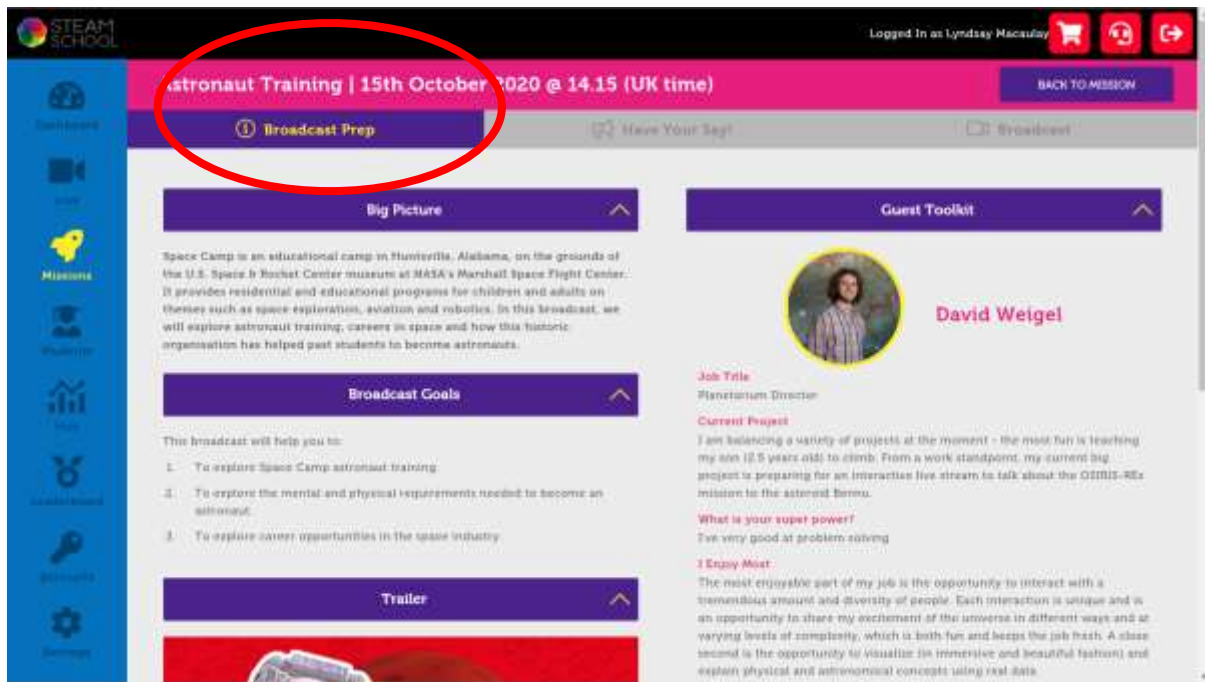
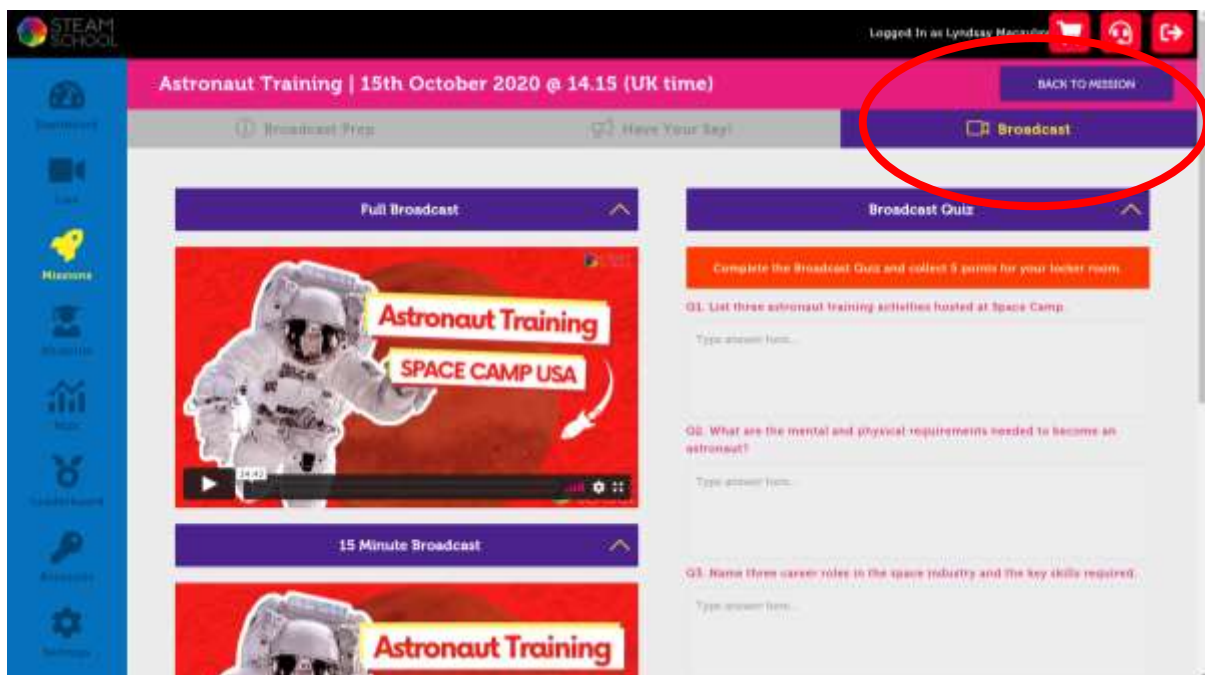


We are super excited to officially launch our first mission - MISSION TO MARS. Use the STEAM SCHOOL Portal to join our mission.

