

STEMillions Muffy Calder

(b. 21/05/58)

First released Autumn term 2017



Meal Plan
#022
30 mins

Starters

Announcements..... 3 mins

Nearby upcoming STEM events, Club member achievements and welcome new members.

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

Eat: Oreos. Yum

Listen: 'Express Yourself' by Labrinth

Science Meme:



Meet Her..... 5 mins

Professor Muffy Calder is the Vice Principal & Head of College of Science & Engineering at the University of Glasgow. She is also Professor of Formal Methods. Her research is in modelling and reasoning the behaviour of complex software and biochemical systems using computer science and mathematics. She is a Fellow of the Royal Academy of Engineering and was awarded the OBE in 2011.

Watch: youtu.be/cBGqMiPJzVY (3 min video)

Desserts

Share with us 2 mins

Upload a photo of your MAKE or summary of your EXPLORE to the online forum. Or tweet/instagram it (remember to tag us)

Ask Her..... 2 mins

Post your Questions for Stephanie to the Agony Aunt Topic.

Mains *choose ONE only*

Computer scientists measure information by how surprising it is. E.g. Telling your friend "I walked to school" is not surprising and does not teach us any new information. Telling your friend "I got a helicopter to school today" is surprising and tells us a lot of new information. The amount of information the message contains is measured by how hard it is to guess the right answer. This is what computer scientists do.

MAKE..... 15 mins

20 Questions: The aim of this activity is to find the answer with the minimum amount of questions but no more than 20 questions. Split the club into pairs, each member thinks of a number between 1 and 10, each partner takes it in turns to ask a question that can be answered with 'yes' or 'no' until they guess the number. It should take only 7 questions. Discuss as a club the best methods to guessing the number. Other suggestions:

- A number between 1 and 100
- A number between 1 and 1,000
- A number between 1 and 1,000,000

EXPLORE..... 15 mins

Decoding the code: Write out the alphabet and swap each letter for a symbol. Then write a short sentence (4-6 words) about yourself in your new code. In your pairs swap your symbol version of the sentence and see if you can figure it out. If they are struggling, give them a clue. Discuss the importance of universal symbols and give examples.

Club Register..... 1 min

Let us know the OtotheB usernames of people who attended this week in your group on MightyNetworks. You'll get less points per non-OtotheB person on your register.

Digest..... 2 mins

Do the #022 Digest on OtotheB, before the end of the day.