

Activity 4

THE SCIENCE BIT



**Thanks for helping me with my mission space curiosity challenge.
I've been so impressed with all your hard work!**

Before I head off on my adventure, I thought I would share some fun facts about how you've helped me create a super successful space journey.

WHY ARE ROCKETS SO TALL?

When you were designing your rockets you may have realised that they need to fly a very long way, very quickly.

The best shape for this is to be tall and thin – this is called aerodynamics.



WHERE COULD YOU GO IN A ROCKET?

You did a great job of choosing a route into space but did you know there are people who do this as a job?

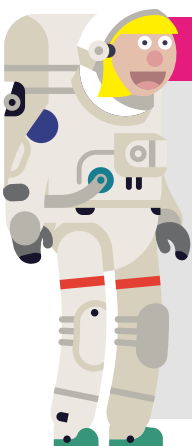
People who work at international space agencies are right now planning how to get the first human to the planet Mars.

Find out more at www.esa.int



WHAT WOULD HUMANS NEED IN SPACE?

When you were preparing your life support pack did you consider the seven life processes that all living things do – move, get energy from food (respire), be sensitive to our surroundings, grow, reproduce, remove waste and eat. Also, astronauts will also be carrying out scientific investigations – so it's good to have space for all that equipment too!



EMILY'S TOP TIPS

For a rocket to be launched into space it must travel at 4.9 miles per second (7.9 kilometres per second)

The loudest rocket ever recorded was the Saturn V at 204 decibels!