

AstroChemistry

Name: _____

Haystack Observatory

Date: _____ Per: _____

Worksheet for AstroChemistry PowerPoint.

After looking through the AstroChemistry PowerPoint either as a standalone or as a web site, please check your knowledge by answering these questions.

1. What are some unique things about AstroChemistry compared to the chemistry class you may have taken or are taking in school?
2. Are all the chemical elements we can find in the Universe limited to Galaxies, Stars, Planets, and Comets?
3. What is spectroscopy? What information can it provide for a scientist (even you!)?
4. Why is the study of Molecular Spectroscopy very different than Atomic Spectroscopy?
5. If you can, explain how the process of how chemical molecules in space generate photons/waves is VERY different than the way in which Atoms of specific elements can make photons/waves.
6. Try to explain how an emission spectrum is caused by a slightly different process than an absorption spectrum.
7. Go back to look at the absorption spectra slides in this PP Pres. What does it mean/imply when there are "dips" or downward spikes in the waveform of what is received?

8. Why are molecules of different compounds sensed or "received" at different wavelengths or frequencies with Radio Telescopes?