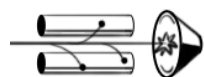


Name _____ Section _____ Date _____



Mass Spectrometry

STEM Sims

Lesson 1: Mass Spectrometer

A mass spectrometer is a device used to analyze samples to identify what they are and to find out their concentrations. These devices are complex machines that can cost up to a million dollars apiece. Can you identify the various parts of this machine?

Doing the Science

1. Start the Mass Spectrometry Simulation by clicking on the “Sim” tab.
2. Explore the different parts of the mass spectrometer and familiarize how the different parts work by scrolling over the various areas of the machine. Click on each part to learn more about its function.

Do You Understand?

For each part on the mass spectrometer, write in your own words the part’s function.

- a. HPLC Pump Controller
- b. Colorimeter
- c. Autosampler Control
- d. Sample Tray
- e. Reagents for HPLC Separation
- f. Sample Injector
- g. Mass Analyzer
- h. Detector