

MODULE 4

Sensors Part 1



OVERVIEW

High Altitude balloons are effective tools in conducting experiments and measuring data in the atmosphere. So how do we gather this data? Through various sensors that can measure different aspects of the atmosphere and the flight. This module will help you learn about our first sensor, the temperature sensor and how to incorporate the sensor onto our Arduino board.

MATERIALS

- Shield kit
- Sensor kit
- Arduino kit
- Computer
- Safety Glasses
- Soldering iron
- Solder
- Wire cutters

PREREQUISITES

- The [Arduino Introduction](#) module must be completed prior to this module

Complete Prerequisites and have all Materials before continuing to activity

1

What is Sensor

- Learn the difference between Analog and Digital
- Learn what a sensor is
- Learn about the importance of having sensors

2

Balloon Shield

- Learn what a balloon shield is
- Learn why we use a Balloon shield
- Build out the balloon shield

3

Temperature Sensor

- Integrate the visual display into our boards
- Add a temperature sensor to your balloon shield
- Learn to test and troubleshoot

Module Video:
[Sensors Part 1](#)



NEXT STEPS

After completing all aspects of this module, you can move on to
[Module 5: Sensors Part 2](#)