Lesson 2.1 Summative Assessment Answer Key

1. Green:1,2

2. Red: 5,6

3. Blue: 9,10

4. Yellow: 13,14

5. B: Closed

6. C: battery, wires, buttons

7. A: The circuit was closed and electric current is flowing through both pins.

8. C: Jumper wires are made of a metal internal substance that conducts electricity and a protective insulator cover that does not. They are used to complete a circuit between devices.

Lesson 2.2 Summative Assessment Answer Key

- 1. B: LED
- 2. D: All of these are inputs
- 3. C: A button is pressed and a switch is pushed into one of two positions.
- 4. B: Electricity can be controlled to behave like binary and either have voltage of 1 = ON, 0 = OFF
- 5. C: Buttons and switches cannot control the flow of electricity.
- 6. A: To complete the circuit, electricity flows from the GPIO to the component on one wire, and from the component back to the GPIO on the other wire.
- 7. B: The game is programmed to detect the state of the electricity going into the pin connected to the switch or button

Lesson 2.3 Summative Assessment Answer Key

- 1. A: TRUE
- 2. D: Polarity has no effect on magnetic fields.
- 3. B: The short one
- 4. C: There is only one kind of piezo buzzer.
- 5. (Matching) 3 = d, 2 = a, 1 = b, 4 = c
- 6. A: The current is not flowing.
- 7. A: TRUE

Lesson 2.4 Summative Assessment Answer Key

- 1. A: Series
- 2. C: If one component fails, they all fail.
- 3. (Matching) 1=b, 2=a, 3=c
- 4. Electrons
- 5. C: (Diagram of a closed switch and completed circuit)
- 6. B: If one light is broken, the other lights will stay lit.