Activity 1.2.1 Energy Sources

Purpose

According to the United States Department of Energy, Americans spend 500 billion dollars each year on energy. The world is facing the challenge of significantly increasing energy needs. Many unique energy sources are available. To meet future energy needs, engineers need to design technology to contribute new ways to harness energy, increase efficiency, and better transport and store energy.

Equipment

- Google Slides or PowerPoint
- Internet access
- Books, articles, and available energy resources.

Procedure

In this activity your team of two to three will choose an energy source that interests you. Your team will create a presentation about your energy source. Those will be compiled with the other teams’ slides to create a class presentation. Each team will have three to four minutes for their portion of the presentation.

Slide Checklist

_____ Title slide – should include group member names, topic, class name and date.

_____ Minimum four (4) content slides – one for each of the bulleted points below – use graphics, and images to help keep your presentation interesting and visually appealing!

   Minimum one slide for each:
   - Is the energy source classified as nonrenewable, renewable, or inexhaustible?
   - How is the energy source made useable?
   - What are the infrastructure requirements for utilizing this energy source?
   - What emerging technologies will make this energy source safer, more useable, more efficient, cleaner, etc?

_____ Two (2) conclusion question slides, one for question #1 and one for question #2 below. You may skip question #3. Include the question and your answer (1 Q/A per slide!)

_____ One (1) reference slide with citations for all information and images gathered.
Presentation Checklist

1. Preview the checklist below before you create your presentation. Check off each item as you prepare the preparation.

____ Have you planned to enhance statements on your slides by what you say, rather than to read from the slides?

____ Have you closely examined every sentence or phrase to be sure that it can’t be made into a word or phrase that you can elaborate on verbally?

____ Did you practice your presentation?

____ Are you prepared to maintain eye contact while you are presenting?

____ Did you make sure that your chosen fonts are easy to read?

____ Is all of your text large, bold, and easy to read?

____ Are your presentation slides easy to read from the back of the room?

____ Have you used bullets or another method to distinguish between separate points?

____ Does your presentation stand out and seem creative?

____ Do you have pictures, graphics, or animations that enhance your presentation?

____ Did you include reference notes on each slide to indicate where information and images were retrieved?

____ Are you happy with your presentation?

____ Have you discussed any questions that you may have with the instructor?

Conclusion Questions

Create separate slides for the conclusion questions below – include the question and your answer (1 Q/A per slide!)

1. Describe one thing that surprised you about the energy source that you researched and presented.

2. Describe and defend what you believe to be the most important technological need regarding energy.

3. Describe one thing that surprised you about an energy source that another team presented.