

Safety, the K–12 Classroom, and AACT

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The American Association of Chemistry Teachers (AACT)

What is it?

A professional community by and for K–12 teachers of chemistry.

Why should I Join?

- Discover customized classroom resources
- Find professional development
- Connect with other teachers
- Publish and share your ideas
- Includes many benefits

Tech Tips--BYOD





The American Association of Chemistry Teachers (AACT)

What are the benefits?

- Classroom resources
- Online periodical: *Chemistry Solutions*
- Subscription: *ChemMatters* magazine
- Webinars
- Science Coaches
- And more! For only \$50!!!



To learn more about AACT, sign up for updates, or become a member, please visit

teachchemistry.org



My Safety Story

- My pre-service classes never went over science-specific courses (i.e. Labs)
- In my first year of teaching, I was given a text book and a basic lab manual.
- It was just me and 2 other rookie teachers!!!



Trying to Survive

- As a young teacher, I learned through trial and error and massive effort
- We three new teachers HAD to collaborate!!!
- We really only had each other.



What I've Learned

Think Like a Teenager (Sometimes)

- Helps to anticipate hazards and leaps of logic
- Can this blow up??

Proactive > Reactive

- Safety contracts
- Set aside a whole class period early in the year
- Review safety before EACH lab!!

Create a Safety Culture

- "Goggles!!!!"
- "If you don't want me to see it, that means you shouldn't do it"



Know your experiments!!!!

- What you should expect
- What can go wrong
- Correct amounts and concentrations



Working with Pre-Service Teachers

Organizing a Stock Room

- Organization strategies (not alphabetical!)
- Incompatible chemicals, etc.

Be Prepared and Set Clear Expectations

- Especially important in a lab setting
- If possible, try to do the lab ahead of time.

Invest in Lab Experiences

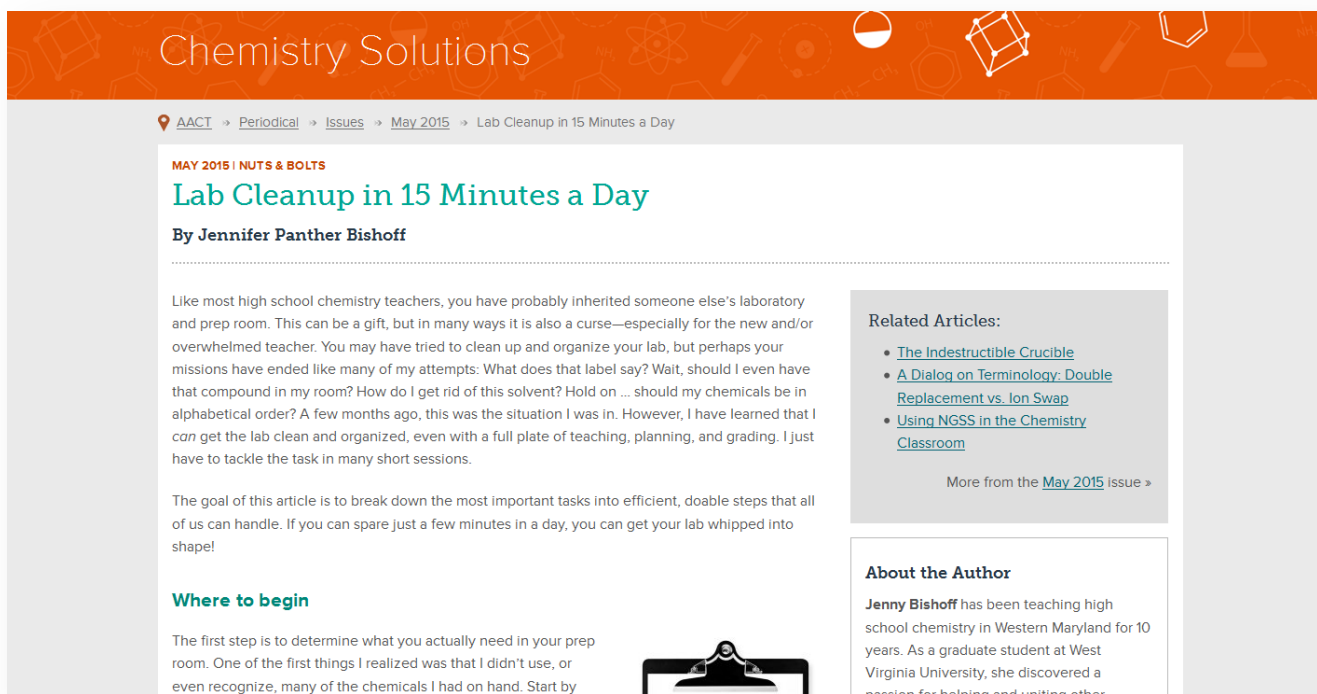
- Make the commitment
- Start small, do what you are comfortable with.

Find a Mentor

- The unique challenge for a teacher of chemistry is the lab
- Collaborate, learn from others!

Resources

- Labs, Lesson Plans, Demos
- Articles in *Chemistry Solutions*



Chemistry Solutions

AACT → Periodical → Issues → May 2015 → Lab Cleanup in 15 Minutes a Day

MAY 2015 | NUTS & BOLTS

Lab Cleanup in 15 Minutes a Day

By Jennifer Panther Bishoff

Like most high school chemistry teachers, you have probably inherited someone else's laboratory and prep room. This can be a gift, but in many ways it is also a curse—especially for the new and/or overwhelmed teacher. You may have tried to clean up and organize your lab, but perhaps your missions have ended like many of my attempts: What does that label say? Wait, should I even have that compound in my room? How do I get rid of this solvent? Hold on ... should my chemicals be in alphabetical order? A few months ago, this was the situation I was in. However, I have learned that I can get the lab clean and organized, even with a full plate of teaching, planning, and grading. I just have to tackle the task in many short sessions.

