

Name:	
Period:	

## UNIT: ELECTRICAL CIRCUITS

# **LEAF TRAIL LIGHT PATH**

### **OBJECTIVE:**

Use a circuit with "leaf-shaped" LEDs to light a path out of the jungle.

#### **MATERIALS:**

- ✓ Green LED lights
- ✓ Battery + holder (2 AA or 9V)
- ✓ Green construction paper (cut into "leaves")
- ✓ Wire or foil strips (to connect the circuit)
- ✓ Tape
- ✓ Optional: Paper map or cardboard path base

#### STUDENT DIRECTIONS:

#### **Step 1: Make Your Glowing Leaves**

- Take a piece of green paper and cut it into leaf shapes.
- Tape one LED to each paper leaf. Make sure the metal legs of the LED stick out so you can connect them later.

### Step 2: Plan Your Jungle Trail

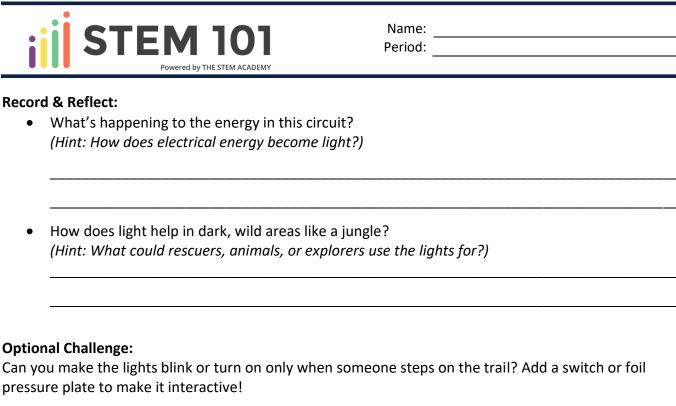
- Lay out the leaves in a **path or winding trail**—this could be across your desk, on the floor, or over a paper jungle map.
- Decide where your path starts (rescue base) and ends (safe zone).

#### **Step 3: Build the Light Circuit**

- Connect your battery holder to the first leaf using foil strips or wire—one strip to the longer leg
  of the LED (positive) and one to the shorter leg (negative).
- Keep connecting the leaves one after the other, forming a series or parallel circuit.
- Tape everything in place so the connections stay secure.

#### Step 4: Test the Path!

- Turn on the battery power (or plug in the holder). Watch as your "leaves" glow!
- Use your finger to "walk" through the jungle and follow the glowing path.



pressure plate to make it interactive!

W	What's happening to the energy in this circuit?	?	
F	How does light help in dark, wild areas?		

#### STANDARDS ALIGNMENT

NGSS: 4-PS3-4 STEL: STEL 1A, STEL 2A, STEL 3A, STEL 4A, STEL 5A, STEL 6A, STEL 7A, STEL 8A CCSS: CCSS.MATH.CONTENT.3.MD.D.8, CCSS.MATH.CONTENT.4.G.A.1, CCSS.MATH.CONTENT.4.MD.A.3, CCSS.MATH.PRACTICE.MP2, CCSS.MATH.PRACTICE.MP5, CCSS.MATH.PRACTICE.MP7