STEMillions

Diana Trujillo

First released Autumn Term 2018

Meal Plan
#059
30 mins

Starters *10 mins*

Announcements..... 3 mins
STEM events/competitions (check OtotheB), share achievements and welcome new members.

Snack, Cackle & Pop..... 2 mins
Snack: *Percy pigs. Yummy*
Cackle:

Pop: *Happier by Bastille*

Meet Her..... 5 mins
Diana Trujillo is an Aerospace Engineer at the NASA Jet Propulsion Laboratory. She is currently a Mission Lead for the NASA Mars Curiosity project. As of January 2018, the rover has spent 2,000 days on Mars!

Watch: *Meet Diana in this video*

Discuss:
- ★ *What are important qualities of an Aerospace engineer?*
- ★ *What do you think is the best bit about Diana's's job?*

Desserts *5 - 10 mins*

Share with us ..... 2 mins
Upload photos to MightyNetworks or tweet/ insta

Ask Her..... 2 mins
Post any questions to the Agony Aunt Topic in MightyNetworks

Digest..... 2 mins
Do #059 Digest: bit.ly/digest059

Mains *20 mins - choose ONE only*

MAKE..... 20 mins
OH NO! The Mars Curiosity rover has a few small breaks in the wheels! Your mission (you don't get to choose it) is to find a solution for this problem. The new wheels need to fit the following criteria:
- *tough to withstand the rocky Mars surface*
- *be able to withstand cold temperatures*
- *durable to travel long distances*

Try the following substances:
- *Paper*
- *Cardboard*
- *Metal?*
- *Plastic*
- *Rubbers/ Erasers*
- *Fabric?*

What other substances can you try? What would be the most suitable material to make/ repair wheels for the Curiosity rover?

If you could redesign the Curiosity rover wheels what would it look like? What design features would it have? WHat substance(s) would it be made out of?

EXPLORE..... 20 mins
Diana is one of the engineers who worked on the NASA Mars Curiosity mission.
Explore the timeline of the rover from when it was first designed up until today. Don't forget to add:
- *The day they started building the rover*
- *The day it was launched into space*
- *The day it landed on Mars*
- *Any discoveries it has made*

If you've got time, explore the future missions of the rover and try and put them on the timeline too.
Post photo's of your club's timelines to MightyNetworks.