








## 'Design Thinking' Sprint Session Delivery Guide

### Overview:

- The overall objective of this session is to ignite ideas and allow young people to think creatively and imaginatively about how technology can help us imagine a better world.
- This is a straightforward, creative workshop which is designed to 'run itself'. Your role will be to facilitate and keep the pace and enjoy the ride!
- The emphasis should not be on the final product (participants do not need to come up with a workable world-changing idea!) but on the experience (they will learn a valuable process for generating and shaping ideas).

### Before the lesson:

- Please be aware that you will be asking young people to work in groups of three. Make the arrangements that work best for you and your students.
- If you prefer them to work independently this is possible too — simply ask them to take on each role, one by one, as they work through.
- Please ensure students have access to pen and paper, and you have the 'plug and play' video set up and ready to go! The slides have built in timers with handy countdowns, so you'll always be sure of how long is left on each task.

 <b>Time</b> 40–60 mins OR 2 x 20 minute sessions (ideal for tutor time)	 <b>Age Group</b> 13–15 (Years 9–11)
 <b>Learning Objective(s):</b> <ul style="list-style-type: none"> <li>• To learn the 'design thinking' process in a pacey creative sprint, developing an idea that will use tech to solve an environmental problem</li> <li>• To build confidence in creative ideation and problem-solving</li> <li>• To understand how careers areas such as R&amp;D, design and marketing are part of this process</li> </ul>	
 <b>Learning Outcome(s):</b> <ul style="list-style-type: none"> <li>• Students will work as a team, identifying skills and taking on career-based roles</li> <li>• Students will use divergent thinking to explore possibilities and convergent thinking to hone a solution</li> </ul>	
 <b>Resources:</b> <ul style="list-style-type: none"> <li>• Samsung 'plug and play' Solve for Tomorrow Video</li> <li>• Pen and paper</li> <li>• Optional: print out of 'doodlesheet' / 'wreck it resource' PDF for students</li> </ul>	

Timings	Starter
2 minutes	<p>'Do it Now' style activity which will prompt students to consider their perfect world, what it would look like and a problem they might need to solve in order to achieve it. Once students are in groups, start the countdown timer. It's a quick, pacy activity and there's no need to share afterwards.</p> <p><b>Top tip:</b> You may wish to introduce this yourself with an example of your own 'vision', posed as a question, e.g. "Ok, so in my perfect world we have clean seas, teeming with marine life. Can anyone tell me a problem we need to solve in order to achieve that? Right, now it's over to you — I'm starting the timer".</p>
2 minutes	<b>Video plays:</b> Calling all Changemakers
1 minute	<p><b>Task 1:</b> This is a super-fast countdown where students are asked to choose the role they would like to take on within their teams.</p> <p><b>Top tip:</b> Read the slides aloud and get them to choose as you go!</p>
2 minutes	<b>Video plays:</b> Tech for Good
2 minutes	<p><b>Task 2:</b> This uses a 'divergent thinking' model where students are asked to come up with as many ideas as they can in a short space of time. What could you upcycle a smartphone into? The idea is to have the room abuzz with ideas being furiously scribbled down. If students are struggling, feed in some ideas - night vision goggles - security camera - telescope - satnav - webcam - morning alarm!</p> <p><b>Top tip:</b> Visit each group during the countdown, choosing ideas you really like — even if it's just something that makes you laugh — from each.</p>
3 minutes	<b>Video Plays:</b> Designing a Sustainable Future
1 minute	<p><b>Task 3:</b> This is a quickfire activity where students discuss and agree in groups which problem they would like to solve. If you think some of these may need explaining, you can pause the slideshow and elaborate on each a little further, calling back to the videos students have watched.</p> <p>Option to break here if you are running the workshop over 2 x 20 minute sessions.</p> <p><b>Top tip:</b> It may be helpful to get students to remember which role they chose at this point (this is also prompted by the presenter in the video.)</p>
2 minutes	<b>Video plays:</b> Careers in Tech — Research and Development (R&D) Q&A
4 minutes	<p><b>Task 4:</b> Find a solution. As prompted by the video, students think about their chosen problem and using divergent thinking they write down as many solutions as they possibly can, no matter how impossible they seem.</p> <p><b>Top tip:</b> Encourage students to build on one another's ideas, modelling this as you visit groups.</p> <p>When the video prompts them, they must now employ convergent thinking, to home in on their favourite idea and decide which one they wish to develop.</p>
2 minutes	<b>Video Plays:</b> Careers in Tech — Design Q&A
3 minutes	<b>Task 5:</b> Design your Prototype. The designers sketch out a very rough look for their solution. Encourage other team members to be supportive and engaged. If you are worried students may lose focus in this supportive role, then the doodlesheets have a space for a sketching their own prototype.
2 minutes	<b>Video Plays:</b> Careers in Tech — Sales and Marketing Q&A
5 minutes	<p><b>Final task:</b> Sell your idea!</p> <p>This gets them thinking about bringing an idea to market and how they might talk to an audience about their product.</p> <p><b>Top tip:</b> Ensure students are aware of the different channels that may be used — use the presentation to prompt them — and the kinds of marketing elements used in adverts (slogans, logos, jingles!).</p>



## Extension:

If you wish to extend the final activity, please ask students to do one of the following for their product:

- Write an elevator pitch
- Script a television advert (or draw out one for print media)
- Check out our 'design thinking' workbook [https://drive.google.com/drive/folders/1k1sapmWqNSM-s9gTrLnMQvfS\\_LsjfXsG?usp=sharing](https://drive.google.com/drive/folders/1k1sapmWqNSM-s9gTrLnMQvfS_LsjfXsG?usp=sharing)
- Turn rough sketch prototypes into proper 3D designs using software such as Sketchup or Grafo
- Build a prototype in the DT rooms

## After the lesson:

- Following this session, young people can choose to enter the competition in their teams (maximum 3 per team entering an idea) or go home and develop an idea of their own.
- Please encourage students to jot down the competition web address <https://woobox.com/xpdt4z> on their doodlesheets (or if appropriate, enter it into their phones and visit the website).
- Remind them there are prizes up for grabs and that every single person who enters gets digital certification — a great badge for their CV or college application — via Credly.

### Prizes are fabulous and include:

- A top-of-the-range Samsung Smartphone (A52 5G) PLUS Galaxy Tab book (A7)
- Great runner up prizes, such as Galaxy Buds Pro in stylish Phantom Silver
- The chance to attend a Samsung Event as a VIP guest
- Every young person who enters will receive a Credly digital certificate
- Plus, the named teacher or parent of the first prize winning student will also receive a Samsung Galaxy Tab A7. Please check the full [Terms and Conditions](#) for all prize-winning information

To enter, all you need to do is visit the website at <https://woobox.com/xpdt4z> to fill out the form with the participant's details by **9th September**. If you need to submit more than one entry, we have displayed instructions on the submission form with next steps.