

5. Give examples of three things needed to operate an industry.



Thomas Edison

AMERICA FINDS NEW POWER

electric dynamo an electric generator
kerosene a thin, burnable oil made from petroleum
lubricate make slippery with oil

Prior to the Industrial Revolution, Americans depended on horses, oxen, and other animals for power. These energy sources were replaced when Americans harnessed water, coal, and oil.

Water was a natural energy source for industry. The first New England factories used the power of falling water to run their machines.

Coal, which was found in huge deposits throughout the country, also became a vital fuel source. Many Americans heated their homes with coal.

Coal (as well as wood and oil) also was used to fuel steam engines. Steam engines helped move people and goods quickly on America's rivers. Many factories used steam power, too.

Electricity became a new energy source, too. In 1831, Michael Faraday experimented with the *electric dynamo* and motor. In 1882, Thomas Edison used a dynamo to generate electricity to eighty-five customers in New York. By 1914, about one-third of American factories used electricity.

Kerosene also was introduced. For years, Americans had used oil in lamps. But the Industrial Revolution brought techniques for refining oil into kerosene. This new product was burned in gas lamps.

Oil was used for other purposes. Machines were *lubricated* with oil. Eventually, Americans also fueled gasoline and diesel engines with oil.

1. What did Americans depend on for power before the Industrial Revolution?

2. What did the first New England factories use as a power source?
