

Name: _____ Date: _____ Class: _____

Control Using Sound Post-Quiz **Answer Key**

1. Sketch clearly a “stimulus-sensor-coordinator-effector-response” framework using the sound sensor on the LEGO taskbot and compare it with a stimulus-to-response framework using the human ear.

LEGO taskbot: sound of clap > LEGO sound sensor > signal to LEGO brick via wire > brick decides to move the motor > signal sent to LEGO motor > motor moves robot

Human ear: sound waves from thunder > human ear > human brain > leg muscles > run for shelter

2. Give examples of sensors in engineering systems that are similar to the human sound sensor.

Examples: Microphones in phones, computers and karaoke machines; voice-activated door openers