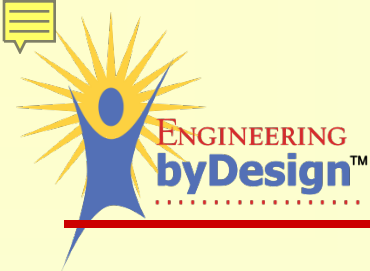


MEETING TECHNOLOGY

Unit 1

Big Idea: Technology impacts every individual and society as a whole.



Engagement

What I Need or Want

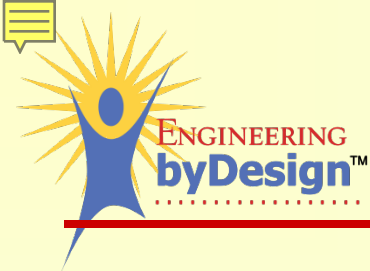
In your Engineering Design Journal
(EDJ):

Draw a picture
of something

- *that is not living* -

that you cannot live without.

Be ready to explain why you need this.



Engagement Continued

What I Need or Want

In your Engineering Design Journal (EDJ),
respond to the following:

- Explain why you need the object in the picture.
- Might others need the same object?
- How would someone use the object in the same way you do to complete an everyday task?
- How would someone use the object differently than you would to complete an everyday task?
- How could this object be improved?

Be ready to share/discuss.



Engagement Continued

Words to Know

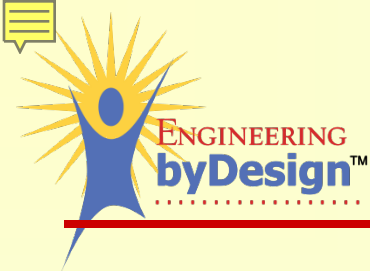
Technology

- 1. Human innovation in action that involves the generation of knowledge and processes to develop systems that solve problems and extend human capabilities.
- 2. The innovation, change, or modification of the natural environment to satisfy perceived human needs and wants.

Science

- The study of the natural world through observation, identification, description, experimental investigation, and theoretical explanations.

Write an example of technology and an example of science in your EDJs.

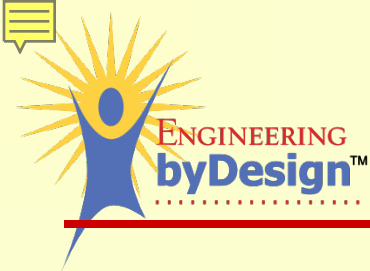


Engagement Continued

Words to Know

Needs and Wants

- Need - Something you have to have to survive.
- Want - Something to make our things easier or entertaining.
- Examples?



Engagement Continued

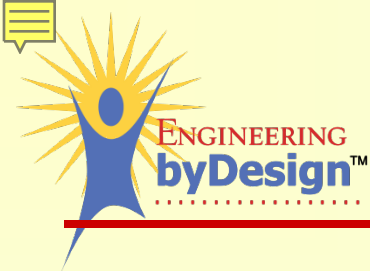
Words to Know

Impact

- The effect or influence of one thing on another. Some impacts are anticipated, and others are unanticipated.
- Examples?

Society

- Relationships among groups of humans.
- Examples?



Engagement Continued

Words to Know

Product

- A tangible artifact produced by means of either human or mechanical work, or by biological or chemical processes.
- Examples?

Innovation

- An improvement of an existing technological product, system, or method of doing something.
- Examples?

Is technology a product/tangible artifact?



Technology to the Rescue

Lesson 1

BIG IDEA . . .

Technology impacts
every individual
and
society as a whole.

Think about it . . .

Now write the BIG IDEA of this lesson in your EDJ. You may use your own words.

Exploration

Different But Still a Family - Technology Systems

Technology Systems in the Designed World

Types of Technology

**Medical
Technologies**

**Agricultural and
Related
Biotechnologies**

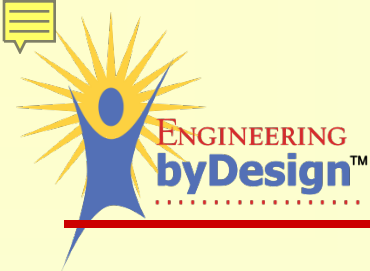
**Energy and Power
Technologies**

**Information and
Communication
Technologies**

**Transportation
Technologies**

**Construction
Technologies**

**Manufacturing
Technologies**



Explanation

Unit 1 Notes

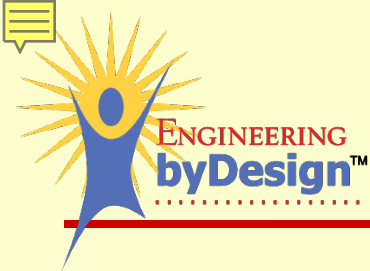
Technology solves problems that could not have been solved without it. Technology is:

- Not just electronics
- Developed out of a want or need
- Creative
- Constantly changing
- Often done in teams
- Often an improvement on pre-existing designs

Impacts can be intended or unintended.

Engineers take project ideas developed by technology and design and produce solutions to be used.

Discuss a product that would not exist without the use of a new technology and the impact(s) that may have resulted if it did not exist.



Explanation

Unit 1 Notes Continued

Science contributes to the development of technology.

Mathematics makes sure technology is developed with precision and accuracy.

History lets us know what technologies have or have not worked as well as the impacts they have had.

Think of a technology that could not have been developed without science, mathematics, and history. How have science, mathematics, and history contributed to its development or improvement?