STEMILLIONS Pooja Godhania

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Meal Plan #042
30 mins

Starters 5-10 mins



Pop: Stemillions playlist on Spotify:

bit.ly/stemillionsplaylist

Watch: meet Pooja here

Discuss:

- ★ What do you have in common with Pooja from her video?
- ★ Why do we need engineers for our roads?

Desserts 5 min

Digest...... 2 mins

Digest this Meal Plan - complete this form.

Mains 20 mins - choose ONE only

MAKE...... 20 mins

You will need: 11 small gummy sweets and 25 cocktail sticks

A geodesic dome is a common shape used by engineers as its strong and stable. As Pooja is an engineer, lets construct a geodesic dome to see how strong it is.

- ★ Connect 5 cocktail sticks with 5 sweets to form a pentagon for your base
- ★ Poke 2 more cocktail sticks into each sweet of your base so they are all pointing up
- ★ Attach the cocktail sticks with 5 more sweets to form triangles
- ★ Connect the top points of the triangles you just made with cocktail sticks to form another pentagon
- ★ Poke one cocktail stick into each sweet of the top pentagon
- ★ Connect the 5 sticks with one sweet in the centre

Gently push down on your geodesic dome, how much weight can it support?

★ Getting a bit stuck? <u>Take a look at these</u> instructions (Scientific American).

EXPLORE...... 20 mins

You will need: paper, colouring pencils.

Pooja works to improve our roads. Our roads are getting smarter, they tell us when to slow down, when there is traffic and more. Draw what you think our roads will look like in 50 years time!

- ★ Could we create energy from roads?
- ★ How can we make roads safer?
- ★ What is the car of the future going to look like?

<u>This link</u> could provide you with some inspiration. (Hongkiat).