

# Inspire Curious Minds



Alex Harris, Executive Producer at BBC Bitesize for Teachers

BBC Bitesize for Teachers offers a range of video collections to inspire young inventors and engineers. *'You too can be an absolute genius'* is designed for KS2 pupils, with scientist Fran Scott exploring creativity, prototyping, and perseverance alongside fellow inventors and young innovators. For KS3 students, the *'How to build'* series takes a behind-the-scenes look at top UK engineering firms.

What makes a good inventor? Creativity, curiosity and a determination to solve problems. Our *'You too can be an absolute genius'* collection of videos is presented by scientist and inventor, Fran Scott. Here, her fellow inventors discuss the importance of developing prototypes and where they get their ideas. They also reveal the importance of testing prototypes and why inventors never give up.

Along the way, Fran meets young inventors, Sam and Benjamin Houghton. They explain how they tackled the age-old issue of hitting a hard object in the ground when using a spade and avoiding injuring oneself. Sam and Benjamin also reveal how their *'Wakey Uppy Thing'* could be just the ticket for those who struggle to wake up in the morning.

## KS2 Videos

This is a collection for KS2 pupils. The videos cover a range of different topics to encourage pupils to think about a possible career path in D&T. It also helps them to analyse their own ideas in the same way that successful inventors do.

The resource could be used at the start of a lesson to get children thinking about potential career options within a range of industries – perhaps a dedicated careers assembly too. You may want to consider setting your class homework to come up with an invention of their own. They can use the information they have learnt from the videos to critique each other's ideas.

The video about perseverance serves as a great standalone lesson in learning and growth through the process of inventing. With Fran Scott leading the way, these films aim to inspire many more girls to explore a future in STEM.

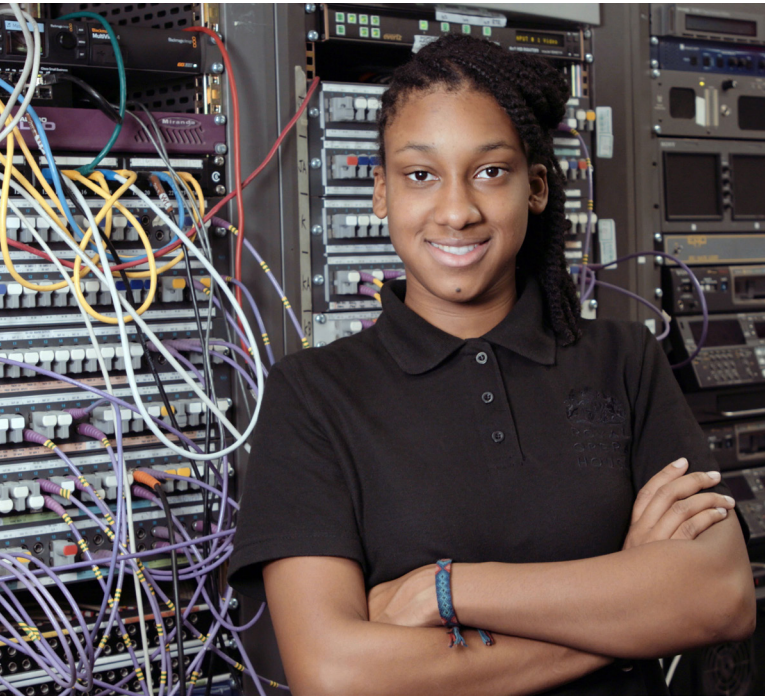


**KS2 Videos**  
[tinyurl.com/2w6tnm2e](https://tinyurl.com/2w6tnm2e)

## KS3 Videos

For our *'How to build'* collection, we've pulled back the curtain at some of Britain's leading engineering organisations. KS3 students can go behind the scenes to see how engineers at the Royal Navy uses CAD/CAM to design its state-of-the-art nuclear submarine, HMS Astute.

At Rolls Royce, students can learn about its use of 'Just-in-Time (JIT)' production planning for the Trent 700 jet engine. They'll hear from the logistics manager who oversees up to 40,000 individual parts, including an engine control management unit worth £750,000. QinetiQ specialise in robotic engineering working with the armed forces to reduce the risk



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to life in potentially dangerous areas. Pupils will hear from Jen Pagani, a sensor specialist, who is adapting the robots to be used by civilian rescue services. These glimpses 'behind the curtain' of different career paths and employers' facilities are a great way to introduce secondary-aged students to the potential offered by apprenticeships.

They show some very impressive technology and how it all works. Each film is just a few minutes long which can provide an ideal 'hook' into learning during a D&T lesson.

They could also form the basis of a class discussion about the future and where technology might take us next. Not only is this collection a source of inspiration for future careers but will get your class thinking about real world application of skills. These videos also help to show students that what they are learning in school gives them clear and transferable skills into the workplace.



**KS3 Videos**  
[tinyurl.com/5dtkapshj](https://tinyurl.com/5dtkapshj)

## BBC Bitesize for Teachers

Secondary school teachers in search of resources that help their D&T students understand the broad spectrum of careers available to them should head over to BBC Bitesize for Teachers.

It has a collection of stories revealing how individuals landed their dream job. Principal costume standby, Rianna Charles, has worked on film and TV projects such as Coronation Street, Peaky Blinders and Fantastic Beasts 3.

Manish reveals how he became a solar farm manager of 10 sites across the UK. JoJo talks about following in her father's footsteps to become a woodworker.

She now travels the world teaching people how to carve spoons. Abdullah reveals the importance of communication, leadership and technical skills for his role as a construction manager.



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[tinyurl.com/3mbpbj8s](https://tinyurl.com/3mbpbj8s)

