

11+ Standardisation Report – October 2022

Each pupil's raw scores were standardised ($\mu=100$, $\sigma=15$). The values used, in 2022, are presented in the table below.

$n=4977$

| 2022 (2023 entry) | Mean (μ) | Standard Deviation (σ) |
|-------------------|----------------|---------------------------------|
| English | 35.14125 | 8.81700 |
| Maths | 30.34760 | 12.33278 |

As in previous years a statistical test was used to assess whether age adjustment was necessary to take account of any apparent bias against younger candidates.

This year, the t -test was statistically significant for English; but not for Maths and the corresponding age adjustment factors were calculated.

| 2022 (2023 entry) | Age adjustment |
|-------------------|----------------|
| English | 0.0141336 |
| Maths | zero |

In each case the calculation proceeds as follows:

$$\text{Standardised score} = (((\text{raw score} - \mu) \div \sigma) \times 15) + 100$$

$$\text{Total score} = 1.5 \times$$

$$[(\text{standardised Mathematics} + \text{"days younger"} \times \text{Maths age adjustment}) + (\text{standardised English} + \text{"days younger"} \times \text{English age adjustment})]$$

where "days younger" is calculated as d-o-b minus 01/09/2011.

Thus a candidate, born on 01/09/2011, with average marks on each paper will obtain a total of 300, comprising the results in the two papers weighted 1:1.