



1 With both valves turned off, use an adjustable spanner to slacken the capnut holding one of them to the radiator. You may need to hold the valve body with a second spanner or pipe wrench to prevent it turning and buckling the pipe.

## Replacing a radiator

You don't have to drain the entire heating system to replace a radiator, just turn off the heating and isolate the radiator by closing off the valve at either end. Turn the manual valve clockwise until it won't turn any further. Pull off the plastic shield of the lockshield valve at the other end and turn the square shaft clockwise with an adjustable spanner. Count the number of turns so that you can reset the new radiator at the same flow rate. If replacing several radiators, you will lose corrosion inhibitor from the system and should drain it down and add more (see page 329).



2 Place a tray beneath the valve to catch the water as it drains out. Open the bleed valve at the top of the radiator and loosen the capnut. When the tray is nearly full, re-tighten the capnut and empty the tray. Be ready with cloths to mop up any spillage – the water will be filthy. Repeat until all the water has drained out then disconnect the other valve.



3 Lift the radiator from its brackets and tilt to drain any remaining water. Get a helper to stuff tissue into the outlet the other end to stop it leaking. If the existing brackets don't suit the new radiator, unscrew them and fit those supplied with the new radiator. Check for pipes and cables before drilling new fixing holes.



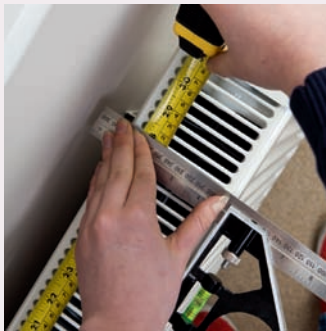
4 Remove the valve connectors from the old radiator, using an adjustable spanner or large allen key. Clean the threads with wire wool and wind PTFE tape around the threads about five times to ensure a good seal. Screw the connectors into the new radiator, making sure they are tightened fully. Hang the radiator. Connect the valves and reset them, allowing water to enter the radiator. You will need to open the bleed valve about half a turn so that air can escape; close it when water starts to appear.

### project essentials

- 2 adjustable spanners
- drain tray
- radiator bleed key
- bucket
- electronic pipe and cable detector
- large allen key, if required
- hammer-action drill with masonry bit
- wire wool
- cloths
- PTFE tape
- new radiator and brackets

## Fitting reflective radiator foil

Available as a roll or tiles, reflective radiator foil can reduce your heating costs by reflecting heat into the room that would otherwise be lost through the wall. It is particularly effective for radiators on cold outside walls.



1 Measure the height and width of the radiator, and the distance of the wall brackets from its top and side edges. Cut a piece of foil 50mm smaller than the radiator in both directions so that it won't be visible once installed.



2 Mark the position of the wall brackets on the reverse of the foil, and also make a note of which side is top. Using scissors make a vertical cut from the bottom of the foil to the upper bracket on each side.

### project essentials

- tape measure
- marker pen
- scissors
- wallpaper brush, if required
- radiator paint roller
- reflective radiator foil
- wallpaper paste or sticky pads



3 To stick the foil to the wall you can use either sticky pads or wallpaper paste. If using paste, protect the wall above with some paper as you position the foil.



4 Use a radiator paint roller to stick the foil to the wall.