

Modern Space travel

The third manned mission to the Moon...

Apollo 13



**Apollo 13 is sometimes called 'The Successful Failure'.
What might this mean?**

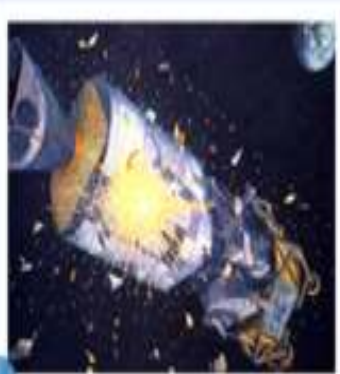


Apollo 13



Launched on 11 April 1970

But the Moon landing was aborted because an oxygen tank exploded.



The explosion left the spacecraft with very little power.

So they turned off the heating and computer displays to save power.

Mission Control in Houston found a very clever way of getting back to Earth...

...and the crew returned safely home on 17 April!



Apollo 13

The Successful Failure

So... although the crew didn't make it to the Moon, at least they returned home to their families. It was a successful failure!

The story was so exciting that it got turned into a Hollywood film called...

...Apollo 13!



Despite the 'successful failure', the USA landed a total of **6** spacecraft on the Moon.

Apollo 11

Apollo 14

Apollo 16

Apollo 12

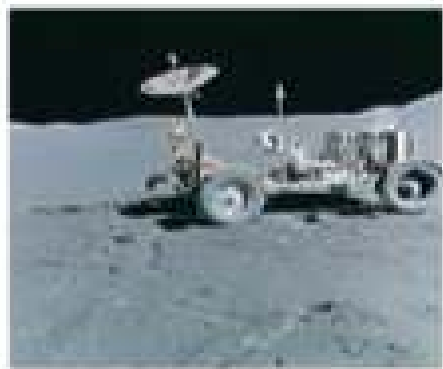
Apollo 15

Apollo 17

How many people have walked on the Moon?



12 lucky men have walked on the Moon.

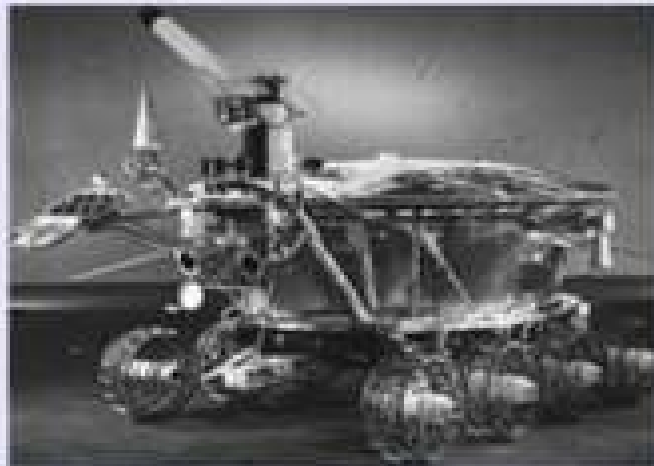


**Some of them even got to drive around in a lunar buggy!
It had a top speed of... wait for it... 8m.p.h.**



The USSR made it to the Moon but only with robots.

1970



**Lunokhod 1
"Moonwalker"**



...and they were even the first to land on a new planet!

Venera 7 landed on Venus on 15 December 1970



Venus



...but the USSR's incredible achievement was the space station!

A space station is a spacecraft where people can live for long periods of time.

Other spacecraft dock with the space station to bring new astronauts and supplies and to take home the crew.

1971

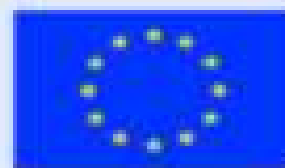
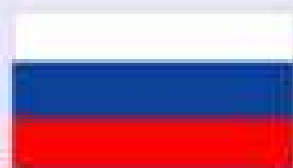
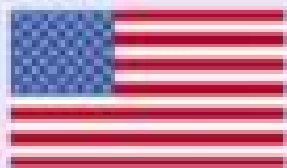


Salyut 1

The first space station



Mir was replaced by the International Space Station (ISS) in 2001.



Life on the ISS

Where are these people and what are they doing?

What's unusual about the photos?



