In this module, students will build a Foam Core structure with insulation. They will then integrate electronics, power, and thermal systems in preparation for final testing.

**MATERIALS**
- All completed parts so far
  - Balloon shield with arduino
  - Power switch
- SD card
- Structure kit
- Foam core
- Insulation
- Flight tube
- Battery
- Glue gun
- Insulation template
- Foam Core template
- Cutting board/surface
- Straight edge/ruler
- Scissors
- Tape

**PREREQUISITES**
- The Sensors Part 2 module must be completed prior to this module
- Recommend watching the Testing module prior to proceeding
- Foam Core Construction Doc for additional information if needed.

Complete Prerequisites and have all Materials before continuing to activity

**1 Cutting**
- How to cut open a Balloon Payload
- How to properly cut Foam Core
- How to properly cut insulation
- Using the templates

**2 Construction**
- Learn about the best adhesives
- Learn how to construct the Balloon Payload box
- Begin building your Balloon Payload box

**3 Building**
- Integrate your arduino board into the box
- Add the flight tube into the Balloon payload
- Complete Balloon Payload build

Module Video: Structure

**NEXT STEPS**
This is the last module is the sequenced module set. If you haven’t completed the stand alone modules, these would be a good next step.