LOGBOOK

TOPIC

We thought about doing ’’how does a chemical reaction happen? :Or does putting food on the ground make it dirty?’’

BACKGROUND RESEARCH:

Different substances can cause different amounts of rust on iron nails. The order of rusting from strongest to weakest is: vinegar, water, soda, detergent, and air.Thats what someone who did the same project got but we got (strongest to weakest)Air,water,vinegar,soda,and detergent.

QUESTION:

Which fluid rusts a screw the most

HYPOTHESIS:

If I put a screw in soda, laundry detergent, air, water, vinegar which one will rust the most, I think water will rust the most and laundry detergent the least.

MATERIALS:

5 similar boxes.

Coke, detergent, vinegar, water, air.

5 screws.

PROCEDURE:

1. **Get 5 similar boxes and 5 similar screws.**
2. **Get the fluids, air, soda, laundry detergent, vinegar, and water.**
3. **Put the fluids into the boxes with 2 tbsp.**
4. **Put in the screws to the boxes**
5. **Wait approximately 2 weeks.**
6. **Check the finishing results.**

VARIABLES:

Control variable: The amount of fluid I put in, the box I use, which screw I use, how long the screws are in the fluid.

Responding variable: How much the screw rusts.

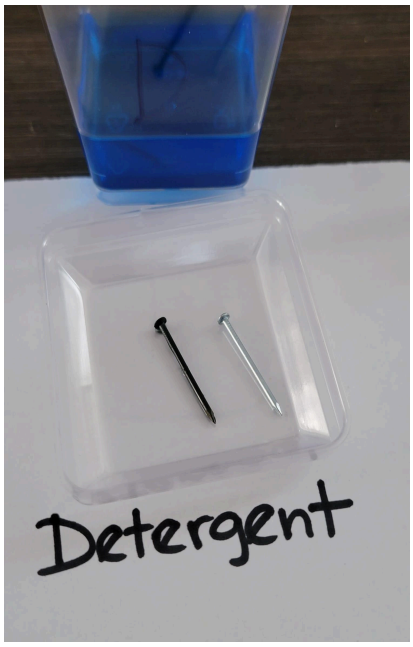
Manipulated variable: Which fluid I use.

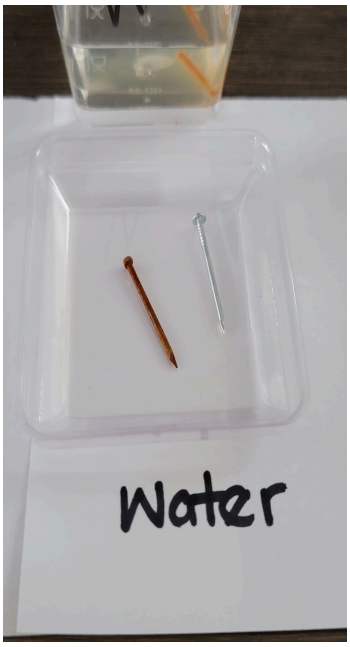
DATA

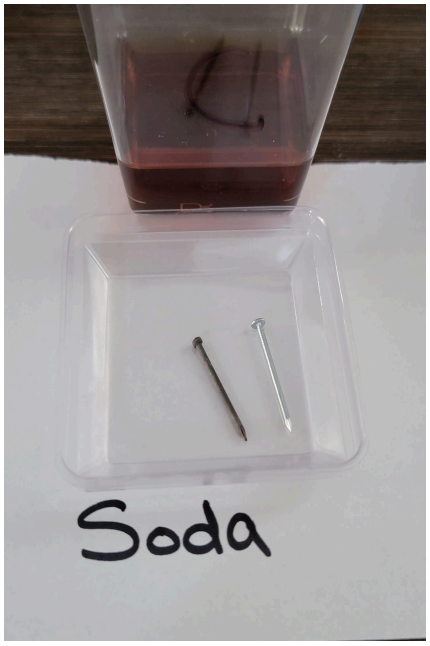
1 week in vinegar has been rusting the most and detergent has been rusting the least.
2 weeks in air has been rusting the most because it is a steel screw and detergent has been rusting the least.

RESULTS:

Here are some pictures from the project







CONCLUSION:

After we finished everybody guessed that vinegar was gonna be most rusted and detergent was gonna be least rusted but we got air rusted the most and detergent rusted the least.

APPLICATION:

if you need to store screws which would be the best, air, water, soda, detergent, and vinegar.