

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Class: \_\_\_\_\_

## Ultrasonic Sensor Post-Quiz **Answer Key**

1. How do humans sense distance?

**Humans estimate distance using their eyes, which is usually not a very accurate method.**

2. How do bats sense distance?

**Bats sense distance using sound. They emit sound waves and receive back reflected waves. The time it takes to receive the waves back provides them with a very good estimate of the distance. This is exactly how the ultrasonic sensor estimates distance.**

3. Provide an example “stimulus-sensor-coordinator-effector-response” framework using an NXT ultrasonic sensor.

**Example: object in front of the ultrasonic sensor > ultrasonic sensor > LEGO brick/computer > robot motor > robot moves**