

**Inquiry** **MiniLab**

**LESSON 1: 10 minutes**

### Why is a reference point useful?

To find an object's position, you need to know its distance and direction from a reference point.

**Procedure**  

1. Read and complete a lab safety form.
2. Put a **sticky note** at the 50-cm mark of a **meterstick**. This is your reference point.
3. Place a **small object** at the 40-cm mark. It is 10 cm in the negative direction from the reference point.
4. Continue moving the object and recording its distance, its reference direction, and its position to complete the table below.

**Data and Observations**

Position of Object		
Distance (cm)	Reference Direction	Position (cm)
10 cm	negative	40 cm
40 cm	positive	
15 cm	positive	
	positive	75 cm
		30 cm

**Analyze and Conclude**

1. **Recognize Cause and Effect** How would the data in the table change if the positions were the same but the reference point was at the 40-cm mark?

---



---

2.  **Key Concept** Why is a reference point useful in describing positions of an object?

---



---



---



---

Copyright © Glencoe/McGraw-Hill, a division of The McGraw-Hill Companies, Inc.