**CircuitMess**

# Understanding Variation

## 1 Looking at Repeated Results

**1** Mr. Bee ran the same test three times.

| Test | Power Level | Distance |
|------|-------------|----------|
| 1 | 0.5 | 10.2 |
| 2 | 0.5 | 10.0 |
| 3 | 0.5 | 10.1 |

1. Circle the largest distance.
2. Underline the smallest distance.

**2** **Answer:**

Are the results exactly the same?  _____

Are they close to each other?  _____

## **2** Thinking About Why Results Change

**1** Choose **two reasons** that could explain the small differences:

- **A.** **The surface changed**
- **B.** **The starting position changed**
- **C.** **The robot forgot how to move**
- **D.** **Small movements can affect results**

**2** Explain your choice in one sentence:

_____

_____

## **3** Explaining Variation

**1** Finish the sentence:

Variation means that _____

_____

_____

**2** True or False:

Variation means something went wrong. _____

---

**4** Reflection

---

**1** Why is it helpful to repeat a test more than once?
**Write one or two sentences.**

_____

_____

_____

_____