**What Is a Sensor? Pre-Quiz Answer Key**

1. **How many sensors or senses to humans have? List them.**

**Five main sensors: eyes, ears, nose, skin, tongue**

**(Additional sensors include: detecting temperature, detecting body position, balance sensors, and blood acidity sensors.)**

1. **Describe how any two of the sensors you listed work.**

**Eyes take in light from the surroundings and relay that to nerve cells that send images to the brain.**

**Ears take in sound waves from air and vibrate, sending vibrations through the inner ear to hair cells that send signals to the brain.**

**Particles are inhaled into the nose and nerve cells contact the particles and send signals to the brain.**

**Sensors all over the skin are activated and send signals to the brain through nervous system.**

**Taste buds on the tongue are made of small cells that have little hairs that are activated by food particles; these hairs send signals through the nerves to the brain.**

1. **Give examples of sensors in robots that are similar to at least three human senses.**

**A robot’s light and ultrasonic sensors are like eyes.**

**Sound sensors are like ears.**

**Touch sensors are like skin.**