The goal of this article is to break down the most important tasks into efficient, doable steps that all of us can handle. If you can spare just a few minutes in a day, you can get your lab whipped into shape!

Where to begin

The first step is to determine what you actually need in your prep room. One of the first things I realized was that I didn't use, or even recognize, many of the chemicals I had on hand. Start by

Related Articles:

- [The Indestructible Crucible](#)
- [A Dialog on Terminology: Double Replacement vs. Ion Swap](#)
- [Using NGSS in the Chemistry Classroom](#)

More from the [May 2015](#) issue »

About the Author

Jenny Bishoff has been teaching high school chemistry in Western Maryland for 10 years. As a graduate student at West Virginia University, she discovered a passion for helping and uniting other

AACT and Safety—PD

Professional Development

- Webinars on lab cleanup, stockroom, etc.
- Workshops on conducting demos safely

AACT » Professional Development » Archive » Webinars: Lab and Safety

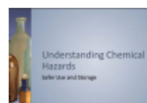
Webinars: Lab & Safety

Creating a Culture of Safety in the Science Classroom



Topics: safety, laboratory, classroom
Date: December 8, 2015

Chemical Safety for Teachers



Topics: lab, safety
Date: September 16, 2014

Teaching Lab Safety



Topics: safety, best practices, instruction
Date: November 4, 2014

Overcoming Obstacles to Chemistry Demonstrations



Topics: demos, safety, curriculum
Date: December 4, 2014
**Video unavailable*

Green Chemistry: The Science of Solutions



Topics: green chemistry, environment, safety, resources, curriculum
Date: March 22, 2016

Considerations for Chemical Disposal



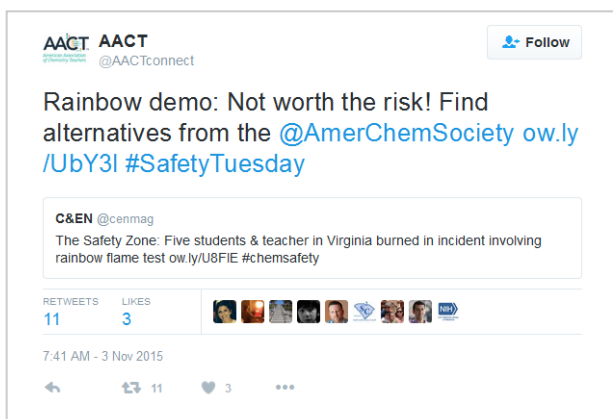
Topics: safety, chemical storage, disposal, waste, hazmat
Date: May 10, 2016



AACT and Safety—Other

#SafetyTuesday

- Safety tips and resources from ACS
- Workshops on conducting demos safely



Other

- Safety pledge
- Blog posts about safety
- Links to other trusted sources of chemical safety information



For More Information

Resources

- teachchemistry.org/safety


Safety

A Word About Safety

The activities described on this website are intended for students under the direct supervision of teachers. The American Association of Chemistry Teachers (AACT) cannot be held responsible for any accidents or injuries that might result from conducting the activities without proper supervision, from not specifically following directions, or from ignoring the cautions contained in the lessons.

The term "safety goggles" used in the safety section of each resource refers to chemical splash goggles, an example is shown in the picture at right.

[Read our full statement on safety »](#)



Safety Resources

[American Chemical Society, Committee on Chemical Safety \(CSS\)](#)
CSS promotes and facilitates safe practices in chemical activities. Visit their website for access to a *Student Laboratory Code of Conduct*, and other safety guidelines for the classroom.

[Occupational Safety & Health Administration \(OSHA\) Chemical Database](#)
OSHA maintains a chemical database with data regarding physical properties, exposure guidelines, and emergency response information.

[American Chemical Society, Education Division](#)

From the AACT library

SAFETY WEBINARS
[Considerations for Chemical Disposal »](#)
[Creating a Culture of Safety »](#)
[Chemical Safety for Teachers »](#)
[Teaching Chemistry Safety »](#)

CHEMISTRY SOLUTIONS ARTICLES
[Managing Chemical Wastes in the High School Lab](#) | Vol. 2, Issue 4, May 2016
[Lab Cleanup in 15 Minutes a Day](#) | Vol. 1, Issue 1, 2015



Website Open House

AACT Resources and Website Open House

Presenter: Jenn Parsons, AACT Education Resource Specialist

Topics: resources, multimedia, AACT membership

Date: September 14, 2016

Have you ever wondered about the benefits of being a member of the AACT? Discover how AACT membership can enhance your experience in the chemistry classroom. Participants will have the opportunity to virtually tour the AACT website and view all of the valuable resources available to members. Resources will be unlocked during the webinar so attendees may follow along with the presenter. This webinar will be particularly valuable to teachers who are considering becoming a member of AACT or members who might not be familiar with all of the classroom resources that are available on teachchemistry.org.

Register now »

www.teachchemistry.org/content/aact/en/professional-development/webinars.html

All resources will be unlocked from 2PM Sept 14 to 2AM Sept 15th!!!!



Questions?

