

## Electrical Energy Project

Before Spring Break, we were looking at the many different types of energy and how they can be transformed into electrical energy. We ended with the advantages and disadvantages to each type. I have scanned the textbook for your reference and is on my website as a pdf file.

Past Learning	
Types of Energy	Generating Electrical Energy
Mechanical = Kinetic (motion) + Potential (stored) Chemical Energy Nuclear Energy Solar Energy Thermal Energy and Geothermal Energy	Hydroelectric Energy from River Flow Electrical Energy from Fossil Fuels Electrical Energy from Nuclear Reactions Electrical Energy from Wind Electrical Energy from Sunlight Electrical Energy from Geothermal Sources Electrical Energy from Tidal

You will continue with this topic and research six additional areas (Part A-F) listed below. You will use google slides and share with me for assessment. Many of these topics we have already touched on.

Questions I often get...

- Can this be done in point form. YES, its google slides :)
- Should I have pictures...YES its google slides
- Can I copy graphs from websites....Yes, its google slides
- Do I need a bibliography...NO, If you stick with resources that I have given you. Yes, if you venture out, which you should do
- Visual presentation counts! Put in transitions. Use an appropriate font. Titles. Spelling :(
- Can I copy and paste. NO! Like I have mentioned before, it needs to be in your own words.

Please go to my website: [jenipherpatton.weebly.com](http://jenipherpatton.weebly.com) for textbook, videos and websites. This will be under **Science 9 Assignments**

Step 1: Open up google slides and name Electrical Energy Project. Then share with me at [jpatton@gedu.sd73.bc.ca](mailto:jpatton@gedu.sd73.bc.ca)

Step 2: **Complete Part A-C by April 2**

This will take 3 hours

Step 3: **Complete Part D-F by April 8**

This will take 3 hours

You can always ask me questions by emailing me each day. I will email you back between 8:30 am - 1 pm

- Part A:**      **What is electricity?**
- Part B:**      **How is electricity generated?**  
**How do we transform kinetic energy to electrical energy using a generator system?**
- Part C:**      **Electricity Generation Sources: Pick 4**
- Hydro
  - Nuclear
  - Coal/Natural Gas/Diesel/Oil
  - Wind
  - Solar
  - Tidal
  - Geothermal
- How is electricity generated from these sources? What are the advantages/disadvantages for each? Remember to pick 4, not all.**
- Part D:**      **Canada and Electricity**
- Provinces generate electricity in different ways. This is dependent upon the availability of resources (example: water, wind, tides, oil, etc.)
  - Research the differences between the provinces when it comes to how they generate electricity from one another.
- Part E:**      **Electrical Energy is always generated from another source of energy.**
- What are non-renewable energy sources?
  - What are renewable energy sources?
  - From the sources listed in Part C, which ones are renewable? Which ones are non-renewable?
- Part F:**      **Your Opinion**
- How is BC/Canada doing when it comes to generating electricity in a sustainable way?

**100 Marks**