

Name \_\_\_\_\_ Pd. \_\_\_\_\_ Date \_\_\_\_\_

### Taking Energy Chains a Little Further...

**Write out the following energy chains. Choose one to create a poster to illustrate and clearly explain the energy chain.**

1. 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 the hydroelectric power plant and right through your television. Be sure to include all the forms of energy involved and the transfers that take place.
  - There is no fuel used in a hydroelectric facility. No coal, oil or natural gas is burned, no smokestacks are needed.
  - Usually, hydroelectric facilities are created by damming up a large river. The water collects upstream of the dam, creating a lake, sometimes called a reservoir.
  - Water from near the surface of the lake falls through huge pipes located within the dam, that direct the water to special 'paddle-wheels', called turbines.
  - The spinning turbines are connected to a device called an electric generator, which 'generates' electricity.
  - A vast system of heavy duty wires carries the energy away from the hydroelectric facility to the customers.
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 to Tony Hawk as he does a 900 on the vert. 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 to 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.