



American Billions



Find the ten-digit number which uses each of the digits 0 to 9 once and has the following properties:

1. the first digit from the left (the billions digit) is divisible by 1
2. the number formed by the first 2 digits from the left is divisible by 2
3. the number formed by the first 3 digits from the left is divisible by 3
4. the number formed by the first 4 digits from the left is divisible by 4
5. the number formed by the first 5 digits from the left is divisible by 5
6. the number formed by the first 6 digits from the left is divisible by 6
7. the number formed by the first 7 digits from the left is divisible by 7
8. the number formed by the first 8 digits from the left is divisible by 8
9. the number formed by the first 9 digits from the left is divisible by 9
10. the number itself is divisible by 10.



Thousands more problems can be found on the NRICH Maths website:

www.nrich.maths.org