

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

1. How do your nose (smell sensor) and skin (touch sensor) work as sensors?

Provide details about the process in each case.

Particles are inhaled into the nose, and nerve cells/receptors contact particles and send signals to the brain. About 10 million smell receptors are present in a nose.

Sensors all over the skin are activated; they send signals to the brain through the nervous system.

2. How many different types of taste can your tongue detect? List them.

Five: sweet, salty, bitter, sour and umami

3. Why did most students have difficulty determining the flavor of the candy when their noses were closed?

We use both our smell and taste sensors (nose and tongue) to identify flavors, and so if the nose is blocked, our brain does not get any signals from the nose, and thus makes incorrect judgments about the flavor.