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**Primes by paper-folding. The symmetry of the Stechkin-Matiyasevich sieve.**

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From the text: In the piece 'Primes by Searchlight', directed at KS3 children, I mention work suitable for the sixth form. This is it. First I describe the paper-folding construction, then unpick it to reveal the similar right triangles and simple coordinate geometry hidden within the figure it is derived from, a construction which sieves composites from the natural numbers to leave primes first described by two Russians, Boris Stechkin and Yuri Matiyasevich.

*Classification:* G70 F60

*Keywords:* parabolas; analytic geometry; coordinate geometry; coordinates; grid points; prime numbers; equations of straight lines; locus; symmetry; collinearity; similar triangles; paper folding