It is important to realize when embarking on a journey through the energy sciences that you may have preconceived ideas about energy, and that they’re not always right. Here are some of the most common myths and misconceptions about energy. Remember that issues like these are rarely black-and-white.

**MYTH:** Most of the oil the U.S. imports comes from the Middle East.

**FACT:** Canada is actually the top foreign supplier of oil to the U.S. Of the total U.S. petroleum imports in 2009, 21 percent came from Canada and 14 percent came from the Persian Gulf.

**MYTH:** The use of corn ethanol fuel could play a big role in helping reduce U.S. dependence on foreign oil.

**FACT:** While any use of ethanol fuel that takes the place of petroleum fuel is a reduction, corn ethanol comprises 3.5 percent of gasoline consumption in the U.S. — hardly enough to substantially reduce our dependence on foreign oil. The use of ethanol raises a number of issues such as its impact on the food supply.

**MYTH:** Turning the thermostat at home way up or way down during changes from day to night expends more energy than leaving it at a constant temperature.

**FACT:** It takes less energy to warm up a cold house or vice versa than to make a heating or cooling system work all day and night to maintain one temperature.

**ACTIVITIES:**

1. Choose one of the myths above, or another one that you research, and create a poster presentation to display in your school to educate your peers and your community about energy facts.

2. Look at the energy flow chart shown here. Does the breakdown of sources and sectors surprise you? Why or why not?

3. View the U.S. Energy Information Administration’s chart of U.S. oil imports by country at http://www.eia.doe.gov/dnav/pet/pet_move_impcus_a2_nus_ep00_im0_mbbl_a.htm. Since 2004, the U.S. has become significantly more reliant upon several countries for oil. Make a list of the countries. On which countries has the U.S. become notably less dependent?