



Hot water central heating

Most modern central heating systems use water as the medium to get heat from the central source to all the areas to be heated. This central source is generally called **boiler**, though the correct term would be **heat generator**, because the water is not “boiled” (the normal running temperature is 78 °C).

When the temperature drops below the thermostat setting, the thermostat sends a signal to the controls on the burner to get into action. A fuel pump draws oil through a filter to the burner, which turns oil into a fine spray, mixes it with air and ignites it in the combustion chamber, causing the chamber to get very hot. At this point the pump moves the heated water from the boiler through the pipes concealed in the walls to the heat distributors, called **radiators** and back to the boiler for re-heating.

A standard domestic circulating pump can only satisfactorily feed water to a maximum of 12 radiators because each radiator is fitted in parallel. All modern installations use the two-pipe system, as all the radiators warm up at the same time and all get to the same temperature. A thermostat governs the operation of the pump as well as the burner.



ACTIVITIES

- 1 Answer the following questions.
 - 1 What is the most common medium to get heat?
 - 2 What is the central source of water heating systems?
 - 3 How does the system work?
 - 4 How many radiators can a standard domestic pump feed?
 - 5 Why do modern installations use a two-pipe system?
- 2 Explain in your own words the meaning of the following verbs.

1 Drop
2 Get into action
3 Draw
4 Boil
5 Turn into
6 Ignite
7 Feed
8 Warm up