

CBC Demo Lab Digest

Ready, Set, Demo!!!



Don't forget to sprinkle in some exciting demos into your lectures!

To keep things running smoothly, please remember to order your demos as early as possible. Orders should be submitted by noon the day before your desired delivery date, and some of our showstoppers need a 48-hour heads-up!

We're also thrilled to kick off our **community outreach** events! Starting September 20th, our team will be visiting Columbus Metropolitan Library branches. We are booked right up to November! **Woohoo!** Check out our spooky-themed flyer for all the dates and locations—it's going to be a blast! (See last page).

A **huge thank you** to those who shared our Instagram page with your students—we appreciate your support!

Let's Demo!

To order for Autumn 2024, Please click here :)

or scan the QR Code:



Today is Friday, August 30th.

Use the [link](#) (Password: hydrogen) to order as well as the full list of demos; as always, early orders are very appreciated!

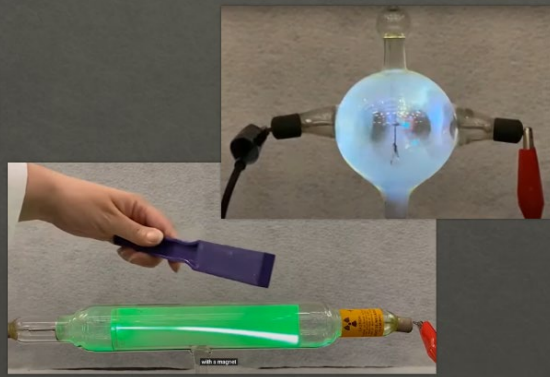
General Chemistry I

Weekly topics

- Atoms, Molecules, and Ions

Atoms, Molecules, and Ions

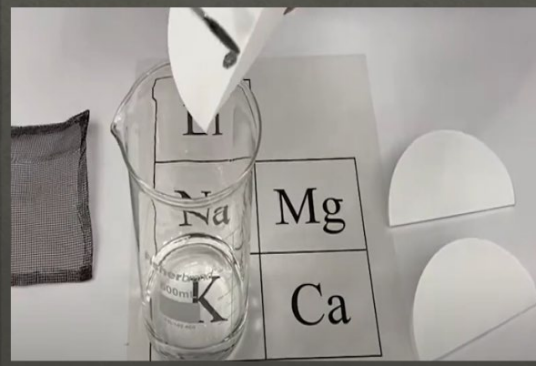
Cathode Ray Tube and Pinwheel



Cathode Ray Tube and Pinwheel-

Demonstrate the deflection of an electron beam with a magnet (CRT), and the particle nature of electrons by using a beam of electrons to spin a pinwheel. (Use the Geiger counter to show students the radiation that the CRT emits radiation (x-rays)).

Periodic Properties



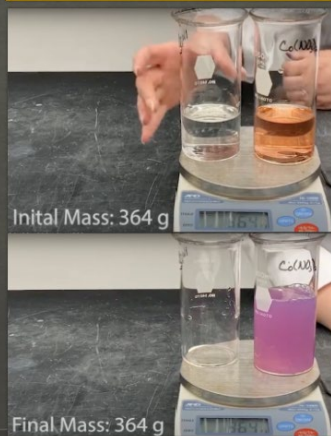
Periodic Properties-Add pieces of Li, Na, K, Mg, and Ca, to beakers of water to observe the reactivity of metals from different parts of the periodic table.

General Chemistry II

Weekly topics

- Chemical Kinetics

Conservation of Mass



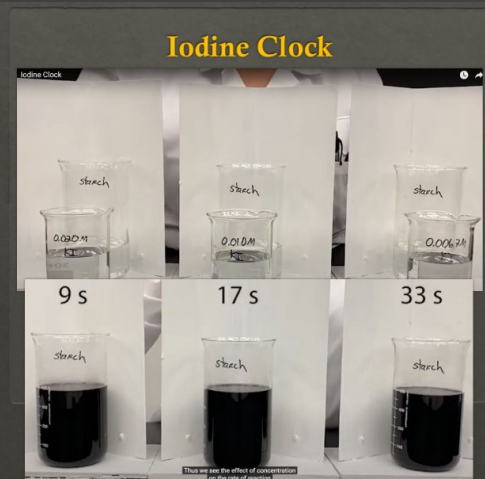
Conservation of Mass- Demonstrate the law of conservation of mass with the colorful reaction of $\text{Co}(\text{NO}_3)_2(\text{aq})$ and $\text{Na}_2\text{CO}_3(\text{aq})$, using the document camera to project the digital readout of a balance on the screen before and after the reaction.

