$\qquad$

## Drawing Ray Diagrams for Plane Mirrors

## INSTRUCTIONS

## Steps:

1. Draw a line to represent a plane mirror.
2. Draw a simple object (i.e. pencil, arrow, etc...).
3. Label one end of the object $A$ and the other end $B$.
4. Draw an incident ray from point $A$ on the object to the mirror at $90^{\circ}$.
5. Draw the reflected ray backwards along the same line as the incident ray.
6. Using a dashed line, extend the reflected ray behind the mirror.
7. Draw another incident ray from $A$ at an angle to the mirror (Not a $90^{\circ}$ angle).
8. Draw the normal as a dotted line. The normal is located at a $90^{\circ}$ angle to the mirror.
9. Measure the angle of incidence and draw the reflected ray.
10. Using a dashed line, extend the reflected ray behind the mirror until it meets the other dashed line.
11. Repeat steps 4 to 10 for point $B$ on the object.

## Ray Diagram for Plane Mirror:

## Description of the Image:

Location: $\qquad$
Orientation: $\qquad$
$\mathrm{S}_{i z}$ : $\qquad$
$\mathrm{T}_{\text {ype }}$ $\qquad$
$\qquad$

## Drawing Ray Diagrams for Plane Mirrors

## PRACTICE

## Steps:

1. Draw a line to represent a plane mirror.
2. Draw a simple object (i.e. pencil, arrow, etc...).
3. Label one end of the object $A$ and the other end $B$.
4. Draw an incident ray from point $A$ on the object to the mirror at $90^{\circ}$.
5. Draw the reflected ray backwards along the same line as the incident ray.
6. Using a dashed line, extend the reflected ray behind the mirror.
7. Draw another incident ray from $A$ at an angle to the mirror (Not a $90^{\circ}$ angle).
8. Draw the normal as a dotted line. The normal is located at a $90^{\circ}$ angle to the mirror.
9. Measure the angle of incidence and draw the reflected ray.
10. Using a dashed line, extend the reflected ray behind the mirror until it meets the other dashed line.
11. Repeat steps 4 to 10 for point $B$ on the object.

## Ray Diagram for Plane Mirror:



Description of the Image:
Location: $\qquad$
Orientation: $\qquad$
$\mathrm{S}_{\text {ize: }}$ $\qquad$
$\mathrm{T}_{\text {ype }}$ $\qquad$

