

## Meaningful Learning Experiences

Strategic Commitment	✓	Part of a regional Careers Hub initiative for Careers Leaders
Curriculum Provision	✓	GCSE Maths: Transformations
Employer Partnerships	✓	Involving a small local firm of architects
Reflective Young People	✓	Showing the value of the maths topic beyond GCSE tests
Informed Career Choices	✓	Promoting careers in Architecture

### Architects show that 'Transformations' is useful for more than passing a GCSE maths test

The teacher brief for this GCSE maths project at Ashton Park School in Bristol explained the challenge in covering the topic of 'Transformations of Graphs' (rotations, reflections, translations and enlargements): *'I struggle to engage my classes with this topic and they seem to lack retention of this knowledge. The teaching of how to do this is easy but I haven't seen where it is used in the real world or in a job when it comes to doing this on a coordinate axes as is required in a GCSE exam. By providing an ideal hook I hope this will help engage my classes more and help them retain this knowledge.'*

A number of local architects were approached, all of which were managing their way through challenges arising from the COVID pandemic. 3/10 Studio, a small local firm of young practitioners, agreed to get involved, with classroom resources created from information on the website and some scale drawings of current projects they emailed across.

*'... scale and dimensions are incredibly important to us and the project that is currently under construction on Bedminster Parade in Bristol (Scaled site model is in shop window front) is a great example. Attached are some photos of some scaled timber models of the buildings (we also put scale model people in so that you can understand the scale), a site photo of the foundation of the rear studio with the scaled model to give the children an understanding ...'*

One of the architects agreed to give feedback after students had completed an assessment on the topic – using the same test that would normally have been presented to them.

### Benefits for the Students

*'I did show the slides to my class and they engaged with them highly.'*

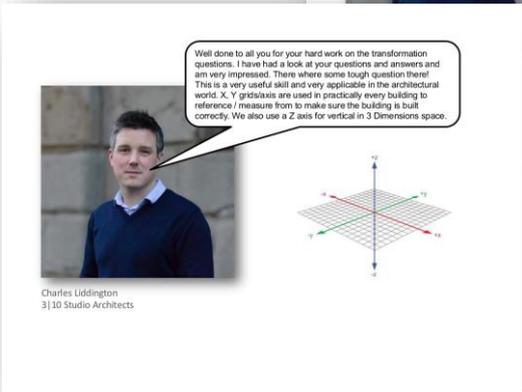
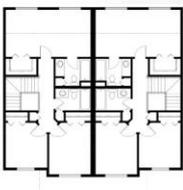
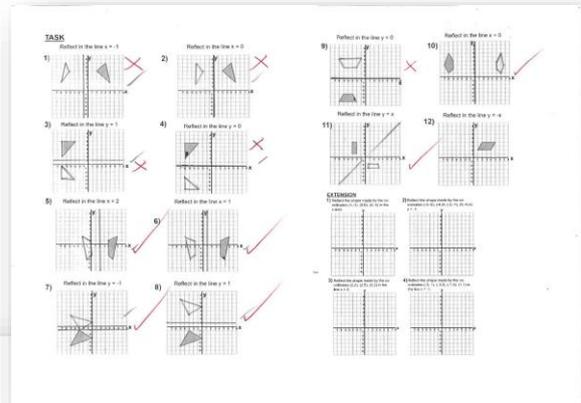
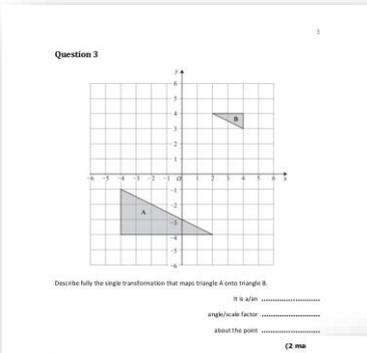
*'I know they are dying to get some feedback on this. I have a group of girls who welcome me at the beginning of each lesson saying "When are we going to get feedback from the architects?", which has been a delight for me to see as I can tell that they have engaged with this project.'*

### Benefits for the School

*'When I have done this in the past with classes of all abilities, engagement has usually been low purely on pupils not knowing where transformations are used in careers. By Charlie and 3/10 Studios providing that insight to my class, they were highly focused on all the activities and were showing great care and attention to detail. Feedback from pupils include pupils wanting to do a perfect job so they don't let the architects down and others nagging me for when they were going to receive feedback on their work.'*

### Benefits for the Employer

*'Well done to all you for your hard work on the transformation questions. I have had a look at your questions and answers and am very impressed. There were some tough questions there! This is a very useful skill and very applicable in the architectural world ... Keep up the great work. Architecture is a very rewarding career when you can see something you design being built in real life Infront of your eyes.'*



Transformations, a maths topic that appears in GCSE exam questions, was given meaning by a local firm of architects. They fed back information about their use of these skills after Year 10 students completed a classroom assessment.