

# So Many Changes: Everyday Physical and Chemical Changes

**Presented by Joseph Houck (Eberly College of Science),  
Amber Cesare (CSATS) and Gabe Knowles (CSATS)  
September 22, 2018, (9:00 a.m. – 2:30 p.m.)  
106 Whitmore, University Park, PA 16802**

Chemical and physical changes are all around us in our everyday lives. In this workshop, we will explore different ways to categorize changes as chemical or physical. Teachers will get to wear their student hats and engage in multiple hands-on activities that use low-cost, easy-to-find materials. You will leave this workshop with ideas of how to excite and engage your students and implement these activities in your classroom. Attendees at the workshop will receive free copies of the You Be the Chemist® Essential Elements Activity Guides.



**Target Audience: Teachers of students grades 2-5**

**This workshop is FREE to all educators with Act 48 (5 hours).**

**All i-STEAM Workshops are aligned to the PA Science and Technology Standards, Engineering Education Standards, and next Generation Science Standards.**

**A continental breakfast and lunch are provided by the Center for Science and the Schools (CSATS). Maximum enrollment is 24. Register online now to reserve a spot.**

**For more information email Amber Cesare at [ams5306@psu.edu](mailto:ams5306@psu.edu) or call 814-867-1323.**

**Sponsored by  
The Penn State College of Education  
The Center for Science and the Schools  
182 Chambers Building, University Park, PA 16802**

**To register visit: <http://csats.psu.edu>**

This publication is available in alternative media on request. Penn State encourages qualified persons with disabilities to participate in its programs and activities. If you anticipate needing any type of accommodation or have questions about the physical access provided, please contact Amber Cesare at [ams5306@psu.edu](mailto:ams5306@psu.edu) in advance of your participation or visit. Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status. U.Ed. EDU 19-14

This publication is available in alternative media on request. Penn State encourages qualified persons with disabilities to participate in its programs and activities. If you anticipate needing any type of accommodation or have questions about the physical access provided, please contact Amber Cesare at [ams5306@psu.edu](mailto:ams5306@psu.edu) in advance of your participation or visit. Penn State is an equal opportunity, affirmative action employer, and is committed to providing employment opportunities to all qualified applicants without regard to race, color, religion, age, sex, sexual orientation, gender identity, national origin, disability or protected veteran status. U.Ed. EDU 19-14