**Energy Scavenger Hunt**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 Hr: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



**General Questions**

1. Label the parts of the atom in the diagram to the right 🡪
2. What do we call the movement of electrons from one place
to another?
3. What is “[Fossil Fuel](http://studyjams.scholastic.com/studyjams/jams/science/energy-light-sound/fossil-fuels.htm)”?
4. How is [electricity produced](http://tunza.eco-generation.org/worldReportView.jsp?viewID=10330) from fossil fuels?
5. What made [Michael Faraday](http://www.physics4kids.com/files/elec_faraday.html) famous? (So famous that he is on money in other countries)

**Solar Energy:**

1. In the Sun, [Hydrogen is converted into Helium](http://www.fplsafetyworld.com/?ver=kkblue&utilid=fplforkids&id=16182), this is called:
2. What [material](http://www.solarpowerworldonline.com/2013/05/what-are-solar-panels-made-of/) is used in making Solar Panels? (Ex Cred – What common material is used to make solar cells?)
3. Circle the parts of the US (on the map below) that use the most [solar energy](http://www.nrel.gov/gis/images/eere_pv/national_photovoltaic_2012-01.jpg)



1. What is “[Passive Solar](http://passivesolar.sustainablesources.com/)” house design?

**Wind Energy:**

1. What makes the [wind blow](http://www.weatherwizkids.com/weather-wind.htm)?
2. \*Wind turbines are being [increased in height](http://www.startribune.com/business/169258976.html) from 80meters to 100 meters. Why?
3. Circle the parts of the US (on the map below) that use the most [wind energy](http://www.washingtonpost.com/blogs/wonkblog/wp/2012/08/14/the-rise-and-possible-fall-of-u-s-wind-power-in-five-charts/)



**Other types of Energy Production**:

1. What are the [negative side effects](http://www.conserve-energy-future.com/Disadvantages_NuclearEnergy.php) of using Nuclear Energy?

1. Biomass energy is like using Fossil Fuels in that a material is burned to produce electricity. What are the most common items burned for [biomass energy generation](http://www.energy.ca.gov/biomass/)?
2. Geothermal energy : What is the temperature once you are more than 6 ft [underground](http://www.alliantenergy.com/SaveEnergyAndMoney/RenewableEnergy/Geothermal/index.htm)?
3. How is [Hydropower different than Tidal Power](http://www.globalization101.org/hydropower-and-tidal-power/)?
4. Hydrogen is a gas that can be converted into electricity by using a “[FUEL CELL](http://www.fueleconomy.gov/feg/fuelcell8.swf)”.
Would fuel cells be better suited for home use or for transportation? *(Circle Your Answer)*

 Explain why! *(Look this up on your own)*

**TRANSPORTATION**

**HOME**