

Questions for the class on **Isotopes and mass spectrometry - dawn of history to today** to be held on January 19, 2010.

1. How did biological mass spectrometry emerge from the study of basic science on the physics of ions?
2. What are the origins of the isotopes of:
 - a. Hydrogen
 - b. Carbon
 - c. Oxygen
3. What are the percentages of the stable isotopes of hydrogen, carbon and nitrogen?
4. Are these ratios constant? What are the factors that cause them to vary?
5. How are isotope ratios measured?
6. What's the basis of accelerator mass spectrometry (AMS)? Which elements can be studied?
7. How does and could AMS impact biomedical science?
8. How could study of isotope profiles of compounds be used to obtain isotope ratios of compounds? Is it realistic?