

STEMillions⁺ Katherine Johnson

First released Autumn Term 2017

WVU Libraries



Meal Plan
#024
30 mins

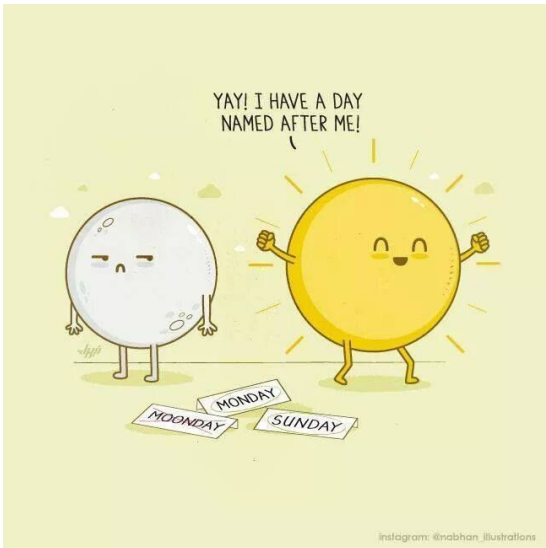
Starters 5-10 mins

Snack, Cackle & Pop..... 2 mins

Snack: grab a snack of your choice!

Cackle:

Really Funny Pictures



Pop: Stemillions playlist on Spotify:

bit.ly/stemillionsplaylist

Meet Them..... 5 mins

Katherine was a mathematician who contributed to the NASA space programmes. She calculated the trajectories and return paths for the early NASA missions and the 1969 Apollo 11 flight to the Moon. Her calculations were critical to the success of these missions. Katherine also did the calculations for the mission to Mars.

Watch: bit.ly/024MeetThem

Discuss:

- ★ Any thoughts about the video?
- ★ What do you think is the hardest activity to do in space?

Desserts 5 min

Share with us 1 min

Upload photos on [Twitter](https://twitter.com) or [Instagram](https://www.instagram.com) and tag @Stemettes and #Stemillions.

Mains 20 mins - choose ONE only

MAKE..... 20 mins

You will need: sweets, internet access.

Katherine's job involves knowing a lot about space, in this activity you will learn more about the size of our solar system. Create a scale model of our solar system using sweets. Start with Earth as it is the best planet; use 1 sweet to represent Earth. Use bit.ly/024make to find out how many times bigger or smaller each planet is than Earth. Once you have done your research, use the correct number of sweets to create a scaled model of the solar system.

- ★ How many sweets would you need if you included the sun in your model?
- ★ Can you include the moons for each planet?
- ★ Think about distance between planets
- ★ How many times smaller is Pluto than Earth?

EXPLORE..... 20 mins

You will need: A4 paper, pens, internet access.

Katherine did the calculations to help us land on the moon. For this activity you will look at the phases of the moon. There are 8 major phases of the moon, make a poster showing the 8 major phases of the moon and why they occur. Start by doing some research in your groups; if you're stuck, this is a good place to start: bit.ly/024explore.

- ★ You could also do this activity with oreos. Split 8 oreo's in half and eat the side that doesn't have the filling on. Recreate the 8 phases of the moon out of the oreo filling.

Ask Them..... 2 mins

Got a question? Ask Away! bit.ly/Ask-Away

Digest..... 2 mins

Digest this Meal Plan - [complete this feedback form](#).