

The Scottish Mathematical Council

www.scot-maths.co.uk

MATHEMATICAL CHALLENGE 2025–2026

Golden Jubilee Year

Entries must be the unaided efforts of individual pupils.

Solutions must include explanations and answers without explanation will be given no credit.

Do not feel that you must hand in answers to all the questions.

CURRENT AND RECENT SPONSORS OF MATHEMATICAL CHALLENGE ARE

The Edinburgh Mathematical Society, The Maxwell Foundation,

The London Mathematical Society and The Scottish International Education Trust.

The Scottish Mathematical Council is indebted to the above for their generous support and gratefully acknowledges financial and other assistance from schools, universities and education authorities.

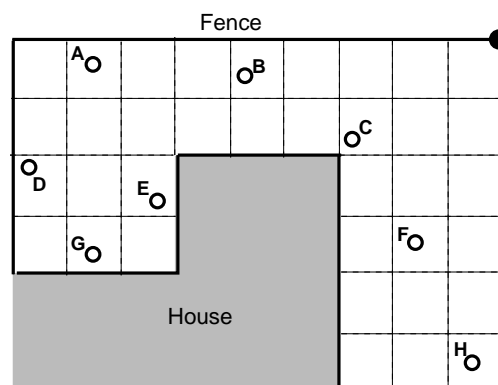
Particular thanks are due to the Universities of Aberdeen, Edinburgh Napier, Moray House, St Andrews, Stirling, Strathclyde and to George Heriot's School and Gryffe High School.

Primary Division: Problems 1

P1. Adam writes down all numbers from 1 to 1000. How many times did he write the digit 3?

P2. Cathy has moved to a house in the countryside and is enjoying watching the birds, foxes and even a badger visit the garden. She decides to fix her 360° camera to the corner of the fence to record the comings and goings.

- Which of the creatures (A to H) will the camera be able to see?
- Cathy reckons there's 12% of the garden that is hidden from the camera. Explain if she is correct.
- What is the best place to put the camera to see more of the garden?



P3. Find the 2-digit primes which have the following properties

- the number obtained by reversing the digits is also prime,
- the difference between these two primes is a non-zero perfect square.

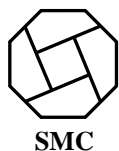
END OF PROBLEM SET 1

CLOSING DATE FOR RECEIPT OF SOLUTIONS :

26 September 2025

Look out for Problems 2 in late October!

SEE OVER FOR LINKS TO THE MATHS CHALLENGES ARCHIVES



Mathematical Challenge Problems 1

PRIMARY DIVISION 2025-2026

PLEASE USE CAPITALS TO COMPLETE

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Please write your solutions on A4 paper and staple the above form to them.

PLEASE WRITE YOUR NAME ON EVERY PAGE.

Send your entry through your school to the section organiser.

For further information on the competition, please see the School Materials which have been distributed to schools. A copy of these Materials can be obtained from

<http://www.wpr3.co.uk/MC/materials/index.html>

There are separate links for primary and secondary schools. This page also includes a list of authorities in each section and names and addresses of section organisers.

For information about Mathematical Challenge, look on the MC web site:

www.scot-maths.co.uk

MATHS CHALLENGES ARCHIVES

There are archives of previous questions on: www.wpr3.co.uk/MC-archive/P/index-P.html

Here is a shortcut for your smartphone or tablet

