ENVR 172 Al Bartlett Questions

1. (Steady growth) 70 divided by the percent growth per unit time = doubling time

Doubling time is extremely important to understand because of the ramifications for not only population size but also energy useand just about any consumptive resource that we would use.

e.g. assume a population is increasing by 5%, calculate the doubling time.

70

5 % growth = 14 years doubling time

70

7 % growth = 10 years

1. Assume that you have 60 years left to live on planet earth before moving above earth. Today the car that you would like to purchase costs $35,000 brand new out the door including taxes and tags. What is this car likely to cost you when you graduate four years from now assumingthat you have 4 years left to graduate and that inflation will increase at a rate of 3% annually?

2. In 2018 the annual rate of growth was about 1.12 percent. Currently there are 7.7 billion people on the planet. Assume that this will remain constant at 1.12% a year and determine what the population of earth be in 10 years? 30 years? 60 years?

3. With a population of 1.2 billion people, china has the most people of any country. Currently, China has a bit over 300,000 cars on the road. This is equivalent to almost all of the vehicles in the United States. However, since they have substantially more people in China who desire cars, it is estimated that the number of cars on the road will increase dramatically over the next few decades. In fact, right now China is the world's leading car producing country, producing approximately **21 million** passenger cars and claiming a 24.1 percent share of total global vehicle production. If the number of cars produced today is to maintain this incredible amount of growth what can we expect in 10 years, 20 years?

4. Do you think zero population growth will ever happen on earth? Why or why not?

5. List six things that are likely to increase population size over the next several decades and six things that are likely to decrease the population size over the next several decades?

6. Everything that we think are noble and just goals for humans seem to increase population and everything that we think is bad will help control population. What can we do to reconcile this fact?

7. What is the Hubbard curve and what does this indicate?

8. What does Al Bartlett mean by the term “Strength through Exhaustion?”

9. According to the video that you have reviewed in what year did oil peak in the United States? What is expected to happen as a result of this? How about world production?

10. Look up on the internet given current rates when we will reach “peak oil”?

11. What is the current population of the United States? Of the world?

13.

Homework: View the following documentary

**The World In 2050 [The Real Future Of Earth] – Full BBC Documentary 2018**

https://www.youtube.com/watch?v=XeEYaX82jSE