

Xplorlabs Learning Experience: A Year of Fire Science and Safety

The science of fire and how to stay safe around it. (We did these lessons very spread out, but they could easily be condensed into a week or two.)

Instructional phases					
Visual storyline					
Standards	6.L2U3.11; 6.L2U1.14	6.P1U13.3	6.P1U13.3	6.L2U3.11; 6.L2U1.14	6.L2U3.11; 6.L2U1.14; 6.P1U13.3
Timing	Overnight Field Trip	1 class period	1 class period	1 class period	1-2 class periods
Overview	Students learn from a camp counselor about (1) the fire triangle, (2) the importance of planned burns, (3) how to build a campfire, and (4) how to properly put out campfires to prevent wildfires. Students search the grounds for kindling, make observations about brush, and assist in the building of and complete extinguishing of a fire. Camp took place in Prescott, Arizona in a forest setting providing, real world observations and practice.	Think, Pair, Share: Students make predictions about the safety of a closed vs. open bedroom door in the event of a fire. Video: Students view Close Before You Dose. Whole Class Discussion: Was anything surprising? What is safer? How did your prediction hold up? Etc.	<u>Fire as a Chemical Reaction</u> Students view the burning of a sparkler, do a quick write and have a discussion about the markers of a chemical reaction. The fire / sparkler creates new substances like smoke and ash, releases heat and light, and cannot be reversed, thus confirming fire is a chemical reaction and not just a physical change.	<u>Wildfire Current Event</u> Social Studies / Science / ELA Crossover: Students use district curriculum Newsela for cross-curricular reading comprehension and short writing answers.	Students work in groups to add to the “What we know about fire?” poster. Yellow = knowledge from previous fire readings and activities. Students explore Xplorlabs and add newly found information on pink or purple sticky notes.  Students discuss the most important information everyone should know in order to keep safe and understand fire.
Supporting Documents			National Geographic Article: Changes in Matter - Physical vs. Chemical Changes		