Paint with Chlorophyll!

Look at a tree in spring. What color are the leaves? The answer is nearly always **GREEN**! Leaves are green because of **chlorophyll**. Plants use chlorophyll, along with sunlight, to get nutrients through a process called **photosynthesis**. Plants need chlorophyll and photosynthesis to grow and survive.

This science experiment allows you to take a closer look at chlorophyll. Using simple materials, you can extract the chlorophyll from green leaves and even use it to paint a picture!

Materials Needed for Chlorophyll Extraction:
- 2-4 Green leaves
- Acetone (aka *nailpolish remover*) OR isopropyl alcohol (aka *rubbing alcohol*)
- Small container or ziplock bag

Steps for Chlorophyll Extraction:
1. Rip your leaves into little pieces - the smaller the better.
2. Put your leaf pieces into the container or ziplock bag.
3. With the help of an adult, add enough acetone or rubbing alcohol to just cover the leaves (a few tablespoons should do it).
4. Seal the container and shake to mix.
5. Wait! In a few minutes, you should notice the liquid becoming green, however, the longer you wait, the darker and more vibrant the liquid becomes.

Materials Needed for Chlorophyll Painting:
- Extracted chlorophyll
- Paper
- Paint brush

Steps for Chlorophyll Painting:
1. Carefully open your container of leaves and green liquid. This liquid is your chlorophyll paint!
2. Dip your paint brush in the liquid and paint on the paper.
3. Depending on how airtight your container is, your chlorophyll paint can last for many days.
4. **Caution!** The liquid should not be consumed or excessively inhaled, and I recommend washing hands after this project, as acetone and alcohol can irritate and dehydrate skin. If you are at all concerned about this, I recommend reading the labels on the bottles and/or skipping the painting part of this experiment.

The green colored liquid you see contains chlorophyll pigment. The reason your "paint" is green is the same reason that plants and trees are green: chlorophyll!

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