

# BEAT THE FLOOD

Home learning guide



[practicalaction.org/schools/beat-the-flood](https://practicalaction.org/schools/beat-the-flood)

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## Thank you for looking at Practical Action's Beat the flood. This guide was originally produced to support parents and/or carers deliver home learning during the UK lockdown in 2020 caused by the COVID-19 pandemic.

The guide remains a useful guide for parents and/or carers who home school, teachers running STEM/science clubs and delivering transition activities, and anyone who wants to run a STEM activity children can do with minimal supervision and equipment.

### The challenge

To investigate structures and properties of materials then design and build a model of a flood-proof home.

### Why would I choose Beat the flood?

Beat the flood is one of several Practical Action STEM (Science, Technology, Engineering and Maths) challenges that are very popular with schools. They are often used in STEM/science clubs, for enrichment days and events such as British Science Week. This is because they fit the UK's science and D&T curriculum and are hands-on activities children love. You can see them all at: [practicalaction.org/stem](http://practicalaction.org/stem)

Each challenge looks at a problem faced by a community in the developing world, and asks children to develop a model of their own solution. They then look at the innovative solutions already in place as a result of Practical Action's work with communities. Because our challenges are set in difference countries children also find out about the lives of people around the world.

Our challenges don't require any specialist science equipment, children can take part using materials readily available at home. Do look at the teaching materials before you get started. You don't need to do all the activities, just select what your child/children will find interesting and fun.

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### What will we need?

**For the model:** modelling equipment e.g. lego, duplo, cling film, foil, plasticine, lolly sticks, straws, plastic bottles, string, glue, cardboard, straws and K'nex.

**For testing:** Best to test outside with a hosepipe or watering can, but the bath will work too!

### What age is it suitable for?

Because of the open-ended nature of our STEM challenges they are suitable for a wide age range, so you could easily set them as a project for a 7 year old or a 14 year old, or even (depending on your children!) get them working together on one.

### Anything else I should know?

Each challenge has a certificate you can print out for your child/children. We think this is a nice touch and something to put on the fridge!

Also, all our challenges are accredited for the CREST Award scheme, Discovery level. You can go on the website and submit your child's work to gain an award. More details at: [crestawards.org](http://crestawards.org)

If you are able to share any videos or photographs to inspire other children to take part that would be hugely appreciated. Please include [practicalaction.org/stem](http://practicalaction.org/stem) in your post.



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