

#WorldSpaceWeek

The Egnaut Challenge



Get creative and think like a spacecraft engineer to design a space capsule that will safeguard an egnaut as it lands back on earth!!!

Design criteria.....

Space capsules are engineered to protect astronauts during their re-entry and descent back to earth, and a variety of methods are used to ensure that they land safely on a surface, including parachutes, jet rockets, air-bag cushions, and wings.

You will need to design & build a space capsule that can hold and protect a single egg from breaking when dropped from a height.

You may use any materials you can find in your home/school and create any type of structure that you think will protect your egg on landing.

Things to think about....

- What materials you will use to protect your egg.
- The shape of the capsule.
- How you will slow down the capsule to reduce impact on landing.

To find out more about how astronauts get home click [here](#)

Please remember to ask for adult permission and/or supervision when required and always wash your hands when handling raw eggs.

Did you know.....

The word "astronaut" is derived from the Greek words astron meaning "star", and nautes, meaning "sailor".

The first person to reach space was Yuri Gagarin, in 1961, on board the spacecraft Vostok 1.

The first woman in space was Valentina Tereshkova, in 1963, on board the spacecraft Vostok 6.

Only 12 people have walked on the moon including Neil Armstrong and Buzz Aldrin.

The first ever artificial satellite to orbit Earth, launched in 1957 and was called Sputnik 1. Later that year Sputnik 2 was launched into orbit, carrying a dog named Laika.

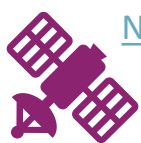
Artificial satellites have many purposes including weather forecasting, navigation (GPS), communications, space stations & scientific research.

The International Space station (ISS) is the largest artificial satellite currently orbiting the Earth. Astronauts live on the ISS for months at a time carrying out scientific research.

Artificial satellites must power themselves. This is usually done by using large solar wings covered with light-sensitive solar cells.

Extra challenge.....

The theme for World Space Week is "Satellites improve lives", so why not have a go at this brilliant activity from NASA to design and build your own edible or non-edible satellite!!!



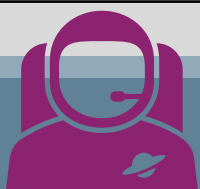
[NASA Build your own satellite](#)

Submit your designs & receive a certificate for taking part.....

Ask your teacher/parent/carer to take a photo and/or video of your design in action and send to ambassadors@debp.org to receive your participation certificate.

You can also share on Twitter with hashtag #WorldSpaceWeek and tag in @STEM_HUBNMSEY

Thank you!



We hope you have fun!