**Name:**

**Date:**

**School:**

**Facilitator:**

5.04 Hydroelectric and Wind Energy

**Directions: Complete the following chart on hydroelectric and wind energy using the lesson.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Energy Source** | **Is source always available?** | **Advantage** | **Disadvantages (at least 2)** | **How is the energy harnessed?** |
| Hydropower  |       |       |       |       |
| Wind Energy |       |       |       |       |

**Directions:** Answer the following questions about hydroelectric and wind energy.

1. In three to four sentences, describe how water is used to generate electricity and what energy conversions take place.
2. List three factors that cause/create wind.
a.

 b.

 c.

1. In two to three sentences, explain how wind energy is used to generate electricity.
2. Visit EPA Power Profiler linked on the task page to see what percentage of your power comes from hydropower, non-hydropower, nuclear energy, coal, oil, and gas. When you get to this page, enter your zip code and click enter. Then choose your electric utility company from the drop down box and click View Report. Scroll down and you can see the percentage of your electricity that comes from each source by scrolling over the covered areas. Tell which source contributes the greatest percentage of your power and describe how your area compares to the national breakdown.