



## Cubes (an amazing math trick)

Here's a neat trick:

Have a student cube a two digit number, then give you the answer only.

Look at the last number of the answer. If it's a 0, the last number of the original number that was cubed was 0; or if 1, then 1; 2 then 8, 3 then 7; 4 then 4, 5 then 5; 6 then 6, 7 then 3; 8 then 2; 9 then 9.

Now look at the one, two or three numbers to the left of the thousands comma (digits 4; or 4 and 5; or 4, 5 and 6. Look at the following chart. Go down to the next number and find the value of the tens digit of the original number that was cubed:

729.....	9
512.....	8
343.....	7
216.....	6
125.....	5
64.....	4
27.....	3
8.....	2
1.....	1

Example: Student says the cube is 12,167. The last number is 7, so the last number (the ones digit) of the original number that was cubed is 3. Truncate the ones, tens and hundreds digits and you get 12. The nearest cube below 12 is 8 which means 2 is the tens digit of the original number and the original number has to have been 23. Ta Dah!

I read about this trick when I was a teen, from a book which is still in print:  
"Mathematics, Magic and Mystery," by Martin Gardner

<http://www.amazon.com/exec/obidos/tg/detail/-/0486203352/104-8970171-6314316?vi=glance>

The kids love this trick and will jump through a lot of hoops in order to have it taught to them as a reward.