

## STEM Club Week 2

Can the neighbours of a nearby quarry hear the blast?

Firstly, we had to decide what we would use as our quarry blast sound. We decided to use a timer as it was controllable and created a short burst of noise. We used a large sheet of card to represent the distance between the blast site and a village. The data logger represented the village, as that would record the sound heard. We measured that the timer's sound reached the data logger at 84 decibels.

This is the control measurement.

We then decided to use card, cardboard, polystyrene and plastic bottles to create barriers between the blast site and the village. We know that these structures created will have to have design and be aesthetically pleasing. This is part of an engineering process and STEM Club have been experimenting to see which materials and structures have the best effect at diminishing the sound from the timer. In STEM Club we are finding it a challenge to attach different materials together, so this will be an area of learning we look closely at next week. Perhaps Hazen Bowskill can give us some support and advice in his next visit.