

Teacher demonstration

Show the class how the strength test is to be done in the school laboratory.

The strength of the cement cube will be measured by a 'crush test' using a G-clamp to apply pressure until the cube crumbles/cracks. Put the block on a disc like a clock face with eight sections. Fix the block securely with the G-clamp. Turn the handle of the G-clamp until the cement starts to crumble. Note the number of sections on the disc that the handle has been turned through to crush the block. This gives an arbitrary unit of strength for comparative purposes (ie eighths of circle).

Pupils do the class practical. Each group tests each block in turn and records their findings in a suitable way. They write down a score for each sample. They then put them in a rank order of strength; 1 is the strongest sample and 7 is the weakest.

Pupils share their findings with the rest of the class by transferring them to this class results table.

ADDITIVE	1	2	3	4	5	6	7	8	9	10	11	12	TOTAL	RANK
NONE														
CLAY														
GRAVEL														
PLASTER														
SALT														
SUGAR														
TALC														

Complete the total score and rank order columns as a class or group exercise.