

Investigation tips

Use this booklet to help you know what to look for. If you're not sure, ask your family members. If they're not sure, you can email woe-energydemo@cse.org.uk!

1. What kind of home do you live in?

How old is your home?

If you and your family don't know, try comparing your house to these images. Which does it look most like?

More than 100 years old



Around 80 years old



Around 50 years old



Less than 50 years old



What type of building do you live in?

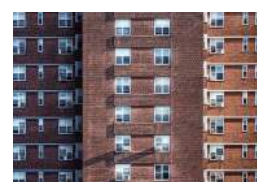
A **terraced** house is joined to more than one other house in a line.

A **detached** house is not joined to any other houses.

A **semi-detached** house is joined to only one other house.

A **bungalow** is a house with only one floor, usually detached.

A **flat** is part of a large building with other flats in it.



What type of roof do you have? It might be:

Flat



Pitched



A mixture of both



What's your roof made of? It might be ...

Tiles



Slate



Metal



Or something else!



2. Building condition

Damp is when water comes through your wall or ceiling and usually looks like a darker patch or a stain. It might feel wet and the paint or wallpaper may be peeling off. The water could come from broken pipes, heavy rain, the ground outside or something else.



Mould looks like speckles or fuzzy patches on walls, on ceilings, around windows and doors. It can be black, green, yellow or white. Mould grows where the wall is damp or cold.

Guttering collects rainwater from your roof and moves it away from your building. It can look different on different buildings but there shouldn't be any breaks, gaps, or places where it's blocked with leaves. If you have plants growing in your guttering, that's a problem!

Look at your gutter when it's raining heavily – the rain will show you if the guttering is broken by spilling out where it isn't supposed to be.



3. Draughts and ventilation

Draughts are when cool air moves through a room and you don't want it to. Usually draughts come through windows or doors that have tiny gaps around the edges, but they could come from anywhere there is a gap to the outside world.

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You might already have ways of stopping draughts from coming in, like **draught excluders** at the bottom of doors or windows or in your letterbox.



However, some fresh air is needed in the home to stop the building becoming damp or mouldy. This is called **ventilation**.

Homes can be ventilated in different ways:

Extractor fans take warm air out to stop it causing damp, usually in the bathroom and kitchen.



Air bricks help small amounts of air get in and out of your house near the floor. You might only be able to see them from the outside because they lead under the floor.



Trickle vents let a tiny bit of air through the window without opening it.



The easiest way to get ventilation is by **opening a window!** For example, you should open the window after showering to let the steam out of the house.



You might have other kinds of vents around your home.

4. Heating

How do you heat your home?

Look for a **boiler** – it's often in a cupboard in the kitchen or maybe the bathroom. If you have a boiler, it's most likely to be powered by gas. If you don't have a boiler, your heating and hot water is most likely powered by electricity.



Do you have a **fire**? It might be powered by something you put in it, like wood, or by another energy source like gas or electricity.

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Do you have **radiators**? Are they attached to the wall or can you move them around? Are they powered by electricity or are they full of water? If they're full of water, they're probably powered by your gas boiler.

You might have a **hot water tank** – it's often in an upstairs cupboard or the loft. The water might be heated by a gas boiler or by electricity.

How do you control the heating?

Can you find a **thermostat** – something that tells you what temperature it is in your house and lets you decide what temperature you want it to be? Some can be digital or 'smart', but many just look like a dial on the wall.



There might also be temperature controls on your radiators or on your boiler.



5. Lights

Have a look at your light bulbs.



Can you see a tiny wire or thread inside? This is an **incandescent** bulb, which is an older technology. These bulbs heat up when they've been on for a while and so are inefficient, wasting energy on heat instead of light. When it blows, you could change it for a new LED bulb to save energy.

Are your bulbs made of tubes that bend or curl round? These are **fluorescent** light bulbs. They save more energy than an incandescent light bulb but not as much as an LED bulb. They might take a while to get bright after you turn them on.



LED light bulbs are often opaque and have plastic at the bottom instead of glass. These are the most efficient light bulbs and they save the most energy. They don't produce any heat, only light.

If you're not sure what kind of light bulbs you have, see if it's labelled on the base.

Once you've finished your investigation, use the **Solutions** sheet to see if you can improve your house.