Quantity Surveyor – A Day in the Office (50 minutes)

Industry Participant

Ideal Industry Participant:
A confident Quantity Surveyor or another professional who has site experience – the session sees students step into the shoes of a Quantity Surveyor.

Example Job Titles:

Apprentice/Graduate Quantity Surveyor.

Apprentice/Graduate Site Manager.

Description

This session sees students take measurements from a 2D floor plan of a new school wing. They will work out the surface areas of the classroom walls and calculate how much the rooms will cost to paint.

What Year Group or Key Stage is the session targeting?

This session should be delivered to KS3 students (Years 7-9).

Maximum number of students?

This session would be ideal for 30 students.

What is the goal of the session?

For students to understand how maths skills are used in the career of Quantity Surveying, and to inspire students to find out more about careers within the built environment sector.

Role of the Industry Participant(s)

Outline the role and responsibilities of the Industry Participant(s)

The industry participant will deliver the session and manage activities, as well as provide guidance and feedback during the measuring activity.

Resource Checklist

USB
Hard copy of PowerPoint
Electronic copy of PowerPoint
Resource 1 – Colour chart and price list
Resource 2 – Floorplan (to print in A3)
Resource 3 – Answer Booklet
Resource 4 – PowerPoint – QS A Day in the Life 50 min

GO CONSTRUCT
Industry led, funded by the CITB levy citb

CONSTRUCTION YOUTH TRUST

Facilities Required from School
A good sized classroom which can accommodate 30 students and 1 or 2 industry participants.

Learning Objectives:
Learners will be able to… 1. Understand the role of a quantity surveyor within a construction project 2. Understand how their maths learning can and will apply to their future careers. 3. Show calculating skills in areas such as measuring surface areas, ratios and working out discount offers.

Gatsby Benchmarks	National Curriculum Links
Gatsby Benchmark 2: Learning from Career & Labour Market Information (LMI). Gatsby Benchmark 3: Addressing the needs of each pupil. Gatsby Benchmark 4: Linking curriculum learning to careers. Gatsby Benchmark 5: Encounters with employers and industry employees.	KS3 Maths: • Develop their use of formal mathematical knowledge to interpret and solve problems, including in financial mathematics • Develop fluency - select and use appropriate calculation strategies to solve increasingly complex problems • Solve problems involving percentage change, including: percentage increase, decrease and original value problems and simple interest in financial mathematics

Teaching Strategies
Real Life Links: Activity focused on real-life duties of a Quantity Surveyor Auditory: Instruction provided verbally throughout.

Risk Assessment
DBS-checked individual (ideally a teacher) required to supervise at all times – industry participant may not be DBS checked.

Duration	Tutor/Industry Participant Activity	Learner Activity	Resources
5 minutes	Slides 1-7: Overview of the Built Environment PowerPoint. Introduce the lesson – tell the students that this lesson will allow students to practice their measuring and maths skills.	Students to listen	Resource 4 – PowerPoint – QS A Day in the Life

	Edit slide 3: All About Me - Industry participant to introduce themselves and to go over slides. The slides promote careers within the sector. After this slide, insert a new slide with images of projects that you and your company have worked on so students can find out more about your work.		
30 minutes	Slide 8-12: Industry participant to run through the site plan and explain the task – each pair will be taking the measurements and making the calculations for one room. Industry participant to use the accompanying PowerPoint to explain the floor plan and scaffold each stage of the working out process. Industry participant to circulate the room and provide guidance to groups. Answer any questions students may have regarding the main activity. First, the facilitator gives the students time to calculate the surface areas of the walls of each room. Then, facilitator can run through answers with the group to check that everyone is working correctly so far. Then, facilitator will instruct students to move on to the cost calculations of the paint, which students can work out using the surface areas of the walls.	Students will work in pairs. • Pairs of students to measure the widths of their assigned room's walls on the floor plan. They will do so in centimetres – the floorplan has a 1cm:1m scale. To find the surface areas of the wall, they will multiply the width of each wall by the walls' height – this is always 2.5m • Students to keep a track of their calculations. • Students to use the colour chart to identify which paint is required for each room. • Students to work out how much paint	Resource 4 – PowerPoint – QS A Day in the Life 50 min Resource 1 – Colour chart and price list Resource 2 – Floorplan (to print in A3) Each pair would require a ruler to measure the floor plan.

		would be needed • Students to calculate how much money would be spent on the total refurbishment of their room	
15 minutes	Feedback – Industry participant runs through each group's answers, and asks each team how much they spent on paint. The industry participant then decides which pair/pairs did the best job. Slides 13-17: Industry participant will use every pair's answers and the answer booklet to inform the whole group as to what the cost of refurbishing the whole room is. Slide 18: If there is time, industry participant will use accompanying PowerPoint to run through pathways into quantity surveying careers. Industry participant to round up the session, thank the students for their involvement.	Students to feedback the total amount of money they need.	Resource 3 – Answer Booklet Resource 4 – PowerPoint – QS A Day in the Life 50 min

To-Do List	
<u>Before Session:</u> • Request that the session take place in a good sized classroom • Go over the session plan • Volunteers should familiarise themselves with the task before the session	<u>After Session:</u> • Collect in resources at the end of the session

• Print all resources before you arrive to the school • Make sure the relevant files are on a USB/sent to the school contact	

Hints & Tips

• Here is the type of question that you may get asked:
  o What do you do on a daily basis?
  o How did you get into your career?
  o How many CVs do you get for jobs?

Delivery Management
• The session could be delivered by one Industry Participant • The teacher will handle behaviour management • Refer to 'How To Contextualise Curriculum' for more guidance on how to deliver this session