



Dr Geraldine Baekelandt

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Twitter



Meal Plan
#118
60 mins

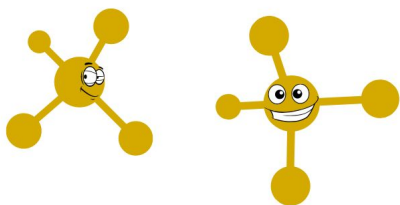
Starters 5-10 mins

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

Snack: Grab a snack before beginning

Cackle:

Why can you never trust atoms?



They make up everything!



Pop: Stemillions playlist on Spotify:

bit.ly/stemillionsplaylist

Meet Her..... 5 mins

Bio

Discuss:

- ★ What do you think of Geraldine's job?
- ★ What do you think Nanoscience is?

Mains 20 mins - choose ONE only

MAKE..... 20 mins

Ingredients: 2 measures cornstarch, 1 measure water, 2-3 drops food coloring (optional)

Geraldine works in nanoscience. Ooze is one of many materials called non-Newtonian fluids which is an example of a nanofluid. Let's experiment with some ooze... If you're using food coloring, add that to the water first. Then slowly add water to the cornstarch, you might not need it all. The Ooze solution should harden when pressure is applied, but otherwise will flow like a liquid. If you get messy, you should dunk your hands into a tub of water before washing in a sink. NOTE: Empty all Ooze directly into the compost, NOT the sink.

EXPLORE..... 20 mins

Ingredients: Ice cubes, plastic cutting board, metal cookie sheet, sponge(for cleanup)

Nano scientists look at the small particles that make up materials. Collect your materials and look/touch them. Which one do you think will melt an ice cube the quickest? Place an ice cube on each kitchen item. Watch closely. Do the ice cubes melt at the same rate? Why do we need to know this? When we use electronic devices, they generate heat which is bad for the device. When engineers design electronics they consider which materials work best to remove heat. As smaller electronics are designed, these thinner materials can't transfer heat quickly enough so we turn to nanoscientist to recommend the best materials.

Ask Them..... 2 mins

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

Digest..... 2 mins

Digest this Meal Plan - fill out the feedback form.

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.