

A large, stylized red splatter shape resembling a tomato, centered on a white background. The splatter has several thick, rounded lobes extending outwards.

SQUASHED TOMATO CHALLENGE

Home learning guide



practicalaction.org/schools/squashed-tomato-challenge

**Practical
ACTION**

Thank you for looking at Practical Action's Squashed tomato challenge. 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 build a model of a system that can move tomatoes down a mountainside in Nepal, without squashing them!

Why would I choose the Squashed tomato challenge?

Squashed tomato 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 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

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.

What will we need?

For the model: modelling equipment e.g. K'nex, pulleys, food trays, string, straws, cardboard, cartons, corks, yoghurt pots, lollipop sticks, cotton reels, plastic bottles sellotape and Blu tack.

For testing: cherry tomatoes, kitchen scales and a timer.

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

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 in your post.

