End of the Universe Activity

Before beginning this activity read the information located at:

Wikipedia Ultimate Fate of the Universe,

http://en.wikipedia.org/wiki/Ultimate fate of the universe

Some helpful websites include:

Mysteries of Deep Space Timeline, http://www.pbs.org/deepspace/timeline/index.html
Drake Equation Calculator, http://www.pbs.org/wgbh/nova/origins/drake.html
Life's Little Essential, http://www.pbs.org/wgbh/nova/origins/essential.html

Astronomers have theorized that there are at least four alternatives for the fate of the universe. They are described at the Wikipedia Ultimate Fate of the Universe website as well as in your textbook: a recollapsing universe, a critical universe, a coasting universe, or an accelerating universe. Select one of these. You and your team will write a **one page, double-spaced, typed** description of what you think the universe will be like in the distant future based on the fate you have chosen. Your description must include the following:

- 1. living conditions in that universe several billion years into the future, including where humans could live
- 2. technological and social changes that might have to take place by that time in order for us to survive
- 3. appearance of the stars and galaxies in the cosmos, including distances and brightness compared to how they appear to us now
- 4. discoveries that we will have made and questions that we will have answered about the universe by that time

You may include pictures and/or information obtained from additional sources, however you <u>must include a minimum of 3 references</u>, even those listed by the instructor, **and type** this assignment in order to receive credit!