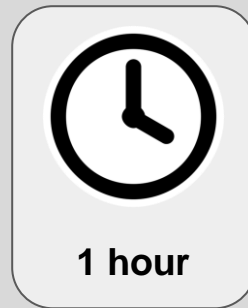# MODULE 2

## Soldering 101

**1 hour**

SPACE MINOR

**OVERVIEW**

Learn to solder by populating and soldering a circuit with blinking lights! A hands-on introduction to learn the basics of soldering. Includes the use of various tools, active use of safety practices, learning how to identify a good solder joint, and what to do if the need arises to desolder.

## MATERIALS

- Soldering 101 Kit
- Soldering Iron
- Solder
- Wire "Sponge"
- Safety Glasses
- Wire Snippers
- Solder Sucker
- 9V Battery
- Helping Hands
- Secure Power Source

## PREREQUISITES

- The Welcome to Balloon Payloads module must be completed prior to this module
- Watch the Electronics and Components video if unfamiliar with circuits

Complete Prerequisites and have all Materials before continuing to activity

### 1  Solder Safety

- Know where the soldering iron is at all times!
- Use safety glasses.
- Tie long hair back.
- Know how to respond in case of accidental burn.
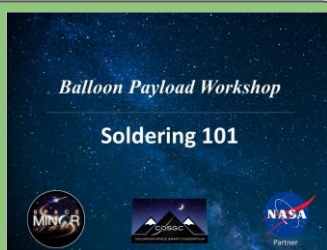
### 2  How to solder

- Learn to solder/desolder
- Build confidence by practicing through hole soldering and interacting with circuit components.

### 3  Creating a circuit

- Build a simple circuit.
- Play close attention to component placement and polarity.
- Learn to troubleshoot if circuit isn't functioning

**Module Video:**
Soldering 101

*Balloon Payload Workshop*
**Soldering 101**

## NEXT STEPS

After completing all aspects of this module, you can move on to Module 3: Arduino Introduction