Workshop Outline:

- Pre-Reading - 1st Chapter of May's Moon
- Astronaut Research - What is an astronaut? What do they do?
- Space News - What is happening in space right now?
- Astronaut Challenge - Physical fitness. Do you have what it takes?
- 1st Chapter of May's Moon - What's happening? What is Weightlessness?
- Persuasive Text - Techniques
- Could you be the next Michael May?

Research Project on Astronaut Training

To write about Michael May's quest to be the first child astronaut, I had to do a lot of research. To get you thinking about how people become astronauts, see if you can find the answers to the following questions:

- What does the word 'Astronaut' mean? (Greek for 'space sailor')
- You may also hear the word 'Cosmonaut' - what does this mean? (Russian word for Astronaut)
- There are 3 key jobs on board a spacecraft. What are they? (Commander, Pilot, Mission Specialist, Payload Specialist)
- What do these people do?
- What special education qualifications do you think a Commander must have? (A degree in a science subject - engineering, biological science, physical science, or mathematics)
- What about previous experience (1000 hours of jet-aircraft pilot time)
- How about fitness/physical requirements? (20/20 eyesight when corrected. 140/90 blood pressure reading. Height between 157.5-190.5cm)

What's the news in space right now?

The International Space Station

Image Credit: NASA

On 2nd September the Russian Space Agency (called Roscosmos) sent one of their Soyuz Spacecraft up to the International Space Station (ISS). This will be the 45th Expedition to the Station. For facts and figures about the football pitch-sized ISS and to find out when it's next whizzing over your head at 5 miles per second go to the NASA website.

Mars Magic

Image Credit: NASA

Did you know that NASA has amazing plans for the first astronauts to visit the planet Mars as early as 2030. How old will you be then? Of all the planets, Mars is the most similar to Earth. Exploration of the planet they call 'the red planet', will help us understand more about our own. Before they go, however, astronauts will need to understand how long periods of zero-gravity and radiation will affect their bodies. This is why they are carrying out experiments right now as well as developing new technologies and better communications. This is vital before the first mission to deep space!

Terrific Technology

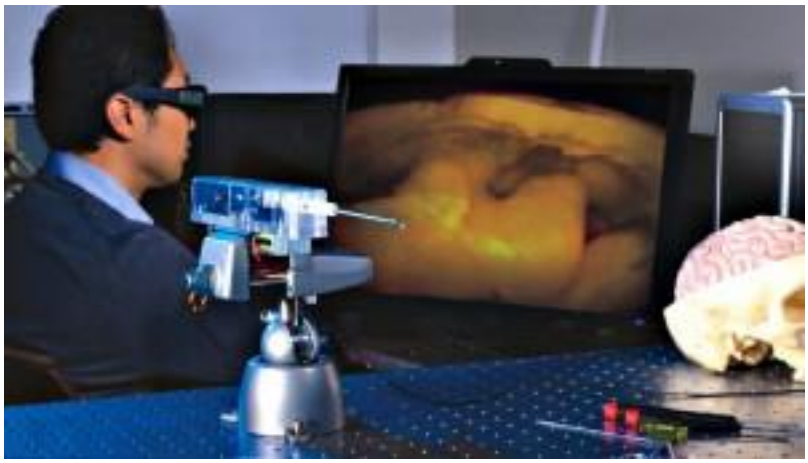

Image Credit: NASA

There are lots of things NASA does apart from space stuff. Can you guess what the picture is about? It's the world's smallest 3D camera designed by NASA. It will be used in brain surgery!

Also, NASA is currently working on building a 3D printer for use in space. They want to be able to make their own tools! Imagine if something breaks or you need a particular tool for repairs. They will be able to download a plan and then print their own!

Watching the World

Image Credit: NASA

Did you know that you are being watched from space every day? The International Space Station and satellites in space are taking pictures all the time. They have the best view of the Earth and use their data to help us to understand how our planet works and how we can improve our lives. At the moment, they are watching our rising seas, raging forest fires, receding glaciers and much more!

Astronaut Challenge

You might have a few things to work on until you're ready to apply BUT, before then, there is a lot you can do to see if you physically have what it takes to be an astronaut!

NASA runs a 'Train like an astronaut' programme, which is perfect for children.

There are a series of 11 activities, which get you to try the same sort of exercises and tests that real astronauts have to do in their training.

There is a video explaining what each activity is about and the equipment you will need.

To become an astronaut you will need good:

1. Agility and coordination
2. Lung, heart and muscle endurance
3. Back and abdominal muscles
4. Dexterity (For repairing satellites and conducting experiments - puzzle challenge)
5. Upper and lower body strength
6. Aerobic and anaerobic endurance
7. Balance
8. Hand-eye coordination and reaction time (Ruler Challenge)
9. Knowledge of food science

These are exercises that real astronauts do 3 times a week for 2 hours a day. Do you have what it takes?

Persuasive Text (Letters)

What is the issue? (Problem or matter being discussed)
(Think of a way of grabbing the reader's attention and getting their interest from the very beginning of your letter)

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Who am I trying to persuade? (My audience)
(Make my tone and language appropriate)

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Facts and evidence to back up my point of view

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What can I offer the person I am writing to? What is my uniqueness?

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_____

Now imagine you are applying for a place on the Children's Moon Programme with Michael May and write your letter. Good luck!