

## 2 Essay

1. What is the most exciting problem in astronomy that might get resolved within the next five years and why?
2. Politicians often hide behind a “support {blank}” (e.g. troops, president, ...). How does science depend on the opposite of this and give specific examples (discovery of neutrinos from the sun, determination that GRBs are outside the galaxy, big bang/dark matter/dark energy).
3. We’ve seen stories of scientists who stuck with a position despite evidence to the contrary (e.g. neutrinos, GRBs, big bang). Were they being unscientific? In the end, the evidence came around to support them, so do the ends justify the means in science?
4. The idea of inflation solves a number of problems with the idea of the big bang. What questions/problems arise because of the introduction of inflation? Would it be better simply to rid ourselves of inflation and stick with the problems of the Big Bang theory?