

## Tutorial for Circuit Playground Express

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During this fortnight you will have a chance to experiment with temperature sensors and data logging using the [Circuit Playground Express \(CPE\)](#).

### Instructions.

Take the time to work your way through the online material, particularly the following:

1. [Guided Tour](#) (5 min)
2. [Pinouts to familiarise yourself with all the bits](#). (5 min)
3. [Windows users only: Install the windows driver](#). (try step 4 first – you might not need to install a driver on Windows 10)
  - a. If you need to, download the .exe file and install (2 min)
4. Plug in the CPE to your laptop (1 min)
  - a. If the CPE drive is not visible, click on the reset button– you should see CPLAYBOOT drive.
5. [Check and update the bootloader if necessary](#). (3 min)
6. [Install/Update circuit python to the latest version](#). (5 min)
  - a. You are asked to double-click the reset button – but a single click may work better.
  - b. A new drive will show up on your computer called CIRCUITPY.
  - c. If you have problems – check your USB cable: cables which have power only – no data – will not work
  - d. If it resets to CPLAYBOOT after you have switched to CIRCUITPY – try again – it should stick!
  - e. When you download Circuit Python library files – ensure you download the same version as the Circuit Python version you installed on the CPE.
7. [Installing Mu editor](#) on your laptop/computer (10 min)
8. [Creating and Editing Code](#) in Mu editor. (10 mins)
  - a. When you start Mu, you will be prompted to select your 'mode' - please select **CircuitPython**.
  - b. Write sample python code in code.py.
  - c. Ensure the code you're running is saved in **code.py** in **CIRCUITPY** drive.
  - d. Press **Ctrl + S** to run
  - e. For new programs, save old code in new python file. **New program should be done in code.py, Mu can only work with code in code.py.**
  - f. Use the switch to determine if you are “Read Only” mode or “Write” mode.
  - g. Every time you save over it, or replace it, the device will reset and run the code again.
  - h. As a drive, it has ~ 2MB of storage, which means you can even directly log data to the device!

For more details, we recommend reading through the Adafruit website material on the [Circuit Playground Express \(CPE\)](#).