

Problem of the Week: Week 1 (Summer 2): Year 8: Number: Primes, LCM and HCF

- Use prime numbers, factors, multiples, common factors and multiples, highest common factor and lowest common multiple to solve problems
- Select and use appropriate calculation strategies to solve increasingly complex problems.

Prime order

How many of the three-digit numbers that can be made from all of the digits 1, 3 and 5 (used only once each) are prime?

<https://nrich.maths.org/4947>

What's on the back?

Four cards each have a number written on one side and a phrase written on the other. The four numbers are 2, 5, 7 and 12.

The four phrases are

Divisible by 7

Odd

Prime

Greater than 100

On each card, the number written **does not** have the property written on the other side of the card. What are the four number-property pairs?

<https://nrich.maths.org/11708>

Factor trio

Which of the following numbers is the product of exactly 3 distinct prime numbers?

45, 60, 91, 105, 330

<https://nrich.maths.org/2916>

One million

If you have been alive for a million seconds, how many birthdays have you had? What if you have been alive for a million minutes?

