

MODULE

Plastics & Polymers

- Explore the various polymers and monomers, examine and compare the uses and characteristics of polymers, and examine the relationship between a polymer's characteristics and its molecular structure.
- Use the injection molder to form polyethylene and polystyrene and compare the properties of the two.

SESSION FOCUS

- 1 Atoms, Molecules, and Polymers
- 2 Creating Polymers
- 3 Polymer Analysis
- 4 Vacuum Forming
- 5 Injection Molding
- 6 Recycling Polymers
- 7 The Absorption Polymer

Dear Parent,

As parents and teachers, we realize it can be hard to get a child to discuss what he or she is learning in school. We hope the information provided on this page will assist you in communicating with your child about what he or she is learning.

Your participation in the learning process is extremely important, as you are your child's best teacher.

For the next few days, your child will be learning about several types of polymers, including plastics, while completing the *Plastics & Polymers* Module.

Words students will learn in this Module include:

- atom
- chemical reaction
- compound
- element
- injection molding
- mass
- molecule
- monomer
- polymer
- vacuum forming

Questions for Discussion

During the course of this Module, your child will be assessed on key concepts and activities. You might want to discuss these concepts and activities with your child. He or she will be asked to:

- Explain the terms *atom* and *molecule*. Give an example of each. (*An atom is the smallest unit of an element that contains all the properties of the element. A molecule is a combination of atoms that forms the smallest unit of a compound that contains all the properties of the compound.*)
- Explain the difference between an element and a compound. (*An element is a substance that can be broken down to a single atom and retain all of its properties. A compound is a substance whose simplest unit is a combination of atoms chemically bonded together.*)

Student: _____

Parent: _____