

Presenter Name: _____

Location: 260_____

Subject (Circle All That Apply): Science **Technology** Engineering Arts Mathematics

Grade Level (Circle All That Apply): **Middle School** **High School** **Collegiate**

Topic Title: __SparkFun Inventor's Kit_Project 2_____

Lesson Focus and Goals

Brief explanation as to what the SparkFun Inventor's Kit is and explain what pieces come with the kit and overall what it may be used and practiced for. They will also mount the breadboard and red board onto the mount that will be used in all projects.

3. **Project 2 Introduction** (*approx. 5 minutes*)

Students will be introduced to the second project of the SparkFun kit. They will know what pieces to use and what they will

What the RedBoard is and what component we will use on it and for what.

How software and hardware can interact with each other.
Concepts and tools like LEDs, Resistors, Arrays, Binary, Digital Inputs, Pull-up Resistors, For-Loops, and potentiometers.

Understand code and what each method does pertaining to the components being used by the computer.

Understand concepts like Arrays, Binary, Digital Inputs, Pull-up Resistors, For-Loops and implement them into code.

Have an idea of the trial-and-error programmers use in the real world.

How to make tones with a buzzer.

How to read a button using digital inputs.

Create a Simon Says game.

Assessment

Students will be asked to complete a quick evaluation after the workshop so we can continue to improve our services.

Sources of Information:

- 1.