

Bunbury Aldersey CE Primary School

School Lane, Bunbury, CW6 9NR

01829 260524 or 261332

RCSAT Executive Headteacher: Mrs Nicola Badger

Principal: Mrs Nicola Badger

Deputy Principal: Miss Charlotte Hickson

principalbunbury@rcsat.cheshire.sch.uk deputyprincipal@rcsat.cheshire.sch.uk

admin@bunburyaldersey.cheshire.sch.uk



28th March 2024

Dear Parent/Carer,

Easter Break Space Challenge

Next half term, inspired by our learning about space, year 5 will be taking part in the MARS Balloon project. [MARS Balloon | Thales Group](#)

We will be sending up to three experiments into space on the MARS Balloon. The experiments will be launched in a high altitude balloon 30km up into the Earth's atmosphere, a place where the conditions of air pressure, temperature and radiation are similar to those on the surface of Mars.



Your challenge (over the Easter break) is to design an experiment related to anything humans or robots could be doing on the Martian surface. When we are back in school, you will have the opportunity to pitch your experiment and we will take a vote to decide upon which three we will go into space!

There are a few rules which you need to be aware of...

- They have to fit inside a kinder egg capsule!
- Maximum 20g per capsule which includes the 4g mass of the capsule.
- The capsules cannot contain live animals or insects.
- The capsules cannot contain any poisonous or hazardous.
- Capsules can be completely open (the lid can be removed if needed) or sealed.
- If the lid is removed, the experiment will need to be secured within the capsule base in some other way.
- The capsules will be mounted vertically with the lid at the top.
- Liquids need to be double bagged inside the capsule. The experiments will be filmed by an HD camera throughout the whole mission, but changing light conditions and distance mean that you should not rely on it for your results.

I have uploaded the teachers pack to our class page which has lots of ideas for possible experiments and information about Mars. However, please feel free to get creative and come up with your own ideas for experiments.

Good luck and I look forward to hearing all your ideas!

Kind Regards,

Mrs Smith

Year 5 Class Teacher