**Power Play**

[**http://www.sciencenetlinks.com/interactives/powerplay.html**](http://www.sciencenetlinks.com/interactives/powerplay.html)

**Description**

Power Play is an interactive activity that helps users learn about harnessing energy from different power sources. Users click on the start icon to begin the activity. The four different screens in this interactive are divided into an upper and lower section. In the upper section, there is a picture of a power source on the left and a picture of a job that needs to be accomplished on the right. In between these two pictures is a blank space that users should fill up with the parts to build a machine that would capture the energy from the power source to get the given job accomplished.

Users are given machine pieces (plus others) in the lower section in order to build the appropriate machine in the upper section. To build the machine, users should click on one of the parts in the bottom screen and then drag it into the upper screen. Each machine requires three pieces. Once the machine works, users can click "Next" to go on to the next challenge. To make it more fun, users can try to do this as fast as possible!

In the lower section, on the far right, there are three icons that users can click on to get more information. The "!" takes users to a screen that contains information about energy; the "?" takes them to a screen that gives directions about how to play the activity, and the "Done" button allows them to quit the interactive.

**Using the Resource**

This interactive is a great resource to utilize when teaching students about physics. In particular, this is a great opportunity to challenge students to do some critical thinking about energy and power! Have students do their own project where they use a power source (e.g., wind, fire, etc.) and develop their own machine to harness energy to accomplish a particular job! Or students can do the same project using a machine that we already use in daily life. In this case, they would need to define the power source and describe how the machine works by using the harnessed energy to accomplish the intended goal. Students can use diagrams to explain their project, along with photos, pictures from magazines, or their own drawings! Also, have students define energy and power in their own words. In addition, have them select one machine they use on a regular basis that they feel has benefited society and have them write a short paper about the benefits of this machine and what life would be like without it!