You can explore additional links on any topics you have particularly enjoyed and pick up some key terms to boost your vocabulary and find out more about each presenter in the BROADCAST PREP SECTION.



To watch the Broadcast, select the broadcast section in the menu and watch either the full or 15 minute version. Complete the quiz to check your understanding and give feedback on what you have watched.



## **Broadcasts**

### **Destination Mars Broadcast**

Jon Chase is a science communicator, author and rapper based in South Wales. Having completed an honours degree in Aerospace Engineering he then gained a BSc in Science and Science Fiction and a Masters degree in Communicating Science. Jon has an intense passion for scientific thinking and believes that knowledge should be made available in a way that allows as many people as possible the opportunity to gain access to it. He was identified by the Guardian in 2008 as education's next best thing after producing a science rap video for NASA about astrobiology.

### **Journey to Mars Broadcast**

Sophie Harker is an aspiring astronaut and currently works as a senior aerodynamicist at BAE Systems, developing future Flight Control technologies for Team Tempest. She has run analysis of fast jet future concept aircraft and was responsible for the company's hypersonic and spaceplane concept development, working closely with Reaction Engines and the application of SABRE. Sophie is one of the youngest engineers to ever achieve Chartered Engineer status with the RAeS, at just 25 years old. She has received commendations including, IET's Young Woman Engineer of the Year 2018. To achieve her space dream, Sophie is also training to be a pilot and is an active member of the RAeS and IET.

### **Life on Mars Broadcast**

Dr Jackie Bell is a mathematician and theoretical particle physicist from Liverpool who dreamed of going to space as a young child. This dream led Jackie to participate as a candidate on the BBC documentary series 'Astronauts: Do you have what it takes?' Jackie has continued her astronaut training in her spare time and is determined to become the next British astronaut.

### **Astronaut Training Broadcast**

Space Camp is an educational camp in Alabama on the grounds of NASA's Space Flight Center. It provides residential and educational programmes for children and adults on themes such as space exploration, aviation and robotics. In this broadcast, we will explore astronaut training, careers in space and how this historic organisation has helped past students to become astronauts.

### **Astronaut Survival Broadcast**

Dan Klopp is a business leader with an extensive background in technology and strategic marketing. Dan holds a bachelor's degree in Physics (with minors in Chemistry and Mathematics) from Millersville State University and a MBA from Duke University's Fuqua School of Business. ILC Dover has been the primary supplier of spacesuits for NASA since the dawn of Apollo. In the 50 years since then we've strived for continuous innovation and improvement. NASA's astronauts aboard the International Space Station are wearing ILC Dover spacesuits right now.

## Design a Space Vehicle Broadcast

In 1975 George Lucas formed Industrial Light & Magic (ILM) to create the special effects for his space opera Star Wars. Since that time, ILM has contributed to over 300 films in the process earning 15 Academy Awards for Outstanding Achievement in Visual Effects and 28 Scientific and Technical Achievement from the Academy.

## Design a Space Vehicle Follow-Up Broadcast

In 1975 George Lucas formed Industrial Light & Magic (ILM) to create the special effects for his space opera Star Wars. Since that time, ILM has contributed to over 300 films in the process earning 15 Academy Awards for Outstanding Achievement in Visual Effects and 28 Scientific and Technical Achievement from the Academy.

## Challenges

As you journey through each mission you will learn about STEAM powered ideas, careers, new inventions and projects. You can use this knowledge to complete a series of challenges. There are lots to choose from at a range of different levels. When you complete a challenge you will be awarded a digital badge.

We would encourage you to choose a challenge from the career you are most interested in and another challenge from an area you haven't considered before. Use this as a chance to try new things and discover new passions and talents.

The screenshot displays the STEAM School website interface. At the top, it says "STEAM SCHOOL" and "Logged In as Lyndsey Mccarthy". The main content area features three mission cards:

- Life on Mars**: ASPIRING ASTRONAUT, Dr. Joelyn Bell, 1st October 2020 @ 12.30 (UK time)
- Astronaut Training**: SPACE CAMP, 15th October 2020 @ 14.15 (UK time)
- Design a Space Vehicle**: With Industrial Light & Magic, 22nd October 2020 @ 12.30 (UK time)

Below the mission cards is a section titled "Mission Challenges" with an "Important Message" box. The message reads: "As we journey through each mission you will learn about STEAM powered ideas, careers, new inventions and #STEAM4good projects. You can use this knowledge to complete STEAM powered challenges. There are lots to choose from and some are more complicated than others! When you complete a challenge you will be awarded a digital badge and points for your locker room."

The challenge options are displayed in a grid:

- Scientist
- Engineer
- Entrepreneur
- Digital Maker
- Artist
- Leader

Each challenge card includes an information icon (i) and a "Preview" button.