Chemical Kinetics

Alka Seltzer at Three Temperatures



Alka Seltzer at Three Temperatures- Three students add Alka-seltzer tablets to flasks containing water at different temperatures and quickly seal the flasks with stoppers fitted with balloons, which will inflate at different rates.



Iodine Clock- Perform the iodine clock reaction with three different initial concentrations of IO_3^-

Combustion of Ethanol Vapors



Combustion of Ethanol (Vapor and Liquid)- Compare the combustion of ethanol in a small dish to the combustion of ethanol vapors. When liquids are flammable, their vapors are explosive!

Combustion of Candy



Combustion of Candy- Add Contrast the rate of oxidation of sucrose in the body (by eating some candy) with the oxidation of sucrose by KClO_3 (as shown by dropping some candy into molten KClO_3 , producing steam and a lavender flame). Body temperature is about 37°C , and the melting point of KClO_3 is 368°C .

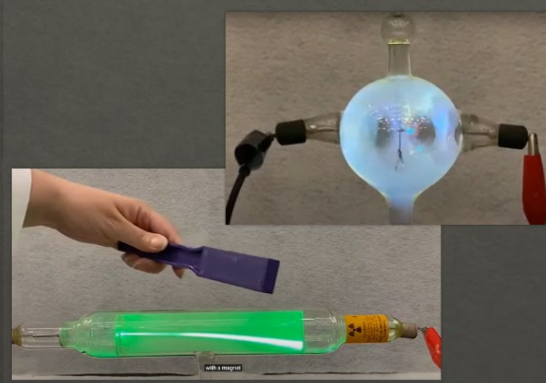
Elementary Chemistry

Weekly topics

- Atoms and Radioactivity

Atoms and Radioactivity

Cathode Ray Tube and Pinwheel

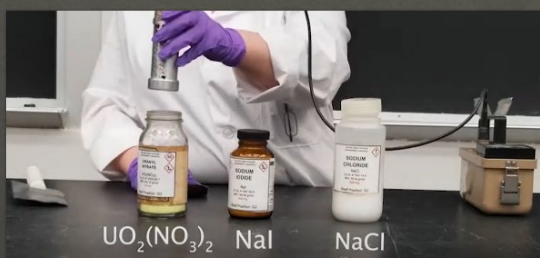


Cathode Ray Tube and Pinwheel-

Demonstrate the deflection of an electron beam with a magnet (CRT), and the particle nature of electrons by using a beam of electrons to spin a pinwheel.

(Use the Geiger counter to show students the radiation that the CRT emits radiation (x-rays))

Detection of Radioactivity



Detection of Radioactivity- Use a Geiger Counter to demonstrate the radioactivity (or lack thereof) of several substances, including NaI, NaC, and uranium salts. A sheet of lead is provided to display the ability of lead to block radiation.

Gas Discharge Tubes of the Noble Gases



Gas Discharge Tubes of the Noble Gases- Show that different gases give different colors when subjected to an electric discharge (the noble gases and hydrogen)

Have a great week!



-The Demo Lab



P.S. If you are ahead/behind of schedule, let us know so we can adjust the demos accordingly. Currently we are simply using the syllabi to guess where your respective classes are at. And [here](#) is the [link](#) again

CHEMISTRY AND BIOCHEMISTRY DEMO LAB PRESENTS:



FRIDAY FUN AT COLUMBUS
METROPOLITAN LIBRARIES!



SEPT.
20

SOUTHEAST
BRANCH
4 PM - 5 PM

OCT.
4

SOUTH HIGH
BRANCH
4 PM - 5 PM

OCT.
18

REYNOLDSBURG
BRANCH
4 PM - 5 PM

OCT.
25

CANAL WINCHESTER
BRANCH
4 PM - 5 PM

NOV.
1

WHETSTONE
BRANCH
4 PM - 5 PM

NOV.
15

DUBLIN
BRANCH
4 PM - 5 PM



FOR MORE INFO, VISIT

U.OSU.EDU/CBCDEMOLAB/OUTREACH-2/EVENTS/

