#NCSCconnects Virtual Activity

**Activity:** Test the Sharpie

**Category:** STEAM

**Suggested Grade Level:** Grades 1-6

**Description:** Are permanent markers really “permanent”? We will test the solubility of permanent markers in three different types of liquids. Before you begin, write down a hypothesis (what you think will happen). Did the results of the experiment match your hypothesis?

**Supplies:**
- 3 coffee filters or pieces of tissue paper
- Permanent markers
- Rubbing alcohol
- Vinegar
- Water
- 3 disposable cups

**Instructions:**
1. Depending on the size of your paper and cups, you might need to fold your tissue paper.
2. Make sure the filters/tissue paper fit into the cups.
3. Use the permanent markers to decorate your filters/tissue paper.
4. Repeat steps 1-3 for all three filters or pieces of tissue paper.
5. Label your cups: water, rubbing alcohol, and vinegar.
6. Fill the three cups with the same amount of the three liquids.
7. Place a filter into each filled cup and let it sit for 5-10 minutes.

8. After the time is up, remove the tissue paper from each cup and check the permanent marker. Is it still there? Did it change? How does what happened compare to your hypothesis?