1. Complete each incomplete sentence and draw the characteristic ray it describes.

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| **Convex Mirror Characteristic Rays** |
| **Parabolic Characteristics:** |
| Any incident ray parallel to the principal axis will  |  |
| Any incident ray passing through the Focus will |  |
| **Circular Characteristics:** |
| Any incident ray passing through the Centre of Curvature will |  |
| Any incident ray striking the Vertex will |  |

NOTE: Any ray originating on the object, and reflecting off the mirror, will appear to have come from a corresponding point on the image. Characteristic rays simply help predict image characteristics.

|  |  |
| --- | --- |
| **Convex Mirrors** | **Image Characteristics** |
|  | **Size****Inversion****Location****Type** |
|  | **Size****Inversion****Location****Type** |
|  | **Size****Inversion****Location****Type** |

**Complete the following Statements:**

1. In order to produce a VIRTUAL IMAGE with CONVEX MIRROR, an object must be placed
2. In order to produce the LARGEST IMAGE POSSIBLE with CONVEX MIRROR, an object must be placed
3. In order to produce an IMAGE SMALLER THAN THE OBJECT with CONVEX MIRROR, an object must be placed

1. If the OBJECT IS MOVED far away from a CONVEX MIRROR, the image will move