

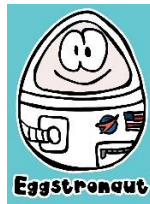


NASA Capsule STEM Project

Protect the Eggstronauts during landing.

Astronauts Bob & Doug launched into orbit last week aboard the Dragon Capsule. They are currently living aboard the International Space Station. They will be returning to Earth in 1-4 months in the Dragon Crew Capsule.

Your STEM Challenge to design and test a capsule that will protect the astronauts as they land. The Russian Space Capsule Soyuz lands on the ground and the Dragon will land in the Atlantic Ocean. Both surfaces are hard at the speed they are landing. Your astronauts are “Raw Eggs”. Your challenge to create a capsule that will protect your EGGstronaut from breaking upon landing.



Be creative, you can use any materials that you want, we just have to be able to get your eggstronaut out of the capsule without breaking it. Your capsule cannot be larger than a volleyball (approximately 20 cm). Remember that space craft have limited size due to launch restrictions. Material ideas: cardboard tubes, paper, tape, straws, small boxes, foam, plastic bags, popsicle sticks, etc.



If you are at school, we will be dropping the capsules from the mezzanine in the gym onto the floor Tuesday afternoon.

If you are at home, if you have an upstairs, drop them from a second story window or maybe with the help of mom or dad throw it into the air about the height of your house. Please video record your test drop, if possible. Please try by Thursday so we can discuss it at the weekly zoom meeting.

I have attached a planning sheet and a test results sheet. With STEM it is always important to test your idea and if it doesn't work, how can you redesign your capsule. NASA Scientists test many versions before a real person is put into the space craft.

GOOD LUCK!

How to Draw the Dragon Capsule: <https://www.youtube.com/watch?v=WCEo6r5To-k>