

EVERYDAY CHEMISTRY

Designed for Students
Grades 4th-9th
Ages 8-15

Program Length
3 hours

Park Location
Epcot®

SYNOPSIS

Within the setting of Epcot®, chemistry is de-mystified as students come to understand that it isn't limited to a lab—it's happening all the time and all around us!

The learning adventure begins with an examination of some everyday items and the elements: carbon, hydrogen, and oxygen. Students become acquainted with the Periodic Table of the Elements and come to understand that when elements combine, they form compounds.

Hands-on activities with molecules and sodium polyacrylate illustrate the role of bonds between atoms and in chemical compounds, further demonstrating that chemistry is the science of change. A select attraction experience provides students with an opportunity to explore the connection between carbon, hydrogen and oxygen elements, photosynthesis, energy and our natural resources.

A polymer demonstration and guided discussion pave the way for a discovery of natural and synthetic polymers. Students construct a polymer model and create an elastomer showcasing how chemistry has filled the gap in providing solutions to meet the needs of humankind.

A select attraction and additional activities further illustrate that chemistry is practical problem-solving for today's challenges. Students are called to action to activate their curiosity and explore chemistry by taking a class, visiting some cave formations, touring a science museum or a chemistry lab, or through a little kitchen cooking.

LEARNING OUTCOMES

After completing Everyday Chemistry, participants will be able to:

- ✓ Define "chemistry" and "photosynthesis"
- ✓ Illustrate the role of carbon, hydrogen, and oxygen in sources of energy
- ✓ Demonstrate how elements can be manipulated to create synthetic substitutes and are the building blocks of everything
- ✓ Explain two types of polymers:
 - natural
 - synthetic polymers
- ✓ Create an elastomer
- ✓ Recognize The Periodic Table of the Elements
- ✓ Identify carbon, hydrogen, and oxygen elements on The Periodic Table of the Elements
- ✓ Build a model of a water molecule, a glucose molecule and a linear polymer
- ✓ Articulate and demonstrate the benefits of chemistry