<http://www.youtube.com/watch?v=ya2vzagppVQ&feature=related>

Eating in space

<http://www.youtube.com/watch?NR=1&v=rWT-DJNSxtg>

Challenger

http://www.youtube.com/watch?v=_10T4UYpzV8

Columbia

<http://www.youtube.com/watch?v=6R4ctaCBapM>

Mars

This photo was taken in 2006 by a robot called Rover Opportunity.

the red planet



Rover



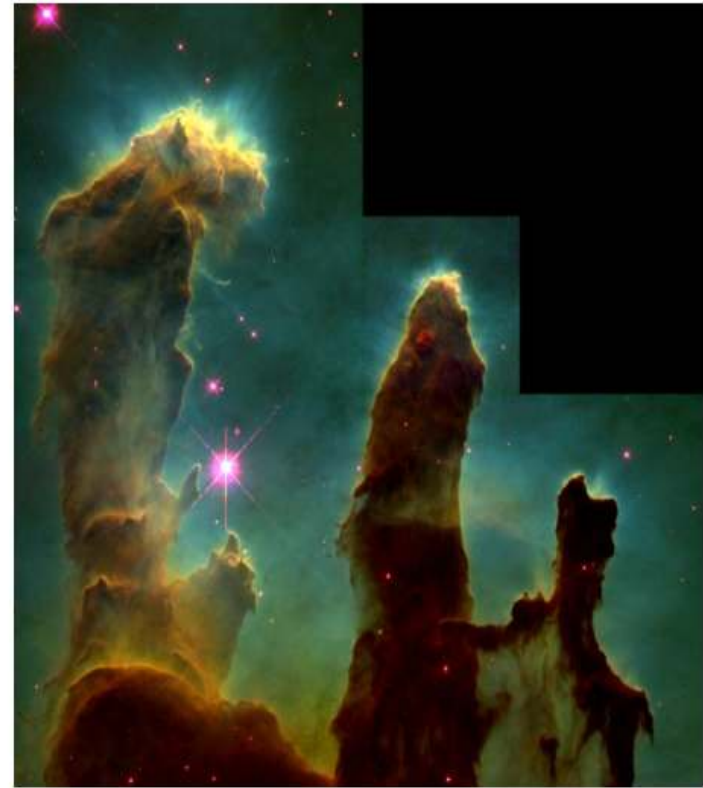
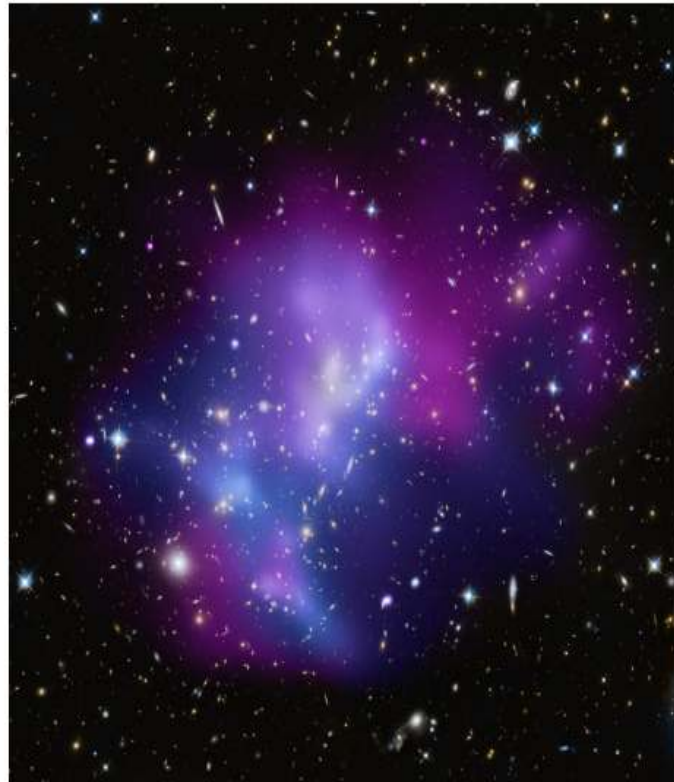
The Hubble Telescope



Hubble is a telescope that is currently orbiting the Earth.

For over 20 years, it has been taking some of the most incredible photos ever seen!

Because it is outside the Earth's atmosphere, it can take really clear photos.



Space Tourism!



Would you like to go to space on holiday?

How much do you think it would cost?

Dennis Tito



The first ever space tourist.

Spent 8 days in orbit in 2001.

Visited the International Space Station.

Paid \$20,000,000 for the holiday!

LO: To understand modern day space travel.

Choose one of the following activities

- Compare life on Earth Vs life on the ISS

In your topic books, describe some of the differences between everyday life in space and on Earth.

You could set your work out like this..

Activity	How is it different on the ISS?
Shaving	Instead of putting the razor down when you put the shaving foam on, the razor can float.
Eating and drinking	Instead of pouring liquid down your throat, you have to...
Moving	Instead of walking from room to room, you...
Exercising	

- Write an advert for the trip of a lifetime to the ISS. How much are you going to charge?

Here's one way you can **start** an advert..

Are you bored of the same old holiday?

We'll don't just sit there...

Think different, think daring, think adventurous.

Think a holiday in space!

- Design a brochure/leaflet about the ISS