





Thank you for looking at Practical Action's Floating Garden Challenge. We appreciate it is a really difficult time for you right now, trying to balance many things including keeping your child/children engaged and interested in learning.

Whilst you are not expected to 'home school' we know that many parents and carers like yourself are looking for engaging activities you can do together as a family and/or that your children can do with minimal supervision.

The challenge

To design and build a model structure that will enable farmers to grow crops even in an area that may become flooded.

Why would I choose the Floating garden challenge?

The Floating garden challenge 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 like British Science Week. This is because they fit the curriculum and are hands-on activities children love. You can see them all at: practicalaction.org/stem

Each challenge looks at a problem faced by a community in the developing world, and asks the children to develop a model of their own solution. They then have the chance to look at the real – life solutions already in place around the world with the support of Practical Action. Because they are set in different countries they also give children the opportunity to find out more about those countries and the lives of people who live there.

Most of our challenges, including this one, don't require any fancy science equipment, children can take part in the challenge using materials readily available in your home.

Please look at the Teacher's guide and PowerPoint before you get started. You do not need to do all the activities, just select what you and your child/children find interesting and will enjoy doing.

What will we need?

For the model: Modeling equipment e.g. plastic bottles, lolly sticks, string, bubble wrap, food trays, cling film, sellotape, foil, straws and twigs.

For testing: Test in a sink, the bath or even a paddling pool! Put tins on top to see how much weight they can hold.

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 to give to your child/children once they have finished the challenge. We think this is a nice touch and gives you 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

We hope you and your child/children enjoy our challenges. If you are happy to share any videos or pictures to inspire other parents and carers we would really love to see them! Please email the to us schools@practicalction.org.uk or tag us on twitter @PA_Schools or Facebook/Practical Action Schools.



