

One Cypriot mathematician is using the lives and deaths of mathematicians to invite new interest in the subject that many detest. **Alix Norman** finds out more

PYTHAGORAS was purportedly so scared of beans that he refused to hide in a handy broad bean field when pursued by enemies. He was, alas, summarily caught and executed. And Abraham Wald, who founded statistical sequential analysis, died during WWII in a plane crash – despite heading a committee tasked with armouring planes!

Despite their brilliant minds, ground-breaking theories, and contributions to society, many mathematicians met an early end in an utterly preventable, downright foolish manner.

From Archimedes (who was so deeply engrossed in a theorem he failed to notice a Roman with a sword) to algebraic genius Évariste Galois (who scribbled his final, brilliant ideas on a scrap of paper and then went off to fight an ill-fated duel), history is littered with maths geniuses who died in unusual ways!

The list goes on, quite possibly proving that intelligence doesn't necessarily equal common sense, and certainly intriguing those of us who have never spared a thought for mathematicians! And it's this that Cypriot author and maths educator Ioanna Georgiou has put at the centre of her second book, *Peculiar Deaths of Famous Mathematicians*.

Like her first release, *Mathematical Adventures!*, Ioanna has brought storytelling to maths in this exciting book for kids. "Storytelling can be engaging and revealing," she explains. "And embellishing what are otherwise often seen as dry, abstract concepts with fascinating stories can really aid understanding."

"So many of us see mathematicians as creatures who can only do maths, almost inhuman in their singular dedication. But, by relating the lives – and strange deaths – of some of the past's more notable experts, we start to see these mathematicians as more human; people like us who are as flawed as the rest of us!"

Each of the 10 chapters in the book is in three parts: the life, the maths, and the death of each mathemati-

cian. And as we move chronologically through history, we discover the maths of the time: the concepts and ideas that were topically relevant to their era.

"These experts were solving problems that were current and relevant to them, developing new ideas as they went along; it's exhilarating!" exclaims Ioanna. "They lived their lives serving their convictions and beliefs; they prioritised what was important to them and enjoyed their subject. But something that is often lost when teaching maths is just how human these people were: Hypatia was an amazing teacher with huge audiences; Cardano was a talented physician but an inveterate gambler; Tycho a passionate astronomer and who enjoyed a wild party; Galois was involved in political movements. They all made it to history, but their weaknesses are also there, part of what made them who they were."

A mathematical history enthusiast, Ioanna is currently Head of Maths at St James Senior Girls' School, London. She also delivers maths masterclasses to teenagers at the Royal Institution, is a Fellow of the Institute of Mathematics and its Applications (the UK's chartered professional body for mathematicians, a learned society for mathematics), and a Public Exam Assessor. And in her spare time, the 41-year-old develops resources in collaboration with online providers, sits on the board of educational

institutions, and volunteers with local organisations to promote maths to primary students through strategy and games.

She also believes in using stories to teach the whys of mathematics: creating connections and enhancing students' understanding of her subject through gripping tales and historical anecdote. It's an unusual approach to what most of us recall as a dry subject.



Archimedes met his end in a surprising twist (Alix Norman). Below: Ioanna Georgiou and her latest book

The peculiar death of Pythagoras

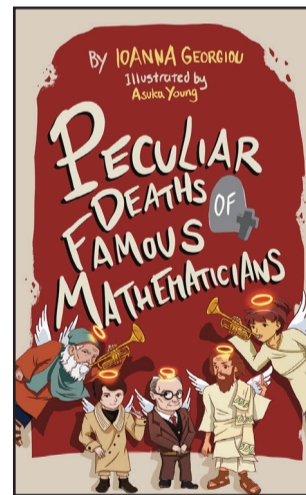


Ioanna's unique approach to delivering maths has been highly effective: "I've used these methods in the Royal Institution masterclasses, and found it very valuable."

Kids constantly ask why and how. Through the medium of storytelling, we're bringing what is often seen as a dry subject to life. I mean, what kid isn't fascinated by an unusual demise?!"

Using the peculiar deaths as the hook for each of the 10 chapters, Ioanna clearly explains mathematical concepts through history; concepts that are the foundation of the maths we use today.

In the concepts part of each



chapter, they are "explained in a clear, simple way, so that even if the reader hasn't done any maths for a long time, they can follow along and understand."

As much a help to parents struggling with their kids' maths homework as to the children themselves, *Peculiar Deaths* is already up for an award, shortlisted for Chalkdust's Book of the Year. And, during the book launch in London, every copy available to the public sold out in a matter of hours.

"I think the beauty of *Peculiar Deaths* is that it inspires children to further their own understanding of maths, and can also be enjoyed by parents and child reading together," says Ioanna. "I'd be delighted

to know that families have sat down to read this together, jotting down helpful diagrams and information, learning maths from the stories as they go along. Maths is indelibly connected to our lives; even if it's not our favourite subject, the whys and hows of anything still fascinate us!"

Enhanced by gorgeous illustrations from the talented Asuka Young, *Peculiar Deaths* brings maths to life: the characters are depicted with humour and liveliness; each concept explained with clear and entertaining diagrams.

"The hope is that readers will pick up *Peculiar Deaths* and breathe a sigh of relief," Ioanna concludes. "What we're really doing by highlighting the peculiar deaths of famous mathematicians is making maths tangible; taking it from the vague and abstract to the real and the fascinating. It's a book that will help every child realise that, even if maths is not their strongest talent, it can still be understood. That this subject can be great fun!"

Peculiar Deaths of Famous Mathematicians is available from amazon in Kindle and paperback, as well as in Lar-naca's Academic and General bookshop

