

Color Sensor Post-Quiz **Answer Key**

1. How does the LEGO EV3 color sensor work?

The light sensor detects the brightness of the light it receives and uses a scale of 0 (very dark) to 100 (very light). Then it sends this signal to the intelligent brick/computer.

2. Provide an example “stimulus-sensor-coordinator-effector-response” framework using the EV3 color sensor.

Example: light > EV3 color sensor > (transmission to coordinator) value sent to EV3 brick via wire > brick sends a signal to the EV3 motors > robot moves

3. Give some examples of color sensors in engineering systems.

Examples: cameras; sensors that turn lights on when it gets dark; porch lights, streetlights and car headlights that turn on automatically in low light or at night