



Full STEM Ahead!

By Mrs Martin (Head of Year 3 and Junior School Science Coordinator)

It has been another busy and exciting week in the Junior School as we celebrated British Science Week 2023.

To kick start our week of activities, alumna, Dr Anna Ploszajski (DAHS 2009), returned to BGS to speak to us about her specialism in Material Science; A tailor made and interactive insight into the sorting of materials through recycling. She asked the students to imagine they were atoms and demonstrated how these atoms might move should they be solids, liquids or gases, before sharing how these atoms' structure can change when heated.

Dr Ploszajski is hugely passionate about our environment and repurposing items for recycling. Tilly McGee, from Year 5, was the lucky winner of a mug, for thinking how it could be reused as a dog food scoop! She went on to spend a long time answering questions from the girls such as, Would atoms behave in the same way in space and what do atoms look like under a microscope?

Natalia Woollard (Year 6) said "I loved finding out how the different materials were sorted and recycled."

Isobel Twitchell (Year 6) added: "I found it interesting how atoms respond differently in different materials."

After an inspiring morning with Dr Ploszajski, Year 3 were excited to welcome their friends from Year 3 and Bedford Prep School. This is one of the many occasions we join together and this term, as part of British Science Week, we invite the boys to join us for an afternoon of STEM challenges. This year we invited the groups to work on building a viaduct (using straws, lollipop Sticks and masking tape) to carry water (a marble) across a ravine (cardboard box), to build the tallest tower using newspaper and lastly to create a boat out of tin foil to float across the water. There was some fabulous teamwork and cooperation to rise above the challenges they faced and some really fantastic successes which were shared among the groups and added to others designs in further rounds. We are always so happy to join together, to catch up with friends and work in such a fun environment and we will now look forward to our visit back to BPS later in the Summer Term.

On Tuesday, Year 6 enjoyed a fantastic presentation by Liz Fordham from the charity Making Me. The focus was on what's going on in our brains as we grow and how this changes when we hit puberty. We learned about the structure of neurons, the cells that send messages in our brain and how they work. It was interesting to hear what happens to our brains during puberty and how this is linked to some of the changes we experience at the time.

We also spent time exploring how friendships and relationships can be affected during adolescence as we start to develop our own identities. It really made us understand why we sometimes feel like we don't belong or why we may change who we are friends with.

The workshop was great fun and a fantastic opportunity to link the learning we have been doing in our Unit of Inquiry with some of the science of our brains!

On Wednesday, Year 5 had the fantastic opportunity to meet and learn from alumna Rosalie Inman (BGS 2019) as part of STEM week, and it's safe to say that they were incredibly lucky to have her speak to them. Rosalie's impressive educational background in Biological Sciences, including a summer internship for a small biotech company, and her current studies in Biomedical Science Research, specialising in immunology and the biology of disease, made her an expert in her field.

However, Rosalie's achievements didn't stop there. She also shared her sporting success in Rugby and her recent appearance on the BBC, which demonstrated her range of talents and the importance of pursuing your passions, both academically and personally.

Rosalie's talk was not only informative but also engaging. She set up an activity for the girls to find out more about their genetic makeup in relation to eye and hair colour, which was not only fun but also helped them understand the science behind it. The girls even got to think about what their future children would look like, which was a real eye-opener for them. Rosalie's visit was a real inspiration for the girls, and many of them are now considering careers in biomedical science. It's wonderful to see the impact that a passionate and knowledgeable speaker can have on young minds. Who knows, maybe we'll see some future biomedical scientists emerge from this group of Year 5 girls!

To finish our week's activities, alumna Chiovonne Koranteng (DAHS 2007) came in to speak to Year 3 about her 11 year journey to becoming an architect! Chivonne gave a stimulating and engaging recount of the role of an architect, what skills you needed and even what clothes you wear to a site visit! The girls got a good understanding of the strength of

structures with height, using spaghetti and marshmallows and went on to create birds eye views to communicate their own bedroom plan. Chioverne evaluated and awarded two hard hats and high vis jackets to Harriet Cooke and Annie Burgess for their accuracy and detailed designs! Many of the girls commented how much they wanted to train to be architects, and I am looking very much forward to the future of STEM with these girls in it!

It has been another incredible week and my sincere thanks go to all of our visitors for giving up their time and inspiring the next generation and a special mention for Mrs Emma Mackenzie (Marketing & Development Officer) for organising all of the alumnae speakers.