

Field Trip # 38

Developed by:

Subject:

Short description:

Educational Level:

Field trip type:

Educational

Outcomes:

Content:

Notes to instructor:

Using a Raspberry Pi to Light an LED

Keith Lynn

Raspberry Pi

Students learn how to assemble items such as LEDs and resistors on a breadboard and to use the Raspberry Pi and Python to control the LED..

9th – 12th Grade

Workshop

Students will be able to:

- Understand how to place items on a breadboard
- Connect to a Raspberry Pi and start IDLE to create a Python program
- Write and execute a Python program
- Turn an LED on and off with a Python program
- Make an LED blink using a Python program

Each student uses a laptop with a special program installed that allows them to view the Desktop of a Raspberry Pi. They are shown how to create and write a Python program that will control the pins of a Raspberry Pi.