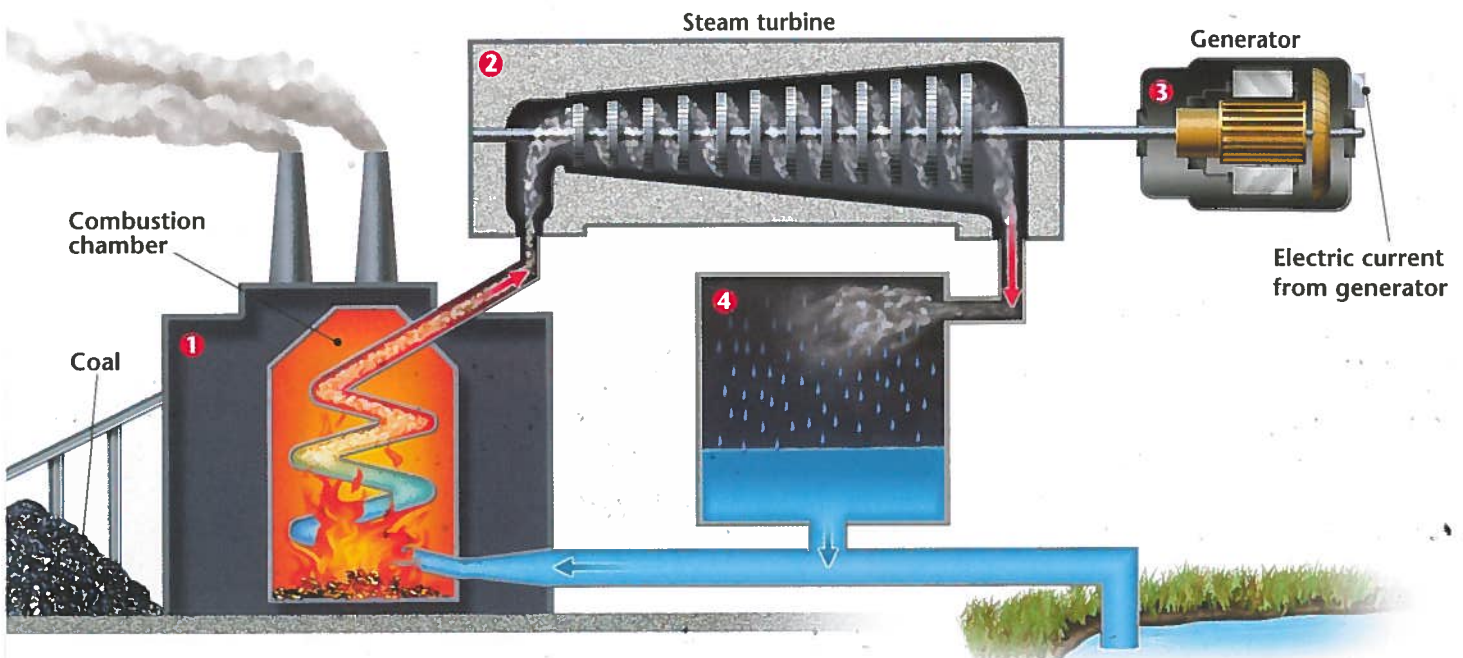


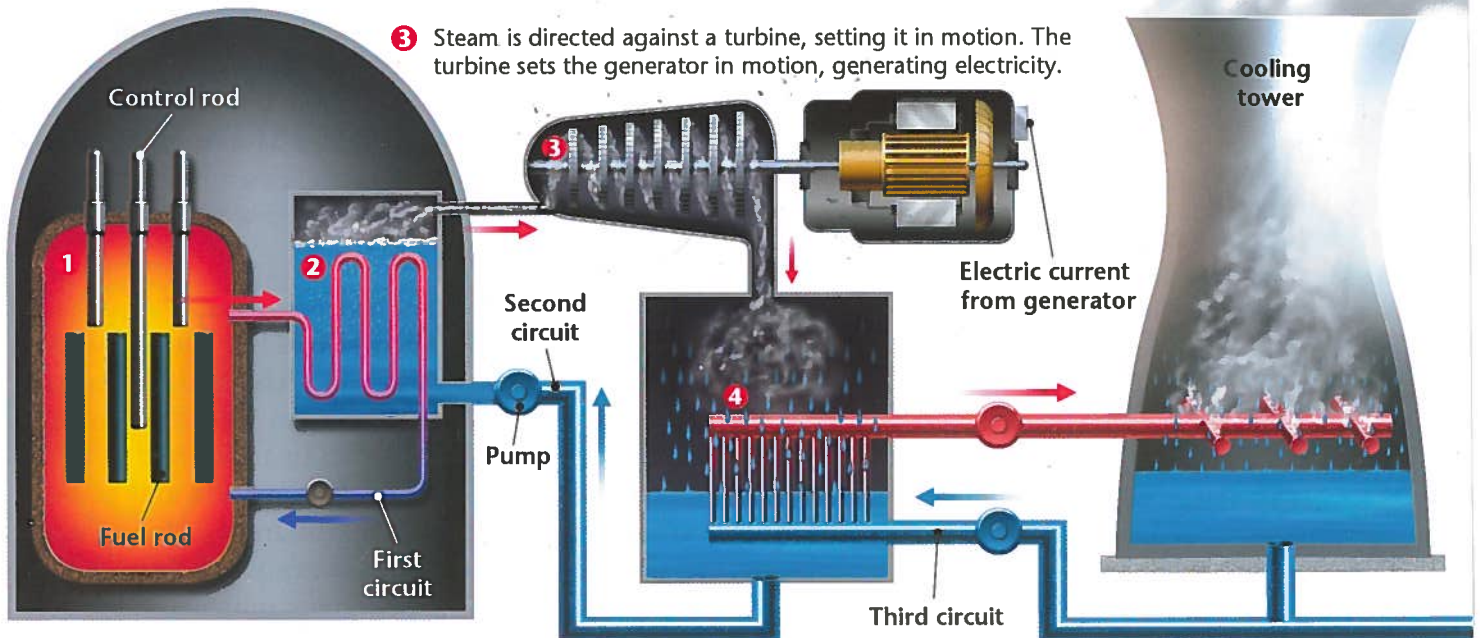
Figure 3 ▶ How a Coal-Fired Power Plant Works



- 1 Burning fossil fuels release energy in the form of heat, which is used to boil water and produce high-pressure steam.
- 2 The steam is directed against the blades of a turbine, which is set into motion.
- 3 The turbine is connected to an electric generator. The turbine sets the generator in motion, generating electricity.
- 4 Steam from the turbine is directed to a condenser where it cools and becomes liquid water to be cycled again.

Figure 15 ▶ How a Typical Nuclear Power Plant Works

- 2 The superheated water is pumped to a heat exchanger, which transfers the heat of the first circuit to the second circuit. Water in the second circuit flashes into high-pressure steam.



- 1 Energy released by the nuclear reaction heats water in the pressurized first circuit to a very high temperature.
- 2 The superheated water is pumped to a heat exchanger, which transfers the heat of the first circuit to the second circuit. Water in the second circuit flashes into high-pressure steam.
- 3 Steam is directed against a turbine, setting it in motion. The turbine sets the generator in motion, generating electricity.
- 4 A third circuit cools the steam from the turbine and the waste heat is released from the cooling tower in the form of steam.