



## Materials List – Discovery Green Spring Break

We are excited for you to participate in Discovery Green's Spring Break, including hands-on STEM with Girlstart! Gather materials from around the house and join us from Monday, March 15<sup>th</sup> – Friday, March 19<sup>th</sup> for a new activity each day.

### Monday, March 15<sup>th</sup>

**Flying Dragonfly:** Flight of the dragonfly! Channel your inner entomologist to learn about the magnificent dragonfly and its special flying abilities as you create your own mimicking flying device.

- Empty cereal box or piece of cardstock
- Hole punch
- Pen or pencil
- Ruler
- Scissors
- Straw or wooden dowel
- Tape

### Tuesday, March 16<sup>th</sup>

**Solar Water Purifier:** Can you use the power of the Sun to purify water?! Explore how to harness solar energy to turn undrinkable, salty water into clean and clear water!

- Coins or a small rock
- Food coloring
- Large bowl
- Plastic wrap
- Salt (~ ½ cup)
- Small, heavy cup (shorter than the large bowl)
- Spoon
- Sunshine
- Water

### Wednesday, March 17<sup>th</sup>

**Penny Battery:** From phones to lights to toys, batteries power many things we use every day! Create an electrochemical reaction between metals and use an electrolyte solution to make your own battery and power an LED.

- Cardboard
- Cup
- Electrical or masking tape
- 5mm LED (red works best)
- Paper towels
- Salt (1/8 cup)
- Sandpaper
- Scissors
- Spoon
- 5 U.S. pennies (dated after 1982)
- Vinegar (1 tablespoon)
- Voltmeter (optional)
- Warm water (1/2 cup)

### Thursday, March 18<sup>th</sup>

**Water Strider:** Why can some insects skip across the top of a pond? Observe the power of surface tension as you construct a wire water strider and learn the physics of how these “magical” bugs walk on water!

- Bin or bowl
- Dish soap (1-2 drops; optional)
- Ruler
- Scissors or wire cutters
- Thin wire (non-insulated; 26-gauge or thinner works best)
- Water

### Friday, March 19<sup>th</sup>

**Rainbow Paper:** ROYGBIV! Learn how to replicate the colorful pattern you see in bubbles, prisms, and the sky. Become a physicist for the day and create your own rainbow paper!

- Black paper
- Clear nail polish
- Plate or bowl
- Water