# STEMIllions

# Dr Eugenia Cheng

First released Autumn Term 2018



Meal Plan #**049** 30 mins

### Starters 5-10 mins

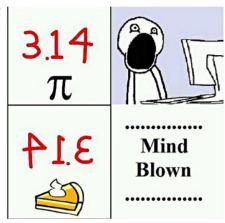
Announcements...... 1 min

Share club member achievements.

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

**Snack:** Candy Kittens! Yummy

Cackle:



**Pop:** Stemillions playlist on Spotify:

bit.ly/stemillionsplaylist

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.

Watch: bit.ly/049MeetThem

#### **Discuss:**

- ★ What do you think of Eugenia's video?
- $\star$  What is a hypotenuse?
- ★ Dr Eugenia currently lives in Chicago if you could live anywhere where would you live and why?

## Mains 20 mins - choose ONE only

For this activity you will need Starburst or other square sweets. This video explains the activity: bit.ly/049make.

- ★ Draw a right-angle triangle with the short sides being 3 and 4 starbursts long and the hypotenuse 5 starbursts long.
- ★ Create a square on each side of the triangle, so on the 3 side, the square will be 3x3.
- ★ Now take the starbursts from the two shorter sides and place them on top of the sweets that form the hypotenuse.

Do the starbursts from the shorter sides completely cover the longer side? Now try these triangles?

- **★** 6, 8, 10?
- **★** 4, 5, 6?
- **★** 5, 12, 13?
- **★** 2, 3, 4?

Why do some of these work and others don't? Which other combinations of numbers will work?

### Desserts 5 min