Links for Stellar Evolution

- Possible leading questions (from http://imagine.gsfc.nasa.gov/docs/ask_astro/stars.html)
 - o http://imagine.gsfc.nasa.gov/docs/ask_astro/answers/971020f.html
 - o http://imagine.gsfc.nasa.gov/docs/ask_astro/answers/970225a.html
 - o http://imagine.gsfc.nasa.gov/docs/ask astro/answers/011028a.html
 - o http://imagine.gsfc.nasa.gov/docs/ask astro/answers/970422f.html
- Fusion
 - o http://www.enchantedlearning.com/subjects/astronomy/stars/fusion.shtml
- Star formation/life cycle; nebulae
 - o http://www.enchantedlearning.com/subjects/astronomy/stars/lifecycle/
 - Caveat: this website appears to have some unclear/incomplete information
 - o http://amazing-space.stsci.edu/capture/stars/
 - o http://teachspacescience.org/graphics/pdf/10001069.pdf
 - o http://imagine.gsfc.nasa.gov/docs/teachers/elements.html
 - o http://teachspacescience.org/graphics/pdf/10000513.pdf

Eagle nebula

• http://hubblesite.org/gallery/album/nebula_collection/pr2005012b/full_jpg

<u>Possible Leading Questions</u> (in no particular order)

- Based on first bullet above
 - o Does the life span of a star depend on the elements that it contains?
 - o (second link above is a general question regarding life cycle and HR diagrams)
 - o Is hydrogen necessary for the creation of stars? Can stars form out of heavier elements? What happens when the hydrogen supply of a star/the universe is exhausted?
 - Are all stars born from nebulae? Do all stars die as supernovae/black holes? What factors determine these things?
- How are nebulae formed?
- What conditions are necessary for the material from a dead star to form into a new one?
- What makes a star different from a planet?
- If star materials can be recycled into new stars, does this cycle continue forever? If not, in what ways can it end?
- Does the life cycle of a star depend on its mass? If so, how?