

Climate Action Week 2024: Design your sustainable home



Stage: **P4-S2**



Time: **2-4 hours**

Introduction: This year's Climate Action Week will focus on how we can make our homes and gardens more sustainable. We would like pupils to use what they have learned during the week to design a model of their own sustainable home and garden.

This activity was produced from a resource originally created in conjunction with the charity SolarAid as part of the [Sunny Schools suite of resources](#).

Entering the competition

Pupil's designs can be entered into our competition, with the chance to win a selection of environmental themed books for their class. Please submit images of pupil's designs to education@keepsotlandbeautiful.org with the subject 'Climate Action Week design entry'. The deadline for design submission is **Friday 4th October at 5pm**. Submissions received by 3pm on Thursday 26th September will be displayed as part of our Climate Action Week Friday assembly. All designs submitted to the competition will be shared in an online gallery. Three entries will be chosen at random from those submitted and winners will be informed on Monday 14th October.

Introduction to the activity

We want to invite your pupils to design a sustainable home and garden. This activity can be completed on its own, or combined with attending our Climate Action Week Live Lessons and doing the follow up activities for each lesson. If you wish to complete the design on its own, please skip to the section titled 'Design tasks.' Otherwise, please continue with this section.

To combine this activity task with our Climate Action Week Live Lessons, attend each lesson with your class, complete the follow up activity afterwards and use what they have learned to work on their overall sustainable house design as follows:

Day	Lesson	Follow-on activity	Design task *
Monday	Imagining our future homes	Sustainability concepts wordsearch and investigation	1. Write a list of what you want to include in a sustainable home
Tuesday	How to engineer a sustainable home	Insulation experiment	2. Decide what materials you are going to build your home from
Wednesday	How to design a sustainable home	Nature scavenger hunt for design inspiration	3. Build a model of your sustainable home
Thursday	Climate ready gardens	Rainwater maths activity	4. Add details of the garden that will surround your sustainable home to your model

*Further details of the design tasks are given below.

Design tasks

Pupils can use the template on Page 3 to add information from each task to feed into their overall design.

1. Write a list of what elements you want to include in a sustainable home. For example, renewable energy, heat insulation, energy efficiency, water saving.
2. Decide what materials you are going to build your home from. For example, natural materials, recycled materials.
3. Build a model of your sustainable home. You can work in groups or as a whole class, creating 3D model in whichever format you would like (drawing, collage, digital, etc.). The finished model should demonstrate what you want your sustainable home and garden to look like. Try to incorporate as many features as you can from what you have learned about sustainable homes, including how to save energy and water, and reduce waste. Add labels to show the sustainable features you have included. Don't forget to include features to support the wellbeing of the people living there.
4. Add details of the garden that will surround your sustainable home to your model.

Building the model

Useful materials that you could use:

Glue	Paper	Pencils
Scissors and/or craft knife	Cardboard – boxes and sheets	Felt-tips
Staplers	Scraps of card	Ruler
Sticky tape	Scraps of material	

Some tips:

Photocopier paper boxes are ideal for converting into model homes. You can cut off one side so you can see inside the house and keep the lid for a roof.

Old scrap material can be used for features such as carpet or curtains.

Windows can be cut out using a craft knife or scissors.

Waste plastic or acetate are good materials for windows (please recycle these after use).

Paper straws are great for making gutters, drainpipes and rainwater collectors.

An example:



Take a photo of your design and share it with us to enter our competition.

Template to help you with your overall design:

Task 1: Key ideas we want to include in our design

Task 2: Materials our house will be made from

Task 3: What we will use to build our model

Task 4: Ideas for our sustainable garden

Our house will look like this (sketches of design to help you build your model)