How many m&ms would kill a 14 yo?

Making middle-school maths real, relevant and fun!

Kerry Cue

Humorous Maths Blogger, Mathspig

This entertaining one and a half hour workshop is designed to show participants how maths - serious maths, funny maths, crazy maths - can be found anywhere in the culture and utilised in the middle school maths classroom to make maths real, relevant and fun.

Timeline	Topic	Activity
Introduction 20 mins	Kerry Cue will discuss the decline in STEM studies in the USA, UK and Australia and how middle school maths teachers can reverse this trend. Cue will also talk about her own hilarious evolution from maths teacher to humorist/ journalist, the laughable maths gaffs she's observed in a 25+ year career in the media and why she started her popular maths blog, Mathspig.	Introduction
Discussion 30 mins	**1. Real** A successful education system *'combines classroom learning with real-world experience to provide students with both the technical and personal professional skills they need to succeed;'*[i] **How much do they stretch models' legs in Photoshop?** **Could you return Andy Murray's serve?** **2. Relevant** Some maths questions that prompt middle school students to be curious about the answer. **How old is your hair?**	Discussion

	How do you calculate ramp distances for a stunt motorbike jump? **How many calories – for Twilight fans – are in a litre of blood?** **Hunger Games Maths: How long would it take you (14yo) to bleed to death from an arrow wound?** **Why should Headbangers study geometry?** **How many m&m's will kill a 14 yo?** **3. Fun** "Empower our teachers to be able to show kids that STEM is fun," suggested Cindy Moss, director of Global STEM Initiatives.[ii] **Why was trigonometry needed to produce the CGI image of Merida's curly hair in the movie, BRAVE?** **Harry Potter and the Death Eaters Maths**	
Workshop Activity 40 mins	Participants get hands-on experience while having fun. Lots of fun. **1. Instant maths: What maths is in your pocket? Handbag?** **2. Maths Mystery Box** **3. Lego: Mean, Median & Mode and Lego Olympics** **4. m&ms and exponential functions** **5. Making square bubbles** **6. MATHS SONG**	Materials provided

References

[i] Mark Kramer, Kate Tallant, Amanda Goldberger, Flynn Lund , The New York Academy of Science, The Global STEM PARADOX, The Global STEM Alliance, 2014

[ii] Abid., 28.