

# BUILD IT

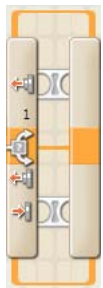
## Straight Line Challenge NXT Questions

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. Match each icon below with its name.

Icons



Name

Loop

Light Sensor

Motor\*

Sound Sensor

Switch

Rotation Sensor

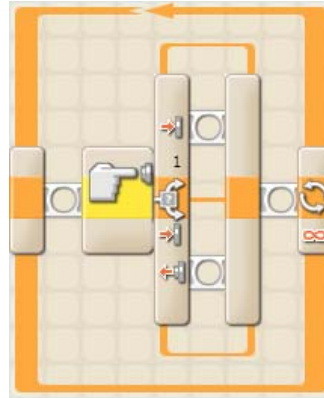
Sound

Ultrasonic Sensor

Touch Sensor

Display

2. You are trying to make an NXT program, and so far, here is what you have:



You want your program to run a motor when the sensor is pressed and play a sound when it is released.

a. Which icon should you put in the top branch?

A)



B)



C)



D)



b. Which icon should you put in the bottom branch?

A)



B)



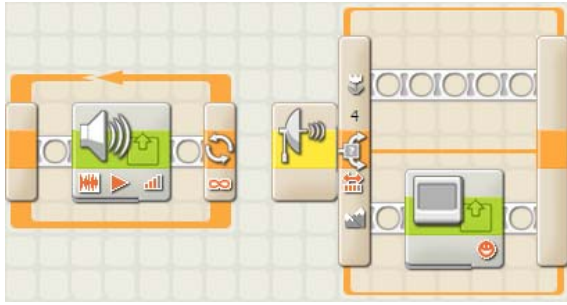
C)



D)

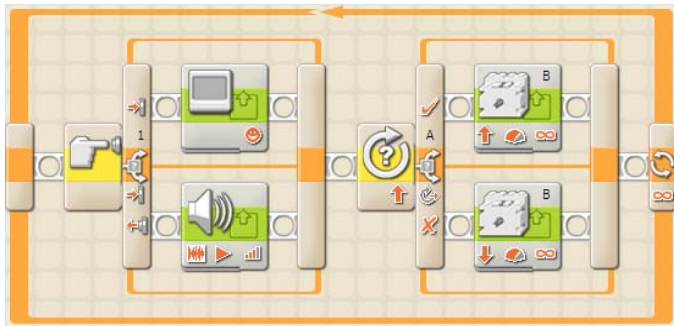


3. A friend of yours is trying to write a program that will draw a picture on the NXT screen if her hand is less than a foot from the ultrasonic sensor, or play a sound if her hand is further away. Here is the program so far, along with the control panel for the ultrasonic sensor:



What are the problems with the program, and what does she need to do in order to fix them?

4. Consider the following program:



What does it do?