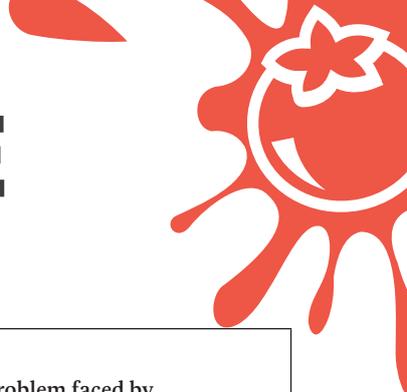
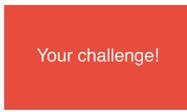
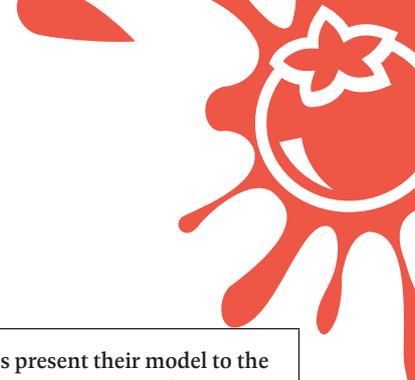


SQUASHED TOMATO CHALLENGE

PowerPoint notes



1.	 <p>SQUASHED TOMATO CHALLENGE Can you design and make a model to transport tomatoes down a mountainside in Nepal without squashing them? Practical ACTION</p>	<p>Introduce the challenge. Explain that pupils will be using their STEM skills to try and solve a problem faced by communities in a country in a different part of the world.</p>
2.		<p>Introduce Nepal. Find out what pupils already know about the country, e.g.</p> <ul style="list-style-type: none"> • Nepal is the birthplace of Buddhism, although many people are Hindu. • Nepal is known for its mountain peaks. The small country contains eight of the 10 highest peaks in the world, including Mount Everest. • People in Nepal greet each other by saying Namaste. It means both hello, how are you and goodbye. As they say it they join their hands together and bring them up toward their chin. • The capital of Nepal is Kathmandu.
3.		<p>Explain that the problem they are going to try and solve using their STEM skills is one faced by farmers living in Nepal.</p>
4.		<p>Introduce the context and a female farmer named Suchana. There is a printed case study to show later.</p> <p>For the starter activity 'Identifying challenge in Nepal', hand out the <i>Photographs of Nepal</i> for discussion on what challenges Suchana and her community might face.</p>
5.	 <p>THE GLOBAL GOALS For Sustainable Development</p>	<p>Introduce the Global Goals. Do this by explaining that in 2015 the United Nations identified the same problems the pupils have come up with, plus a few more as essential in solving world poverty. The United Nations then came up with 17 Global Goals which they agreed to work towards to help solve world poverty by 2030.</p>
6.		<p>This is the full set of Global Goals. You may want to print this out for display and/or to hand out. Show to pupils and explain that they are also known as the Sustainable Development Goals, or SDGs. You may like to discuss which ones they feel are most important and why.</p>
7.		<p>This slide explains the starter activity 'Moving tomatoes and the Global Goals'. At this point hand out the <i>Sustainable Development Goals</i> and <i>Moving tomatoes and the Global Goals</i> pupil worksheets and introduce the task.</p>
8.		
9.		<p>Outline the main rules for the challenge.</p> <p>See the Teacher's Guide for more details and prompt questions.</p> <p>Hand out the design sheets and talk about the importance of testing and amending designs during the design and make process.</p>



10.		<p>Feedback is an important part of the challenge. We suggest that pupils present their model to the rest of the class reflecting on how well they worked together, problems they solved etc. (this will be necessary if you are planning for your pupils to gain a CREST Award). Allow time for pupils to work on their presentations as well as building their model.</p>
11.		<p>These feedback categories are going to be used to judge which group wins the challenge, so it is important pupils consider this when presenting.</p>
12.		
13.		<p>Explain how the actual solution in Nepal works. Use this, and the videos that follow, as an opportunity to discuss how different/similar the pupils' model systems are.</p>
14.		<p>Videos – www.youtube.com/watch?v=YAtIBXvnWfo (the one above, showing how the ropeway works) – www.youtube.com/watch?v=yJIxsUBIFuA (focuses on the impact of the ropeway on families living on the mountains)</p>
15.		<p>Hand out the pupil activity sheet <i>Suchana's story</i>. Go back to the story of Suchana and discuss how her life has changed for the better since the introduction of the aerial ropeways.</p>
16.		
17.		<p>CREST Taking part in the Squashed tomato challenge is a great way for pupils to gain a CREST Award.</p> <p>Big Bang Fair and competition Pupils who have completed the Squashed tomato challenge can enter their work into the Big Bang competition.</p> <p>See the Teacher's Guide for more details.</p>