Highlighting AACT Web Resources for Introductory/General Chemistry

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What is AACT?

• A membership organization open to anyone with an interest in chemistry education, but primarily serving K–12 teachers

• AACT is funded and brought to you by the American Chemical Society (ACS), the world’s largest scientific society

• AACT membership is separate from ACS members, though some individuals hold dual membership
Over 6,000 members

- 89% are K–12 teachers of chemistry
- 250 international members from 50 countries
- Over 300 student members
1. **Resources**
   Serve as a trusted source of curricular and pedagogical resources for K–12 chemistry instruction

2. **Networking**
   Provide networking opportunities for chemistry teachers amongst themselves and the broader ACS community

3. **Professional Development**
   Disseminate effective teaching and learning practices at the K–12 level
AACT Member Benefits

Resources
- *ChemMatters* subscription
- Online periodical, *Chemistry Solutions*
- Multimedia (animations, videos, simulations)
- Lesson plans
- Access to ACS Publications

Networking
- Q&A for chemistry pedagogy, classroom techniques, etc.
- Access to mentors through Science Coaches

Professional Development
- Webinars for professional development credit
- Workshops
- Compensated curriculum development opportunities

Only $50
$25 for preservice teachers
Using AACT Resources in a “Flipped” Classroom

Pre-Lab Simulations and Questions

• [https://teachchemistry.org/classroom-resources/gas-laws-simulation](https://teachchemistry.org/classroom-resources/gas-laws-simulation)
  – This could even be used as a full out-of-class lesson!

AP Chemistry “Big Ideas”

• [https://teachchemistry.org/classroom-resources/big-ideas](https://teachchemistry.org/classroom-resources/big-ideas)
  • These tend to align with units in college-level chemistry, and have many resources for students to complete assignments outside of class in preparation for lecture
Extra Practice and Resources for Struggling Learners

Balancing Chemical Equations
• [https://teachchemistry.org/classroom-resources/balancing-chemical-equations](https://teachchemistry.org/classroom-resources/balancing-chemical-equations)
  – Interactive practice/game, student activity, list of websites and videos

Chemical Equations and Stoichiometry
• [https://teachchemistry.org/classroom-resources/chemical-reactions-and-stoichiometry](https://teachchemistry.org/classroom-resources/chemical-reactions-and-stoichiometry)
  – Interactive practice that includes identification of reaction type, balancing, and stoichiometry problems

Predicting Products
  – Interactive practice in predicting products of a chemical reaction
And remember, we’re a safety resource!

- AACT and ACS resources
  https://teachchemistry.org/classroom-resources/safety

- ACS Chemical Safety Video Series
  https://teachchemistry.org/classroom-resources/collections/acs-chemical-safety
AACT Classroom Resources

- Lesson plans and Classroom Activities
- Labs, Demos, Projects
- Multimedia: Videos, Simulations, Animations
- Webinar Archive
- ChemMatters subscription and Teacher Guide
- Chemistry Solutions
- Download 50 ACS journal articles per year
- Discounted ACS insurance

https://teachchemistry.org/about-us/learn-more
AACT Classroom Resources

Make a Safety Pledge!
Win $200 and a 1-year AACT membership

High School
Middle School
Elementary School

All High School Topics »
All Middle School Topics »
All Elementary School Topics »

https://teachchemistry.org/
Links to AACT Webpages

• **Benefits:** [https://teachchemistry.org/about-us/learn-more](https://teachchemistry.org/about-us/learn-more)
• **Home page:** [https://teachchemistry.org/](https://teachchemistry.org/)
• **High School Resources:** [https://teachchemistry.org/classroom-resources/topics?grade_level=high-school](https://teachchemistry.org/classroom-resources/topics?grade_level=high-school)
• **Molecules & Bonding:** [https://teachchemistry.org/classroom-resources/topics/molecules-and-bonding?q%5Bgrade_level_ratings_grade_level_id_eq%5D=3](https://teachchemistry.org/classroom-resources/topics/molecules-and-bonding?q%5Bgrade_level_ratings_grade_level_id_eq%5D=3)
• **Stoichiometry of Air Bags:** [https://teachchemistry.org/classroom-resources/stoichiometry-of-air-bags](https://teachchemistry.org/classroom-resources/stoichiometry-of-air-bags)
• **AP Resources:** [https://teachchemistry.org/classroom-resources/big-ideas](https://teachchemistry.org/classroom-resources/big-ideas)
• **Big Idea 2:** [https://teachchemistry.org/classroom-resources/big-ideas/big-idea-2](https://teachchemistry.org/classroom-resources/big-ideas/big-idea-2)
Links to AACT Webpages

- **Coulomb’s Law**: [https://teachchemistry.org/classroom-resources/coulomb-s-law](https://teachchemistry.org/classroom-resources/coulomb-s-law)
- **Equilibrium in a Beaker**: [https://teachchemistry.org/classroom-resources/equilibrium-in-a-beaker](https://teachchemistry.org/classroom-resources/equilibrium-in-a-beaker)
- **Multimedia**: [https://teachchemistry.org/classroom-resources/multimedia](https://teachchemistry.org/classroom-resources/multimedia)
- **Founders of Chemistry**: [https://teachchemistry.org/classroom-resources/collections/founders-of-chemistry](https://teachchemistry.org/classroom-resources/collections/founders-of-chemistry)
- **Sam Kean’s Disappearing Spoon**: [https://teachchemistry.org/classroom-resources/collections/sam-kean-s-disappearing-spoon](https://teachchemistry.org/classroom-resources/collections/sam-kean-s-disappearing-spoon)
- **Simulations**: [https://teachchemistry.org/periodical/simulations](https://teachchemistry.org/periodical/simulations)
- **Ionic & Covalent Bonding**: [https://teachchemistry.org/periodical/issues/september-2016/ionic-covalent-bonding](https://teachchemistry.org/periodical/issues/september-2016/ionic-covalent-bonding)
Links to AACT Webpages

- **Animations**: [https://teachchemistry.org/classroom-resources/collections/animations](https://teachchemistry.org/classroom-resources/collections/animations)
- **Orbitals Animations**: [https://teachchemistry.org/classroom-resources/orbitals-animation](https://teachchemistry.org/classroom-resources/orbitals-animation)
- **Galvanic Cell Animation**: [https://teachchemistry.org/classroom-resources/galvanic-cell-animation](https://teachchemistry.org/classroom-resources/galvanic-cell-animation)
- **Incorporating AACT Multimedia Resources Into Your Chemistry Curriculum**: [https://teachchemistry.org/news/incorporating-aact-multimedia-resources-into-your-chemistry-curriculum](https://teachchemistry.org/news/incorporating-aact-multimedia-resources-into-your-chemistry-curriculum)
Questions and Downloads

https://teachchemistry.org/

To Download Resources:

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