

Lesson Plan KS3



MATHS - Measure and Calculate

Lesson Objective: To measure parts of the organ or other features of the building to solve problems and gain practice in mathematical skills.

Starter	Main Teaching	Resources
This lesson is best held in SMSG Church where the organ and other features can be viewed and physically measured. If used in the classroom, then copies of SMSG Plan would be needed for each student, together with the Resource pictures. A series of problems set by the Teacher to challenge the students mathematical thinking and computational skills.	<u>Activity 1 - Choose</u> Choose an mathematical question, e.g. What is the difference in the lengths of the golden or-organ pipes? What is the size of the organ console, it's cubic area? Can you make an accurate scale drawing? What is the proportion difference in the sizes of the Belleplates? Are there common features in terms of size? What causes the sounds to be different? How much of the total floor space taken up by the pillars? Calculate how many chairs could fit in a row if the wooden beams were removed? Compare the size of the paved aisles to the wooden seating area. <u>Activity 2 - Measure carefully</u> Measure carefully to enable your calculations to be accurate. Work in pairs and check each others results. <u>Activity 3 - Work it out</u> Show all your workings and alternative ways of solving the problem. Check your answers with another student. <u>Activity 4 – Set the work</u> Swap challenges, set a mathematical problem for a fellow student.	The Visits Team at Music for All @ SMSG will assist for this session. 3 octave set of Belleplates Resource 1 SMSG Plan Resource Pictures A range of measuring tools