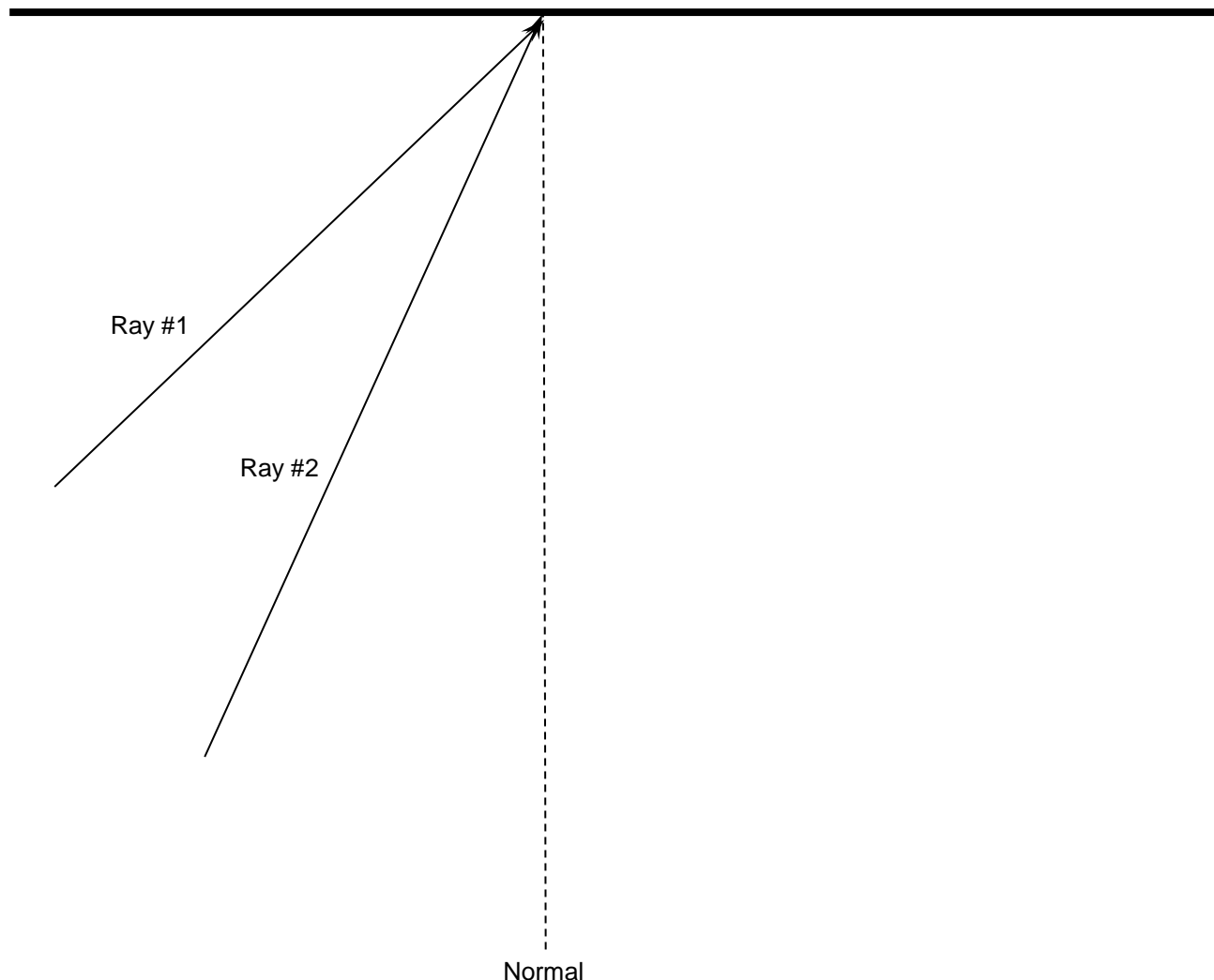


Law of Reflection Handout

In this exercise, you'll be using a mirror and a light box to find the Law of Reflection. To do so, you'll use the light box to shine a ray of light and observe how it reflects. Use a protractor to measure the angle of the incident ray (the light being shone) and the angle of the reflected ray (the light being reflected). Record your results in the provided table for the rays in each of the scenarios.

- **Scenario 1:** Align the light box so it follows the path of ray #1 and ray #2.
- **Scenario 2:** Choose an angle for the incident ray of your choice and label it ray #3.
- **Scenario 3:** Start with the angle of the reflected ray at 17° . Position the light box so it produces a reflected ray that follows the path and number it ray #4.

Place mirror along this line:



Observations:

Table #1: Angles of Incident Rays and Reflected Rays for a Plane Mirror

Ray #	Angle of Incident Ray	Angle of Reflected Ray
1		
2		
3		
4		17°

Scenario 1:

1. Compare your results for Ray 1 and Ray 2. What do you notice about the results?

Scenario 2:

2. What did you observe when you chose your own angle for the incident ray? Did the angle you chose matter?

Scenario 3:

3. What did you observe when you started with a reflected angle? Did it make a difference to your results?

What you observed follows the Law of Reflection. Use your own words to describe this law.

The Law of Reflection: