## Students on Track



Helping students to reach \& exceed their academic potential


## ABILITY LEVEL \& SUBJECT FIT



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## Summary

This report provides an independent assessment of student academic performance using Cognitive Ability Test (CAT) scores as a benchmark. The aim of the report is to help students, parents and teachers better understand whether students are reaching their academic potential and to consider whether additional supports may be helpful. The analysis uses data science to compare current academic grades in different subjects with numerical, verbal and spatial cognitive scores in addition to motivation levels and well-being. For example, a student with a strong verbal reasoning score of 100 (out of 141) might expect to see good grades in languages of 60 to 70 (out of 100) on average. While cognitive test performance, motivation levels and well-being play an important role in the academic performance of students, many other factors also apply (including for example teacher competence and the learning environment).

## Cognitive Ability Performance

Figure 1 shows your cognitive ability test (CAT) scores for verbal reasoning, non-verbal reasoning, numerical ability and spatial reasoning in addition to your mean average test score. The scores are also placed in a national context. CAT scores can range from 60-141. Table 2 shows the relationship between CAT performance and subjects based on a correlation analysis in your school and using international evidence. The correlation for your school is shown in brackets ( 1 is a strong positive relationship and -1 is a strong negative relationship).

# 1. Jane has exceptionally high numerical reasoning ability compared to her peers <br> Your cognitive score <br> O National average score 



Verbal $\bigcirc 120$


2. Jane's cognitive scores suggests she is suited to maths and science-based subjects

| Aptitude Level | CAT | Associated Subjects |
| :---: | :---: | :---: |
| Average | Non-Verbal | Maths (0.53), Latin (0.44), Irish (0.43), Spanish (0.43), CSPE (0.40), Art (0.37). |
| Above average | Numerical | Maths (0.68), Music (0.50), Science (0.44). |
| Average | Verbal | English (0.57), Science (0.54), CSPE (0.54), Home Economics (0.52), History (0.51), Geography (0.49), Religion (0.48), Languages. |
| Average | Spatial | Maths (0.52), Science (0.35), CSPE (0.34), Art (0.33), Geography (0.31). |

## Academic Performance

Figure 2 shows your grades in each subject benchmarked against your 'potential grade range' based on the CAT scores. Where current grades (in grey) are at or above the potential range, it suggests that you are reaching or exceeding your potential. Where current grades are below the potential range, it suggests that there may be room for improvement in that subject area.
3. Jane is under-performing in history and art class and may need extra support here


## Well-Being and Motivation

This section considers your self-reported motivation level and well-being compared to your school average. Low levels of wellbeing and motivation may contribute to a student not reaching their potential at school. The year-group analysis show that students who report that they like school, participate in school clubs, spend more time on homework tend to perform better at school in general. Similarly, students who report a high degree of interest in specific subjects do better at those subjects.
4. Jane has high motivation levels and high participation levels in school activities

| Question | Student response | Average of year-group response |
| :--- | ---: | ---: |
| How do you judge your own grade performance at school? | Average | Below average (10\%), Average (51\%), Above average (37\%) |
| Do you participate in school clubs? | Yes | No (43\%), 47\% (Yes) |
| How much time (in mins) do you spend on homework? | 90 minutes | $30 \mathrm{mins}(16 \%), 60 \mathrm{mins}(34 \%), 90 \mathrm{mins}(39 \%), 120 \mathrm{mins}(11 \%)$ |
| To what extent do you like school? | A bit | Hate it (3\%), Do not like much (5\%), Like a bit (15\%), Like quite |
| a bit (41\%), Like very much ( $33 \%$ ) |  |  |

## 5. Jane has low motivation in French and Art class, which may explain weaker grades there



