WORKSHOP EXTENSION ACTIVITY

Built by The Home Depot Kids Workshop



CONNECT.

Cultures all around the world use lights to celebrate special events and holidays. The lights may illuminate a special area, or even flicker, change colors, or dance to music.

Does your family use light to celebrate holidays or special occasions? How does this light add a special touch to your celebration?

INVESTIGATE.

Though lights may not traditionally be used to celebrate Valentine's Day, there's no reason to keep it that way! Let's explore how you can *create* light to make your Heart String Art extra special.

You'll need:

- 1 LED Bulb
- (1) 3-Volt circular watch battery
- (2) 6" inch pieces of wire (strip off each end)



- (2) Alligator clamps
- Insulating tape





When you have completed your testing, circle which one(s) made the light turn on.			

Then consider: Why do you think some of your ideas worked, but others did not? What kind of path does the electricity take when the light turns on?

Start by trying to illuminate just one light. Experiment with the battery, wire pieces, and alligator clamps to make the LED bulb light up. Draw each set-up that you try in the squares below.

Answer: If you were able to illuminate your light, then you created a successful circuit. A **circuit** is the path that electricity flows through. In your circuit, the electrical current leaves one side of the battery, travels up the wire path, through the bulb, down the wire path, and then back to the other side of the battery, making a loop!

INNOVATE.

You'll need:

- Your Heart String Art
- Strip of battery-powered LEDs
- Batteries
- Clear mounting squares
- Scissors

Now that you know how to create light, it's time to illuminate your Heart String Art!

- 1. While one bulb will certainly make your art more festive, let's go even bigger. The LED strand is powered the same way as the circuit you created...It just has more lights! Test different ways to add the LED strip to your Heart String Art. You could use the lights to form a letter, make a design, outline the heart, or create a frame. The choice is yours! Just be sure to consider where you will put the battery pack, too.
- 2. When you're happy with your design idea, use the clear mounting squares to secure the lights and battery pack in place.
- 3. Then dim the lights in your home, turn on the LED strand, and enjoy the glow of your newly-illuminated work of art!

Share your bright design: Use #KidsWorkshopExplore to post a picture of your Heart String Art.

MAKE. CREATE. EXPLORE.



