Electronics Lesson 2

**Overview**

This lesson is to introduce the basics concepts of programming. The goal is to able to code a LED to blink.

Big Concept #1: Code is a set of instructions

To students: Raise your hand if your parents tell you what to do?

Expected Answer: Everyone should raise his or her hand!

To students: What do your parents tell you what to do?

Expected Answer: Clean your room. Stop playing games. Wake up early to go to school. Go to Fun Fun Saturday.

Instructor: Code is like the instructions that your parents give to you. You are like the processor (arduino) that take these instructions and follow the instructions.

Activity 1: Variables

Instructor: In this activity we will introduce the concepts of variables. Variables store information.

Activity goes as follows:

1. Cups are labeled with names [green, yellow, red]. These are variable names.
2. Ping pong balls will be label with numbers [8, 9, 10]. These are information.
3. Instructor will write several variable assignments on the board and the students will be required to place the ping pong balls in the correct cup.
4. Do step 3 several times.

Example Variable Assignments