

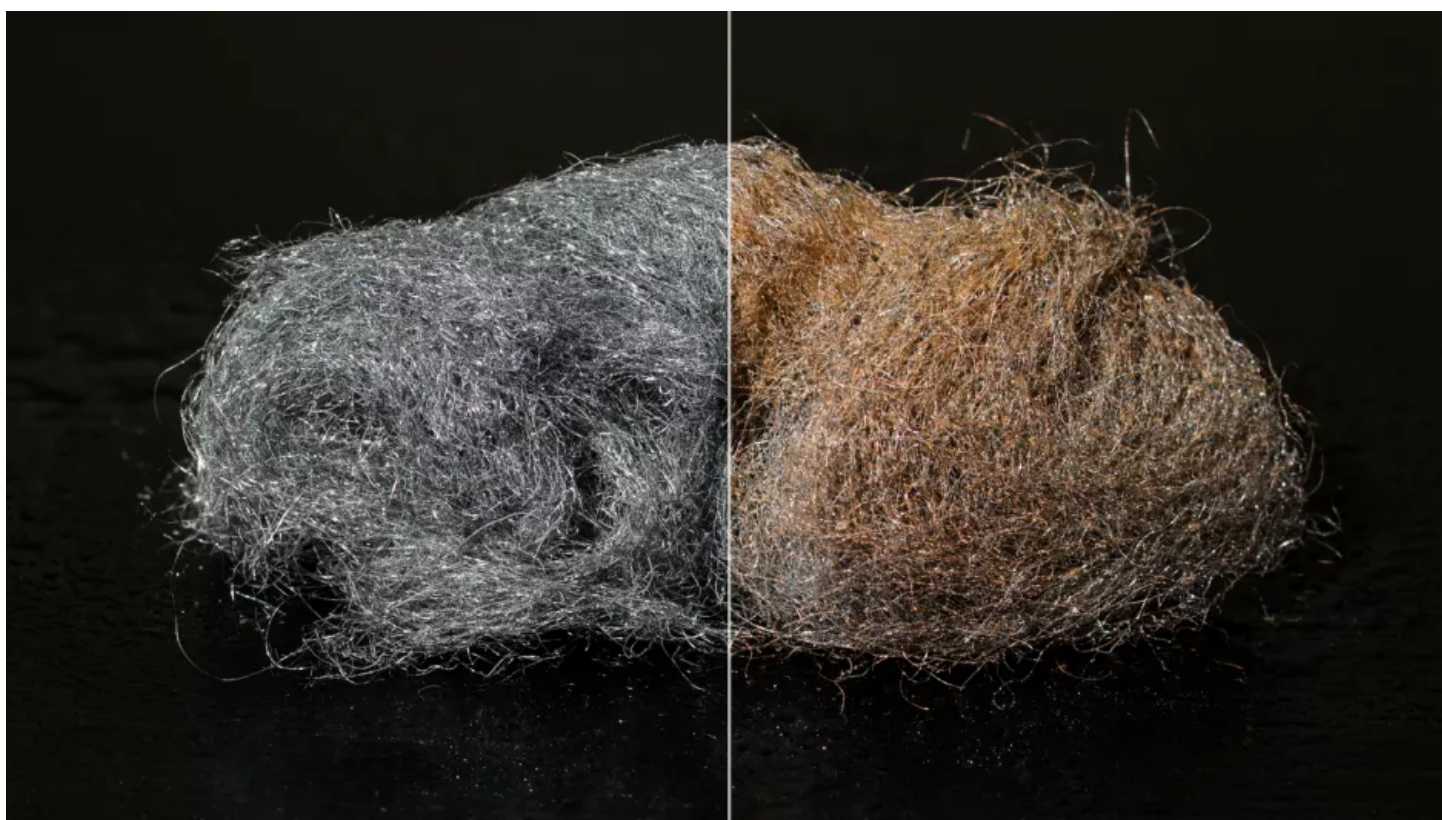
Iron corrosion

Study iron corrosion under different conditions

Difficulty:

Danger:

Duration: 1 hour



Do this experiment at home

This experiment is included into "[Corrosion](#)" kit along with "[Nailbreak](#)" and "[Stopping corrosion](#)". Subscribe and get everything you need to do this experiment at home.

[Learn more →](#)

Reagents

- Iron wool
- Sodium hydroxide
- Mineral water
- Vegetable oil (liquid)



Safety

- Put on protective gloves and eyewear.
- Conduct the experiment on the plastic tray.

General safety rules



General first aid information



Advice for supervising adults



FAQ and troubleshooting

My steel wool floats in the soda water. What should I do?



What type of vegetable oil will work for the experiment?



