

Tips for planning chemistry demos

Step 1

Determine your goals

- What scientific concepts do you want to cover?
- Who is the audience (young kids, peers, general public)?
- Is this demo the most effective and safe way to teach the concept?

Step 2

Get the logistics in order

- Set a date and secure an appropriate location
- Check space for exits, emergency equipment, and adequate distance from audience (>10 feet)
- Order materials
- Plan safe transportation for people, supplies, and safety equipment
- Assign tasks and perform a risk assessment

Step 3

Practice the demo

- Write a detailed procedure the way it will be performed
- Review Safety Data Sheets, ACS hazard assessment tools, and past incidents to determine what could go wrong
- Figure out tactics to minimize risk
- Practice in front of a test audience

Find more safety
information at
acs.org/safety

Flammable Demos Checklist

- ✓ Before demo, notify hosts, security, administrators, and fire department
- ✓ Handle flammable liquids safely
 - Collect only needed amounts from stock bottles before the demo
 - Keep bottles capped and stored away
 - Never add flammable liquids after ignition to avoid flame jetting
- ✓ Appoint a safety officer to follow all fire safety measures (e.g., personal protective equipment, fire extinguisher, fire blanket, safety shower)

Don't forget!

- Keep 10 feet between demo and observers
- Encourage audience participation
- Warn audience of loud noises, potential spills, and other hazards
- Dispose of waste appropriately
- Clean demo site completely, wash hands



ACS
Chemistry for Life®



chemistry
The ACS Student Member Magazine
inchemistry.acs.org