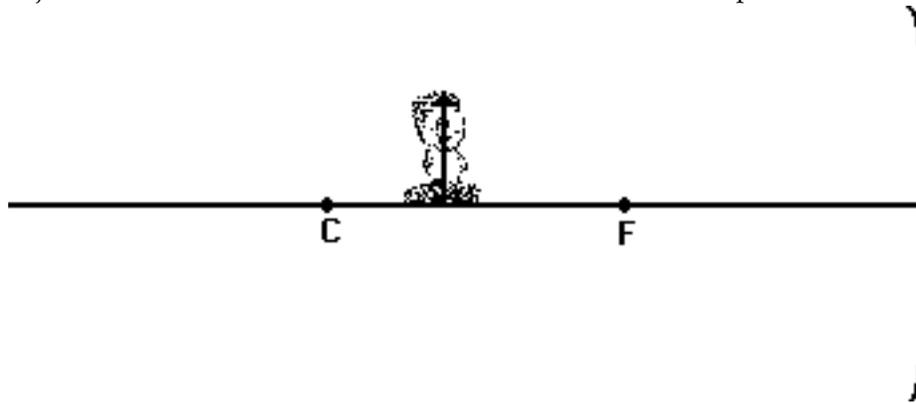


Description of Image:

Location: _____
 O: Upright or Inverted S: Magnified or Reduced T: Real or Virtual

Light, Reflection and Mirrors

Case 3: If the object is located between the center of curvature and the focal point.



Description of Image:

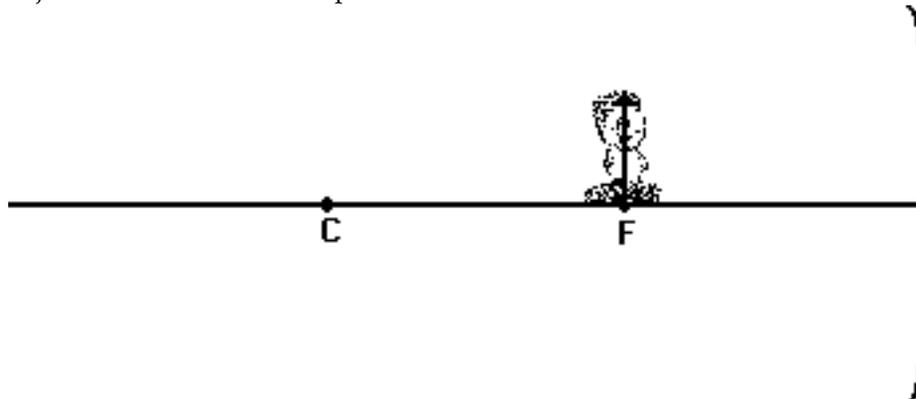
Location: _____

O: Upright or Inverted

S: Magnified or Reduced

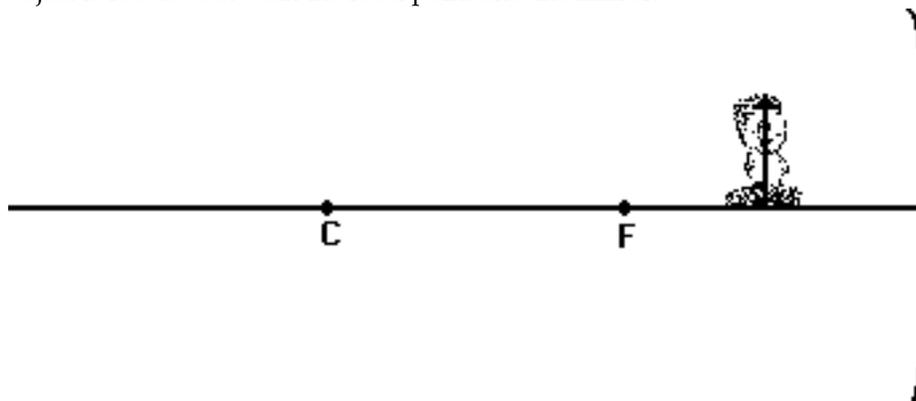
T: Real or Virtual

Case 4: If the object is located at the focal point.



No Description Required

Case 5: If the object is located between the focal point and the mirror.



Description of Image:

Location: _____

O: Upright or Inverted

S: Magnified or Reduced

T: Real or Virtual