Other experiments

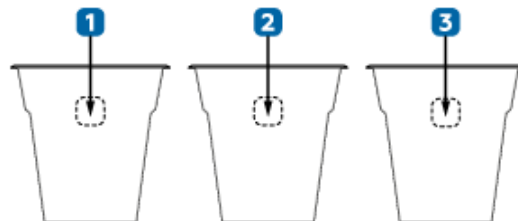
Tin hedgehog

Liquid wires

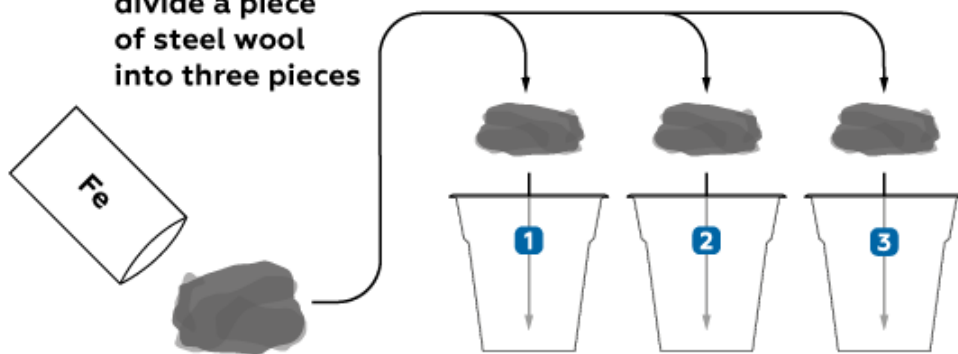
Step-by-step instructions

Prepare three samples of iron.

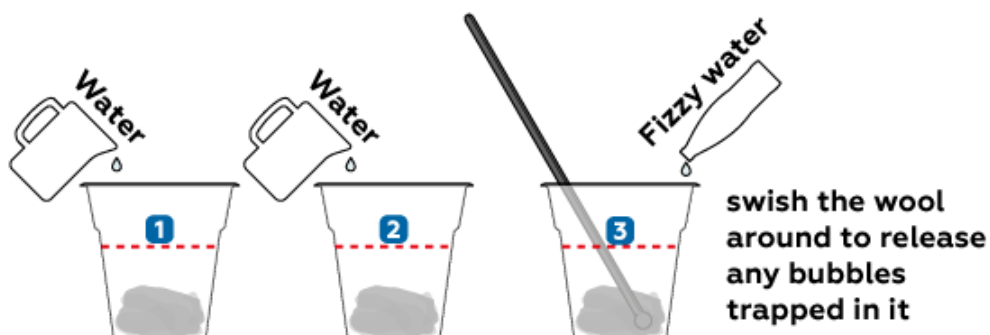
attach
the numbered
stickers to the cups



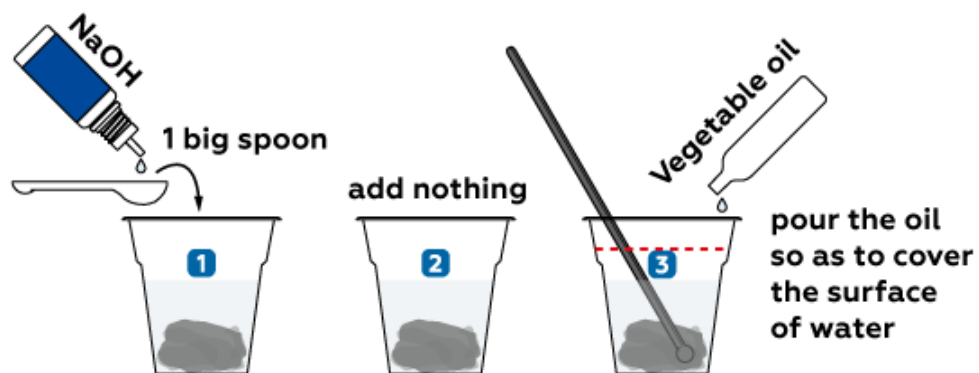
divide a piece
of steel wool
into three pieces



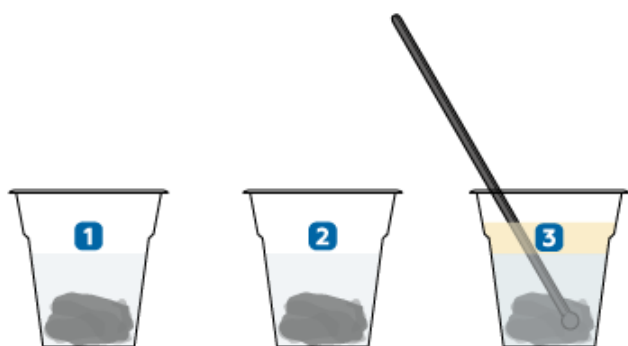
Add regular water to the first two samples and fizzy water, which contains less oxygen, to the third.



Add NaOH to the first sample to create a basic medium. Leave the second sample as is. Pour vegetable oil into the third sample to prevent oxygen from entering the water.



Under basic conditions, and in the absence of oxygen, the iron will remain almost entirely uncorroded. In the regular water, it will rust.



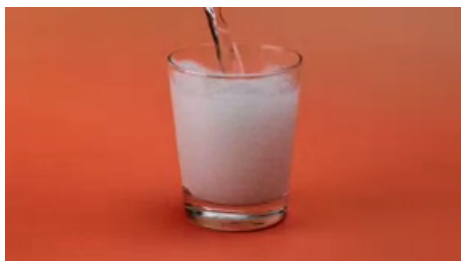
⌚
1 hour

compare the results



Disposal

Dispose of solid waste together with household garbage. Pour solutions down the sink. Wash with an excess of water.



Dozens of experiments you can do at home

// One of the most exciting and ambitious home-chemistry educational projects

— The Royal Society of Chemistry

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