ARTBOTICS

Programming with Lego Mindstorms EV3

Reacting to Sensors
Plug into ports 1, 2, 3, 4 on the EV3 Brick

**Touch Sensor**
True/False Boolean value

**Color Sensor**
Black, blue, green, yellow, red, white, brown

**Ultrasonic Sensor (Distance)**
Variable; far - close
Touch Sensor

Boolean value: true or false, on or off

https://www.youtube.com/watch?v=_qPa0fz1oT0
Distance Sensor

Variable; far - close

https://www.youtube.com/watch?v=-4yF7257P7E
Lego Mindstorms EV3 Blocks

Flow Control Tab, for timing and repetition
Blocks used with Sensors

Wait blocks

The program pauses until the sensor is interacted with, and then continues executing the program.
Blocks used with Sensors

Switch block

The program executes either the top beam or bottom beam commands based on the sensor’s input.
Interactive, Kinetic Sculptures

- Combine all components with art materials to create a simple interactive, kinetic sculpture

- All projects must use at least:
  - 1 motor/mechanism
  - 1 sensor

- Do not use glue on any Lego pieces!

- Sticky Tabs work great on Lego pieces; easy to apply, easy to remove, and maintain their stickiness
Color Sensor

Black, blue, green, yellow, red, white, brown