

Inventions and Innovations

Introduction:

Television today is not what television was 30 years ago. We see them getting lighter/slimmer and producing higher quality images. Our phones no longer require cords, buttons, or dials. These changes are considered innovations. They are improvements to products that exist. An invention is a new product/system/or process from the likes we have never seen. Alexander Graham Bell is known for the telephone, but it was nothing like we have today. Thomas Edison's light bulb was an invention but what we have done with them today would be innovations on his invention.

Challenge:

In this activity you will work in your team to research an invention/innovation that you feel has been most impactful in the last 100 years. You will also document this process within your engineering notebooks.

Equipment:

- Engineering notebook
- Pencil
- Computer with internet access

Procedure:

Form a team of 2-3 with the guidance of your teacher

Select an invention/innovation that your team will research/discuss. (ex. Toothbrush, Phones, Shoes, TV, Cars, Bikes, Washing Machine, Dishwashers, Refrigerators)

Record the name of the Invention/Innovation _____

Research the invention/Innovation. Discover (at minimum) the following information and document within your Engineering Notebooks.

1. Description of the invention/innovation.
2. Explain why it is/was so important.
3. Draw/illustrate the invention/innovation that your team chose.
4. What materials were used in making this invention/innovation?
5. How was/is this product made?

6. What types of individuals use this product?
 7. What types of Engineers might have impacted this invention/innovation?
 8. If you could change this product, would you? What would you change about it?
- Prepare a 3 minute presentation for your peers on this invention/innovation. Look towards your research for your presentation. Be sure to include:

1. Team members names, class, and name of invention/innovation
2. List of engineering disciplines that may have been involved in the creation of this invention/innovation.
3. Timeline of invention/innovation and major changes in its design
4. References

Scoring:

Scores are based off the following criteria:

Deliverable: Up to 5 points

Team Spirit: Up to 10 points measuring how well the team works together

Accuracy: 1 point will be given to those projects that connected with accredited sites.

Conclusion:

1. What is the difference between invention and innovation?
2. Given current technology do you think it may have changed the pace of your invention/innovations development?
3. Do you think your product will have any future innovations? If so what?