Experiment title: Cleaning Science

Grades: 3rd-6th Grade

Eco Friendly House cleaners vs. Commercial cleaners: which is more effective? With a little research and experimentation you can turn cleaning into a science experiment.

Research: What are natural cleaners and how do they work. What are commercial cleaners made of and how do they effectively clean. From this research you will form your hypothesis on which type of cleaners you think will be more effective.



Materials list:

- Distilled white vinegar
- Water
- 1 commercial counter top cleaner
- 1 commercial floor cleaner
- Clean rags
- A mop
- 2 buckets
- Pencil
- Paper
- Rubber gloves
- Things to make a mess.

Procedure:

- 1. Before you begin.... Make sure that the cleaners that you are using will not damage the surface that you are cleaning. For example Vinegar is too harsh to use on a marble surface. If you are using surfaces that you can't use vinegar on try using an eco-friendly household cleaner. Many are sold in stores.
- 2. Before you work with cleaners, which are chemicals, make sure to use the rubber gloves. Safety first.
- 3. To clean a floor mix 1 cup of white distilled vinegar with 1 gallon of water in one of the buckets.
- 4. Prepare the commercial floor cleaner according to instructions on the bottle in the other bucket. Always keep the chemicals separate. It is very important to never mix chemicals.
- 5. Clean one section of the floor with the Vinegar solution and another section of the floor with the commercial solution. Compare the differences. It may also be a good time to take pictures to include on your display.
- 6. Repeat the experiment but clean a counter top this time. Using a rag wipe down one part with the vinegar solution and another part with the commercial cleaner.
- 7. Record the differences.
- 8. Now it is time to write your conclusion. Does it fit your hypothesis? What is the real world application of this experiment?