Introduction
We learned about *chromatography*, when water is used to separate color chemicals or substances, in episode 8. Today, we are going to use the principles of chromatography to create an art project.

Experiment 1: Chromatography Garden

Materials
- Coffee filters
- Scissors
- Water-based markers
- Water
- Sponge
- Small plastic plates
- Drawing paper
- Stapler, glue, or tape

Link to video
Facebook:  https://www.facebook.com/324041427754736/videos/230785867984618/
YouTube:   https://www.youtube.com/watch?v=84e1L1rNNi8
Estimating Buoyancy

1. Create a boat from a piece of foil.
2. Estimate how many marbles (or other like objects) your boat can hold and stay afloat. Record your estimate on the table below.
3. Add marbles one at a time until the boat sinks.
4. Record your results on the table.
5. Redesign your boat and repeat the experiment!

<table>
<thead>
<tr>
<th>Draw your Boat</th>
<th>Estimated number of marbles</th>
<th>Actual number of marbles</th>
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Regional Water Authority
Tapping the Possibilities™