

## CREATE 'N' CODE

### **SMART TRAINS**

Dear Families,

Welcome to The STEAM Project's **Create 'N Code: Smart Trains** 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:

- 1 wooden station base
- Wooden train track set
  - 12x cardboard track pieces, 8x plywood track pieces
  - 4 unique cardboard track pieces with shape connectors (2 long, 2 short)
- Envelope #1: Train crossing kit
- Envelope #2: Train car kit (2 sheets wood, 2 pcs cardboard, component bag)
- Envelope #3: Train station kit (7 pcs)
- Envelope #4: Train tunnel kit (6 pcs)
- Electronics bag 1
  - Yellow gear motor & LED lights
  - AA batteries, Coin battery & battery holders
- Electronics bag 2
  - o Micro:bit & Micro-USB cable, Alligator clip and dupont wires
  - 2x AAA battery & battery holder
- Tool kit with wood glue, popsicle sticks, sandpaper, and double sided tape

#### **Hardware and Software Requirements:**

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

#### **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







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## **SMART TRAINS**

#### **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

#### --- 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.



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#### --- 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
  - For missed classes, resources will be available through Google Classroom.

Sincerely, The STEAM Project Family