



Rocket Rocket

What is the ISS?

- The International Space Station (ISS) is a large spacecraft that orbits around the Earth.
- Astronauts live onboard and use it to investigate more about space.

Photo: International Space Station.

Children Grow Seeds From Space

Can seeds that have travelled through space be grown? Well, scientists and school children have teamed up to find out!

One million seeds of **rocket** were rocketed into space and spent six months on the International Space station (ISS).

Dr Jake Chandler, a scientist involved in the project, said that sending seeds to space was crucial to "growing plants that support human exploration of space, Mars and other worlds."

When the seeds were returned to Earth, some were given to school children to grow.

The children carefully watched the results. To keep it a **fair test** they were also given seeds that did not go into space.

The results **varied** from school to school, but, generally, the space seeds grew less well.

Scientists think this could be for several reasons. When the seeds were on board the ISS, they absorbed 100 times more **radiation** than the ones on Earth. They might also have been affected by the vibrations of the rocket. Either or both of these things could have affected the seeds, and therefore the

growth of the plants, once they were back on Earth.

Although the space seeds did not grow as well as those which never went into space, it is still good news. This is because, despite all they had been through, the plants were still able to grow.

Dr Jake Chandler thinks that because the seeds survived, "eating home-grown salad on Mars may be one small step closer."

Who knows what will be on an astronauts menu next?

Glossary

rocket	A lettuce leaf often used in salads.
fair test	A test which changes one variable.
varied	Different.
radiation	Energy that moves from one place to another, such as cosmic rays.

Questions

1. How long did the seeds spend in space?

2. How did the scientists keep the test fair?

3. 'When the seeds were returned to Earth some were given to school children to grow.' This suggests that...

- ☐ Scientists couldn't be bothered to grow seeds.
- ☐ Scientists wanted children to be excited about science by growing plants.
- ☐ There aren't enough scientists.
- ☐ Seeds are tricky to grow.

4. Tick each statement to show whether according to the story it is true or false.

	True	False
None of the space seeds grew.		
Children have grown seeds that have travelled in space.		
The space seeds generally grew less well than those which stayed on Earth.		
Two million seeds were sent to space.		

5. What do you think scientists might do next?

6. Summarise the key information in this story in 20 words or fewer.

Answers

1. How long did the seeds spend in space?

Six months

2. How did the scientists keep the test fair?

Accept any reasonable answer that refers to the two different seeds to test, e.g. The children grew seeds that went to space and seeds that stayed on Earth to compare results.

3. 'When the seeds were returned to Earth some were given to school children to grow.' This suggests that...

- ☐ Scientists couldn't be bothered to grow seeds.
- ☒ **Scientists wanted children to be excited about science by growing plants.**
- ☐ There aren't enough scientists.
- ☐ Seeds are tricky to grow.

4. Tick each statement to show whether according to the story it is true or false.

	True	False
None of the space seeds grew.		✓
Children have grown seeds that have travelled in space.	✓	
The space seeds generally grew less well than those which stayed on Earth.	✓	
Two million seeds were sent to space.		✓

5. What do you think scientists might do next?

Accept any reasonable answer that refers to testing food that can be grown in space, e.g. I think that scientists will try to repeat the experiment to see if they get the same results.

6. Summarise the key information in this story in 20 words or fewer.

Accept any reasonable answer that is 20 words or fewer, e.g. One million rocket seeds were taken to space. Children grew the seeds to see if there was any difference.