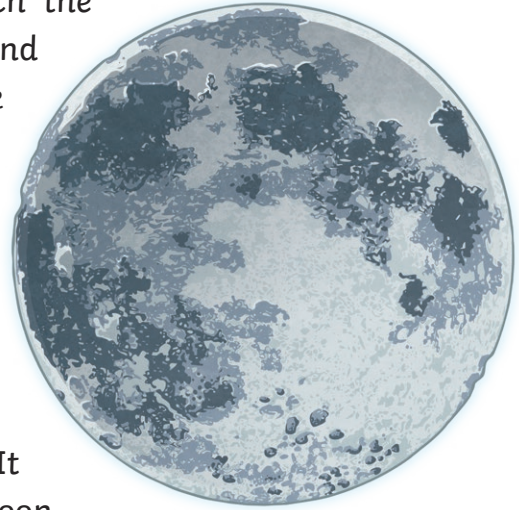


Apollo 13

The mission of NASA's Apollo 13 was to reach the moon. The mission failed, but it taught NASA and the world important lessons about team work and never giving up.

Blast Off

On April 11th 1970, three astronauts climbed onboard the Apollo 13, blasting off from the Kennedy Space Centre in Florida, USA. The crew was mission commander James Lovell, as well as pilots Fred Haise and John Swigert. It was Haise and Swigert's first mission to the moon, whereas the experienced Lovell had been once before.



The mission suffered bad luck even before Apollo 13 was launched. One of the original pilots was replaced by Swigert just two days before blast-off. This was because he had been exposed to a virus. NASA couldn't risk any of the crew getting ill in space, so Swigert had only a couple of days to be ready for the mission.

The Apollo 13 was made up of two different spacecraft, the Odyssey and the Aquarius. They were connected by a tunnel. Odyssey was the spacecraft with the crew's living area and the main controls. The Aquarius was smaller. It was designed for two crew members to land on the moon.

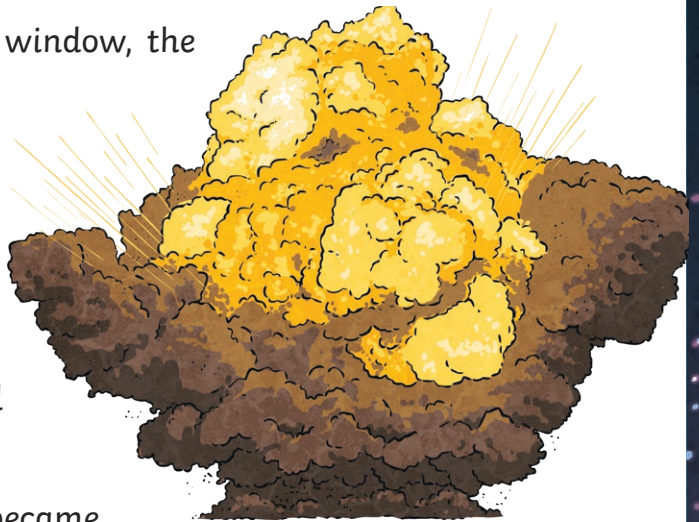
After launch, the Apollo 13's journey seemed to be progressing perfectly. Their mission was to explore the surface of the moon by taking photographs and getting samples of the moon's surface. The crew were also going to film videos for television.

An Explosion

On the evening of 13th April, disaster hit the Apollo 13. An explosion rocked the spacecraft. Swigert reported the explosion to mission control in Houston, exclaiming, "Houston, we've had a problem here." An oxygen tank had exploded

and caused serious damage. From the window, the astronauts could see gas escaping into the atmosphere. This gas was oxygen.

The explosion changed Apollo 13's story into a rescue mission. The crew were stranded in space with a damaged spacecraft. It would take an immense amount of teamwork and resilience to get the crew safely home.



The crew moved into Aquarius, which became a lifeboat for them. Odyssey was shut down to try and conserve as much power as possible for the journey home to Earth.

To return home, the crew had to run the spacecraft for just enough time to direct it to Earth. The timing had been carefully calculated by both mission control and the crew. If they were even a few seconds wrong, Apollo 13 would miss the Earth by thousands of miles. Everyone was relieved when the plan worked.

Difficult Conditions Onboard

Life in space was very difficult for the crew. All power was turned off, except for vital systems, which made the spacecraft extremely cold and caused condensation. Water and food were strictly rationed. It was so cramped and cold that it was difficult for the crew to sleep.

The crew were anxious, but felt supported by mission control, who were working hard to rescue them.

Unfortunately, soon there was another problem. Too much carbon dioxide had built up and the spare filters that they had were not the right shape. Mission control helped the crew build a new filter to fix the problem, using things available on board, including plastic bags, cardboard and a sock.

To return into the Earth's atmosphere the crew moved back into Odyssey. They hoped there was enough power to get them home.

Returning Home

On 17th April, the Apollo 13 crew splashed into the Pacific Ocean, near to Samoa. Millions of people around the world watched the Apollo 13's journey and saw the crew land on television. The world celebrated the crew's safe return.

Apollo 13 is regarded as a 'successful failure' for NASA. The mission failed to reach the moon, but the crew returned home safely, making it a huge success. Apollo 13 showed the world that by working together, even when miles apart, any problem can be solved.



Apollo 13 Questions

1. Where did the Apollo 13 blast off from? Tick one.

- ☐ Kennedy Space Centre
- ☐ Houston Space Centre
- ☐ Washington Space Centre
- ☐ New York Space Centre

2. Number the events below to show the order in which they happened to the Apollo 13.

- ☐ There was an explosion in an oxygen tank
- ☐ Apollo 13 blasts off on April 11th 1970
- ☐ The crew land in the Pacific Ocean
- ☐ The crew radios mission control to report a problem
- ☐ The astronauts are stranded in space

3. Three crew members were onboard Apollo 13. Which had already been to the moon?

- ☐ Fred Haise
- ☐ John Swigert
- ☐ James Lovell

4. Where was Aquarius meant to land in space?

5. What did the crew radio to mission control when the explosion happened?

6. Find and copy one word that shows someone is feeling worried.

7. People have many different qualities, for example, they might be tall, short, serious or cowardly. What qualities do you think the astronauts needed to help them through the scary situation onboard the Apollo 13? Explain why the qualities you have chosen would have been helpful.
