

STEM Club Week 1:

In STEM Club this week we had a visit from our STEM Ambassador, Hazen Bowskill. Hazen is a Quarry Operations Manager at Aggregate Industries and explained to our STEM Club his role in a STEM career.

We learnt that Hazen uses mathematics to create a controlled drill and blast site that will produce the required weight of aggregate. He also has to ensure that everyone on site is kept safe during this extraction. Therefore, his calculations must be accurate.

By using mathematics, Hazen will know what scientific measurements are required for the controlled blast. Once the blast has been detonated, Hazen and his team use a variety of machinery to extract the product from the site.

We were lucky enough to watch some drill and blast site videos of Hazen's work. We were then given a challenge to use Hazen's work formulas to find answers to real life scenarios about blast sites and product extraction.

Hazen left us with the question: 'Do the neighbours of a nearby quarry need to hear the blast?'

We have been lucky enough to be part of a Partnership Grant Project through the <https://royalsociety.org/topics-policy/education-skills/> who have given us funding that will help us carry out our project. With this funding we have been able to buy a year group set of data loggers. Data loggers allow us, as scientists, to collect data at speed.

We will use our data loggers to record and monitor sound over the next few weeks and see if the neighbours of a nearby quarry really do need to hear the blast.