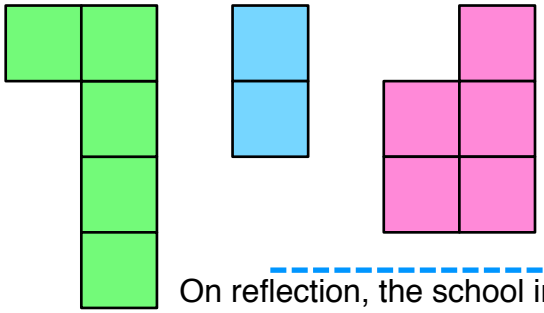
x-maths Bond

November 23rd 8:55am A British School in Rome, Italy

The school inspectre was able to drift into the building without raising any suspicion. With a smile, a confident 'buongiorno!' was all that was needed. To a busy teacher or security guard, he was just another member of the inspection team. He headed straight to room 96 where Miss Connery was about to develop rotational symmetry with her Y7 class - he had certainly done his homework.

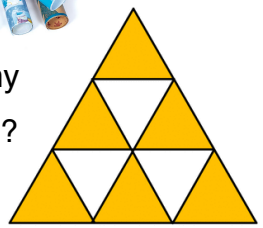
'Good morning students, for your opening challenge try to arrange the following 3 shapes into one shape that has rotational symmetry. Make sure the coloured sides showing remain visible on your solution.'



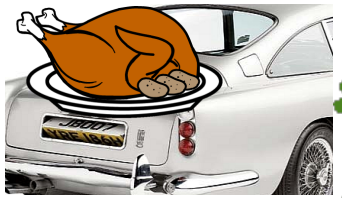
On reflection, the school inspectre had enjoyed the lesson; he had managed to pilfer 2 of his target digits from a lovely display of cube numbers. 'Most satisfactory,' he thought, 'time to leave.'

Wrapping Shaper

How many Triangles?



Number Plate



abcde is a 5-digit number.

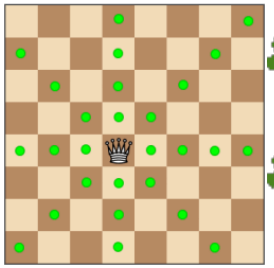
ab, bc, cd and de are all square numbers.

Display Dismay

The first 10 cube numbers are:

27	729	25	8
216	12	343	1
64	1000		

Chess Nuts



Find the maximum number of queens that can be placed on a chess board so that none of the queens attack each other.

Jangle Bells

10am precisely