

### **Energy Chain Poster Project:**

You will be assigned one of the following topics to create a poster illustrating the energy chain involved with the topic. Your grade will be based not only on how scientifically accurate your poster is but on how well you work together, your time on task and how clearly your poster gets the idea across to others.

1. Using what you have learned about energy transformation and energy transfer, make an energy chain that traces the path of energy from a hydroelectric power plant and right through your television. Be sure to include all the forms of energy involved and the transfers that take place.
2. Using what you have learned about energy transformation and energy transfer, make an energy chain that starts at the sun, and traces the path of energy from a coal fired power plant and right through your television. Be sure to include all the forms of energy involved and the transfers that take place.
3. Using what you have learned about energy transformation and energy transfer, make an energy chain that starts at the sun, and traces the path of energy from a gas fired power plant and right through your television. Be sure to include all the forms of energy involved and the transfers that take place.
4. Using what you have learned about energy transformation and energy transfer, make an energy chain that traces the path of energy from a nuclear power plant and right through your television. Be sure to include all the forms of energy involved and the transfers that take place.

5. Using what you have learned about energy transformation and energy transfer, make an energy chain that starts at the sun, and traces the path of energy from the sun, to fossil fuel to your car as you go to the mall.
6. Using what you have learned about energy transformation and energy transfer, make an energy chain that starts at the sun, and traces the path of energy to you as you score a goal in soccer and right through the ball coming to rest in the net. Be sure to include all the forms of energy involved and the transfers that take place.

Some links that may help:

How Electrical Generators Work:

(go to ch. 6) <http://www.energyquest.ca.gov/story/chapter06.html>  
<http://science.howstuffworks.com/electricity3.htm>  
<http://science.howstuffworks.com/electricity4.htm>

<http://www.youtube.com/watch?v=SzSCFdF6zTs&feature=related>

Coal fired power plants (gas and oil fired plants work the same way!)(also has good video of how ANY steam Turbine works - time mark 1:45)

<http://www.youtube.com/watch?v=j0e772Vo73k&feature=relmfu>

nuclear power plant time mark 1:45

hydroelectric power plant time mark 4:00

<http://www.youtube.com/watch?v=LTnfXLws40Q&feature=related>

How Fossil Fuels are formed:

(go to ch. 8) <http://www.energyquest.ca.gov/story/chapter08.html>

Video on Basics of Energy:

<http://www.mmscrusaders.com/newscirocks/energy/basicenergy.asf> We have watched this in class, within the first 15 minutes it discusses where nuclear energy comes from, how fossil fuels are formed and how electrical power plants work.

Formation of fossil fuels

<http://www.youtube.com/watch?v=MBeXRRTGjNE&feature=related>

How a car engine works

<http://auto.howstuffworks.com/engine1.htm>

