

## CREATE 'N' CODE

## MARS MISSION III: ROVER

Dear Families,

Welcome to The STEAM Project's **Create 'N' Code: Mars Mission III** Virtual Program! We're looking forward to getting started with the program. Below you will find information about preparing for your course:

**What's inside your kit:**

- Cardboard wheels x4 (circle pieces) & shell
- 1x Micro:bit - inside a green box (you will also need the one from Part I)
- 1x Breakout Board - inside a black box
- Chassis base (wooden piece)
- Bag 1:
  - 3x F-F dupont wires
  - 2x AAA batteries & battery pack
  - 3x AA batteries & battery pack with M-F dupont soldered on
  - 2x yellow gear motors
  - 2x screws and nuts
  - Ultrasonic Sensor
- Bag 2:
  - 3D printed motor pins and motor axles
  - Full servo horn (small white plastic piece)
  - 3D printed holder for the ultrasonic sensor
  - Short wooden dowels
- Bag 3:
  - Small Wooden pieces
  - One wooden piece with a blue servo motor attached
- Tool kit with wood glue, popsicle sticks, double sided tape, and elastic bands

**Hardware and Software Requirements:**

- Any PC or Mac **computer** that can **run Google Meets (with webcam, mic, and USB port)**
  - iPads are not compatible. Chromebooks may experience technical difficulties.
- Link to **software used**: <https://makecode.microbit.org/>
  - Chrome is the recommended browser for uploading code onto the micro:bit

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### Safety Information:

- This product contains **small and sharp parts**. Do not swallow or scratch to avoid injury
- Some **parts will rotate or move** when they work. Do not touch them to avoid being bruised or scratched and to avoid damaging internal components
- Use the parts in the kit in accordance with each lesson. If you do not know how to use or wire a part, **ask an instructor** before connecting it to any source of power (e.g. batteries).
- Store the kit and all parts in a **dry place away from direct sunlight**
- Unplug and **turn off all power when not in use**

### Class Rules:

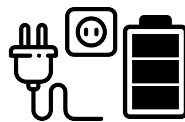
#### --- Before the first class ---

- Sign up for the **Google Classroom** at least **one day before the first class**.
- Your Classroom code is available through a PDF titled **“Household Confirmation Letter”**. The meeting links will be posted in the Classroom.

#### --- To prepare for class ---



Prepare a **clean workspace**.  
Use newspaper or something similar to **protect surfaces**



Plug in your device or  
make sure it's **fully charged**



**Arrive on time** - after 5  
minutes, you may not be able  
to be added as the instructor  
may be busy

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### --- During class ---

- You can turn off your video if you are not sharing something with others.



**Raise your hand** to indicate to the instructor that you have a question



Please use the **chat** only for **relevant discussion**



**Mute your microphone** when you are not speaking to the class or instructor

- For the first class, the instructors will spend time making sure everyone is comfortable and that the equipment is working.

### --- After class ---

- Students can ask questions to their instructor, communicate with other students, receive updates, and links to online resources & bonus projects through the Google Classroom.
- If there is a **planned absence, please notify us by emailing: [virtual@thesteamproject.ca](mailto:virtual@thesteamproject.ca)**
  - For missed classes, resources will be available through Google Classroom.

Sincerely,  
The STEAM Project Family