



Pre-Mission Preparation

What do you know about primary colors?

Answers will vary. Students may know that primary colors are red, yellow and blue, and that you mix them to get more colors.

Mission Objective #4

Predict what will happen when you run your code for Objective #4

Answers will vary. The answer will probably be something like: "The first pixel will display Red, then Green, then Blue and then White." *What really happens is that the colors change so quickly you only see the White.*

Mission Objective #5

What is a 'bug'?

When your program doesn't do what you want it to do –
Or mistakes in the program

When does each line of code run in the debugger?

Each line of code runs AFTER the STEP button is clicked.

Mission Objective #8

Write down at least one fact about variables:

Answers can include:

- Name assigned to data
- Variables must be defined before they are used
- Once defined, a variable can be used anywhere in the program
- A variable is like a box with a label on it that can store stuff, like numbers, text or images
- Variable names have to follow certain rules: begin with a letter, contain letters and numbers and _
- A variable has a data type that determines its size and what information it holds.

What are two rules about variable names?

1. Must start with a letter
2. Can contain only letters, numbers and _

Post-Mission Reflection

You can set the pixel LEDs to any color you want. Lights like these are used in

Answers will vary

so many applications in the real world.
What are some ways you see smart
LEDs (programmable lights) being
used?