Science, Society and Technology

Goals for this unit…

- Explain how technology influences the quality of life.
- Explain how decisions about the use of products and systems can result in desirable or undesirable consequences (e.g., social and environmental).
- Describe how automation (e.g., robots) has changed manufacturing including labor being replaced by highly-skilled jobs.
- Explain how the usefulness of manufactured parts of an object depend on how well their properties allow them to fit and interact with other materials.
- Design and build a product or create a solution to a problem given one constraint (e.g., limits of cost and time for design and production, supply of materials and environmental effects).
- Identify ways scientific thinking is helpful in a variety of everyday settings.
- Describe how the pursuit of scientific knowledge is beneficial for any career and for daily life.
- Research how men and women of all countries and cultures have contributed to the development of science.

Today's Assignment to get us started!

Directions: In groups, on a separate sheet of paper, answer the following questions the best you can.

1) Explain 3 ways that technology influences the quality of life.

2) A handful of private companies are designing rockets, testing engines, and building electronic systems to create spaceships that would take everyday people on the trip of a lifetime to space! What kind of desirable and/or undesirable effects would this have on society and/or the environment?

3) Car manufacturing companies have converted to using machines and robots to automate much of the process of making a car. What effect do you think has had on workers in this industry?

4) If you were designing a new computer part for everyday computer users to use, how important would it be that this computer part fits and works with many types of home-computers? Why?

5) Name one way that scientific thinking can be helpful in everyday-life. For example, when I have a problem on my computer, I use scientific thinking to make observations, form a hypothesis, test the hypothesis, etc. I use this thinking until I have solved the problem. Name another way that scientific thinking can be helpful in everyday-life.

6) How is the pursuit of scientific knowledge beneficial for any career and for daily life? For example, the pursuit of scientific knowledge about how to create a calculator resulted in us being able to make calculators and saving much time and greatly reducing errors. With calculators, we are able to calculate things and make predictions as we were never able to before.