**11th grade Honors American Literature**

End of the World Disaster Theories

 **Particle Accelerators**

Physicists have long theorized that particle accelerators could destroy the earth. When electric fields are used to accelerate protons they could collide at speed fast enough to create black holes or bits of altered matter. These small black holes would slowly engulf our planet. The pieces of altered matter, called strangeletes, would destroy any ordinary matter they came in contact with, eventually annihilating the entire planet. Although most scientists assure that none of the particle accelerators being used at the present are strong enough to bring about these events they are unsure of the abilities of the newest accelerator being built. Currently, over two-thousand physicists from thirty-four countries, universities and laboratories are aiding in the construction of The Large Hadron Collider (LHC) located near Geneva, Switzerland. It is scheduled to begin experimentation in May 2008. It is hoped that if black holes are produced they will be small enough to evaporate, but only time will tell.

**Rogue Black Holes**

Although the concept of black holes was conceived in 1915 by Einstein (some may argue earlier) they were not accepted as fact until Stephen Hawking and Roger Penrose proved their existence in 1970. From this point on black holes have been looked at with a sense of awe and fear; a place from which nothing can escape, not even light. Even scarier is the fact that our galaxy is full of collapsed stars waiting to turn into black holes, some astronomers estimate there are as many as 10 million. Luckily, most black holes are in orbit around other astronomical masses. However, if one of these black holes was able to pull itself away from orbit and head towards earth we would be clueless since they are almost impossible to see. The black hole wouldn't even have to come very close to earth to wreak havoc, if it even entered our solar system it would distort all planetary orbits causing extreme climate changes, and even expel some planets from the system.

**Gamma-Ray Burst**

Gamma-ray bursts are extremely powerful, estimated to have 10 quadrillion times more energy than our sun. They are created by the collision of two collapsed stars. Unfortunately, it is almost impossible to visualize collapsed stars making it even more difficult to predict the location of a gamma-ray burst. A burst 1,000 light years from the earth (further away than most of our stars) would create an explosion as bright as our sun and bring a hasty destruction to earth. Although our atmosphere and the ozone would provide protection at first it would soon be cooked away by the radiation. UV rays would kill the photosynthetic plankton in the ocean, which provide most of the earth's oxygen. At least one burst can be seen each day when watching our sky with gamma-ray vision; it can't be too long before there is one closer to home.

** Omega Point**

This term describes the ultimate maximum level of complexity-consciousness. Philosopher Pierre Teilhard de Chardin believed that the universe is continuously working towards this point. The socialization of humankind, including creating more complex forms of communication and information exchange, increases the collective consciousness of the human race. Just as human beings can self-reflect, one day too the universe will hit the critical Omega Point and the collective consciousness of humankind will be able to reflect upon itself. This divine center of consciousness will draw together the entire universe and end the world as we know it.

**Bubble Nucleation**

According to the leading cosmological model the universe began as a false vacuum of empty space filled with energy. This incredibly unstable, high-energy state went through the process of bubble nucleation to reach a more stable, lower-energy state. This huge release of energy caused the expansion of the universe. We would like to think that the world we now live in is a stable true vacuum but it is possible that although the universe is at a lower energy level now than it was before, we are living in another false vacuum which could collapse at any moment. If a low energy bubble nucleates in our false vacuum it would expand at the speed of light, once again changing the universe.

**Divine Intervention**

As with all end of the world theories it's impossible to know if divine intervention is a feasible end of the world scenario. Despite its lack of scientific evidence it gains validity through strong support. Christians look to the Book of Revelation, Jews to the Book of Daniel, and Muslims believe that the coming of Mahdi will bring the end. All religions have a similar story: a divine force will intervene in the world to bring our history to an end and start a new moral order. Even non-believers have something to worry about since some doomsday groups decide to take these matters into their own hands. For example, the Aum Shinri Kyo sect that released Sarin nerve gas into a Tokyo subway station in 1995, killing 12 and injuring more than 5,000. Imagine what would happen if these groups got their hands on more powerful weapons.

**Solar Activity (Super-Flares and Decreased Activity)**

The sun emits solar flares, also known as coronal mass ejections, towards earth frequently. These flares are large magnetic outbursts which contain high-speed subatomic particles. Luckily, earth's atmosphere and magnetic field protect us from the consequences of these potentially lethal flares. However, evidence has been found that sun-like stars far from our solar system can briefly increase in brightness by 20 times. It is hypothesized that these increases are caused by super-flares, which are millions of times more powerful than the common solar flare. If our sun were to emit one of these super-flares it would literally fry the earth. On the other hand, if our sun's activity were to decrease by a mere 1% (which has been known to happen to many sun-like stars) we would be flung back into another ice age.

**Aliens Attack The Earth**The chance of encountering intelligent extraterrestrial life becomes greater every day. As of January 8, 2008, 217 planets have been discovered outside of our solar system and 2-3 new ones are found each month. Famous astronomer Carl Sagan believed there to be billions upon billions of planets in the universe. With such high numbers it is hard, if not impossible, to believe that there is no intelligent life in the universe besides human and that an alien invasion and destruction of Earth is impossible. It is theorized that it would not be a conflict between humans and aliens that would cause lead to our end but that the aliens would exploit Earth for her resources or merely disrupt the planet by mistake.

**** [**Global War**](http://botw.org/top/Society/Issues/War_and_Conflict/)

Although, tensions between world groups wax and wane causing the public to frequently go from worrying about a global war to forgetting about it, global war is a constant threat. It is believed that there are at least 20,000 active nuclear weapons in the world. A malicious use of these weapons or even an accidental nuclear exchange or misfire could be disastrous for the planet. Even more worrisome should be the treat of biological warfare. Using killer germs is cheap, they are also easy to produce and conceal. Even scarier, they can become impossible to control.

**Ecosystem Collapse**

Our biodiversity is vanishing. At least 30,000 new species become extinct each year, a higher rate than ever before in history. Every single organism on the planet is integrally intertwined with the life of others. To make our life easier in the here and now we are slashing and burning forests, slaughtering animals, transporting organisms from their original ecosystem to others, and introducing synthetic materials into the environment, just to name a few. We are already upsetting the checks and balances of the global ecosystem but have not yet seen a devastating consequence such as the extinction of pollinating insects leading to widespread crop failure and the eventual starvation of humans. Ecologist use the imagery of a "marginal tree," that once cut will throw our planet into chaos to explain the unpredictability of a cataclysmic [ecological collapse](http://botw.org/top/Society/Issues/Environmental/).

**After reading these articles, which theory strikes you as the most plausible? Why? Be sure include a minimum of three pieces of evidence to support your response.**