



#STEMILLIONS

STEMillions

ABOUT

Teachers Pack

STEMettes
♥ ★ # +

FOR TEACHERS AND
ADULTS WANTING TO
RUN A STEMILLIONS
CLUB FOR CHILDREN
AGED 5-11

STEMettes
♥ ★ # +

STEMillions

Stemillions for Primary Schools

Introduction

Bring a Stemettes-style experience to your Primary School by running a new club at lunchtime or after school. Club members will do a range of STEM activities related to real women in STEM and explore a range of careers. Working as a team, the club will gain points, certificates and prizes as part of nationwide programme as they progress through our Stemillions Meal Plans. The club can be run as an extra curricula activity any day of the week or incorporate the activities and role models into lesson plans with our teachers notes. We will also provide an online community for teachers to connect with other teachers running Stemillions across the country, we hope this will provide a further support network.

STEMillions
Dr Eugenia Cheng
Meal Plan #049
30 mins
First released Autumn Term 2018

Starters 5-10 mins
Announcements..... 1 min
Share club member achievements.
Snack, Cackle & Pop..... 2 mins
Snack: Candy Kittens! Yummy
Cackle.....
3 1 4
 π
Mind Blown
P.I.E.
Watch: <https://www.youtube.com/watch?v=049MeetThem>
Meet Them..... 5 mins
Dr Eugenia Cheng is a mathematician, pianist & best-selling author. She is currently the Scientist in Residence at the School of the Art Institute of Chicago, Honorary Fellow of the University of Sheffield & Honorary Visiting Fellow of City University, London. Her 1st book 'How to bake Pi' teaches you maths through baking desserts.
Discuss:
★ What do you think of Eugenia's video?
★ What is pi?
★ Dr Eugenia currently lives in Chicago - if you could live anywhere where would you live and why?

Mains 20 mins - choose ONE only
MAKE..... 20 mins
Pythagoras Sweets: for this activity, you will need Starburst or other square sweets. Follow the steps below or this video explains the activity:
<https://www.youtube.com/watch?v=049Sweets>
1- Create a right-angle triangle with short sides of 3 & 4 starbursts & the hypotenuse 5 starbursts long.
2- Now create squares on each side of the triangle, so on the 3 side, the square will be 3 x 3 starbursts; do the same for the 4 and 5 side.
3- Now take the starbursts from the two shorter sides and place them on top of the sweets that form the hypotenuse square.
★ Do the starbursts from the shorter sides completely cover the longer side?
Do these triangles follow the same rule?
★ 6, 8, 10? ★ 4, 5, 6?
★ 5, 12, 13? ★ 2, 3, 4?
★ Why do some of these work & others don't?
★ What other combinations of numbers work?

EXPLORE..... 20 mins
Dr Eugenia is a mathematician and pianist. Make a song or rap about your favourite topic in Maths. Maybe you're really good at trigonometry, geometry, indices, probability, it can be anything! You could look up music to sing/ rap along to on YouTube, but the most important aspect is the lyrics! If you want, perform your hit song to the rest of your club. If you want some inspiration, <https://www.youtube.com/watch?v=049Sweets>

Desserts 5 mins
Share with us..... 1 min
Upload photos on Twitter or Instagram and tag @Stemettes and #Stemillions.
Ask Away..... 2 mins
Got a question? Ask Away! <https://www.youtube.com/watch?v=049AskAway>
Digest..... 2 mins
Digest this Meal Plan <https://www.youtube.com/watch?v=049Digest>

Keep up to date with Stemillions in The Stemettes Society. Any queries? Email schools@stemettes.org or message us in The Stemettes Society.

Each Box Will Contain:

10 x Meal Plans/ Activities based around 10 different female STEM role models

1 x Teachers Pack with a breakdown of each Meal Plan and links to the National Curriculum.

10 x backpacks for each club member

10 x badges for each Meal Plan

10 x certificates for each student at the end of the term

Materials/equipment needed to complete each Meal Plan
Access to MightyNetworks – our brand-new online community of teachers running the Stemillions club to connect with and share ideas to help inspire the students

THIS IS WHAT A MEAL PLAN LOOKS LIKE

STARTERS:

Start by celebrating any club member achievements

Load up the Stemillions playlist and have a snack and a bit of a laugh with your club

Get to know the role model; read out the bio we have written and then play the video

After the video, take a couple of minutes to talk about it as a club and try to answer our questions

The screenshot shows a digital meal plan for Zaha Hadid DBE. It is titled 'STEMillions Zaha Hadid DBE' and includes a 'Meal Plan #046' badge. The plan is divided into three main sections: Starters, Mains, and Desserts. Each section contains a video link and a bio. The Starters section includes a video link and a bio. The Mains section includes a video link and a bio. The Desserts section includes a video link and a bio. The page also features a 'STEMillions' logo and a 'Meal Plan #046' badge.

MAINS:

Choose between 2 activities...

MAKE: follow instructions and get creative

EXPLORE: discover more about the role models STEM career

DESSERTS:

Share photos of your club with us

If any club members have questions, they can ask our industry experts

Digest the Meal Plan by telling us how it went

STEMillions

Process

Before the Club:

Check MightyNetworks to see which Meal Plan to complete.

On the Day of the Club:

Get out the corresponding equipment needed to complete the club.

Load up the corresponding slides.

Run the club.

Fill out the digest/feedback form.

Give out the corresponding badges to club members.

Choose a new leader for the next club meeting.

After the Club:

Share any photos of the club in action with us on social media or in the MightyNetworks.

Post any tips for the Meal Plan in MightyNetworks for other schools.

FAQ's

How many members can be in a club at a time?

Up to 10 members ages 5-11 can join at once.

When does the next cohort start?

There are 3 cohorts run in a year:

Cohort 1: Autumn Term: September - December

Cohort 2: Spring Term: January - April

Cohort 3: Summer Term: April - July

When can I apply for the next cohort?

We open up applications for the next cohort during the half term before the cohort begins.

*The link to the application form will be on the Stemillions Primary webpage:
stemettes.org/stemillions/primary*

Applications will be open for 2 weeks. You can expect to hear whether you have been selected for the cohort after 2 weeks of the applications closing.

What schools are eligible for Stemillions?

Non fee-paying schools are eligible to receive the Stemillions box free of charge. Only schools in England are currently eligible for the Stemillions box.

I'm from a fee-paying school, how much does a Stemillions Box cost?

A Stemillions box for a fee-paying school with a term's worth of content and materials costs £700.

What do I do with the Meal Plans after my term is done?

After the term is done, please incorporate the role models into the lesson plans. The Meal Plans and activities can be re-used with a new set of students after the term has finished to introduce more students to the STEM-azing role models we have featured.