

Presented by Suranjan Jana

SAT Performance Analysis Across NYC Public High Schools

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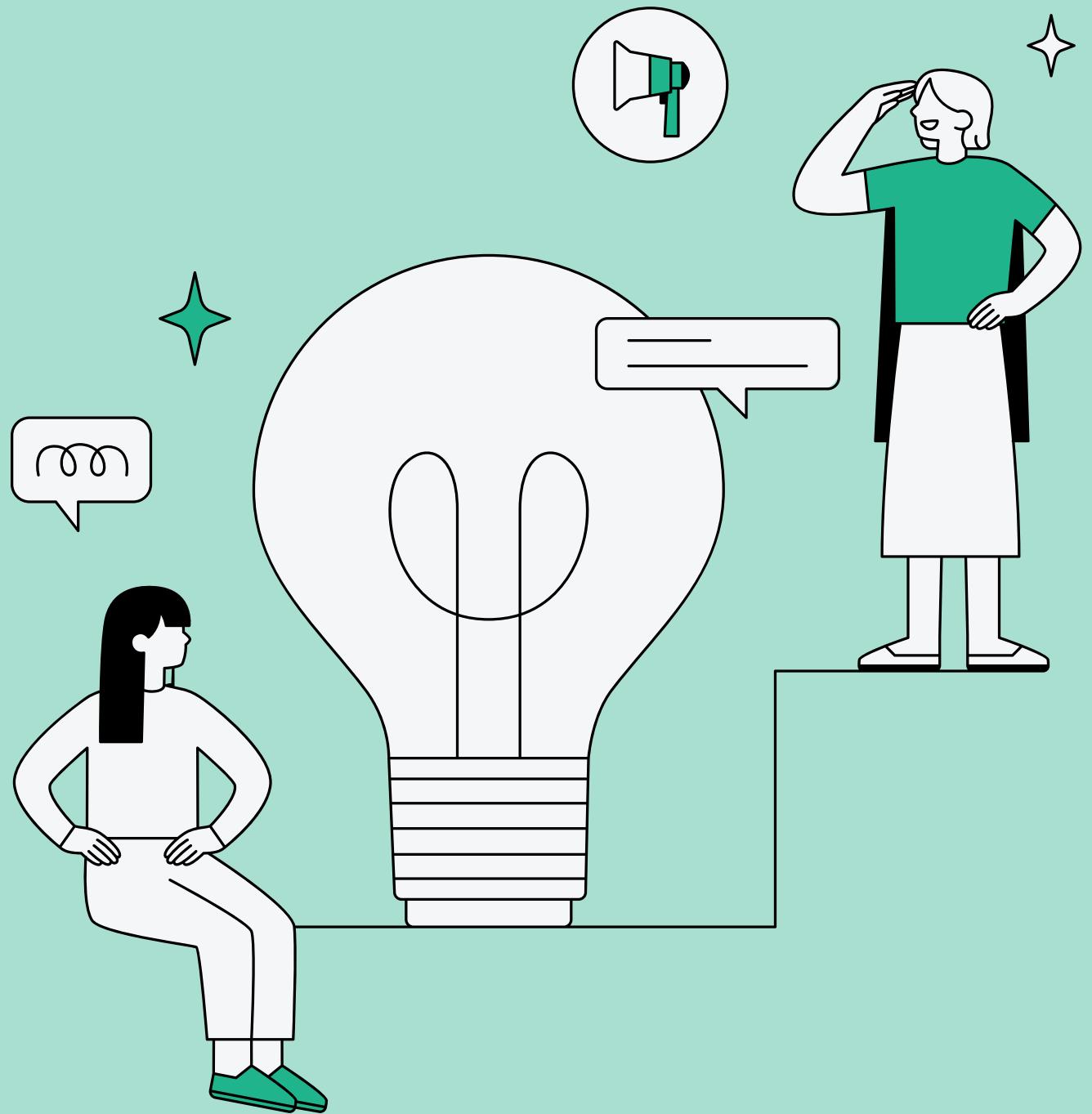
Introduction to Sat Performance Analysis

Every year, American high school students take SATs, which are standardized tests intended to measure literacy, numeracy, and writing skills. There are three sections - reading, math, and writing, each with a maximum score of 800 points.

These tests are extremely important for students and colleges, as they play a pivotal role in the admissions process.

Analyzing the performance of schools is important for a variety of stakeholders, including policy and education professionals, researchers, government, and even parents considering which school their children should attend.

In this notebook, we will take a look at data on SATs across public schools in New York City. Our database contains a single table:



Data Completeness Check

Schools missing percent_tested data: 20

Total schools in dataset: 375

Proportion of incomplete entries: approximately 5%

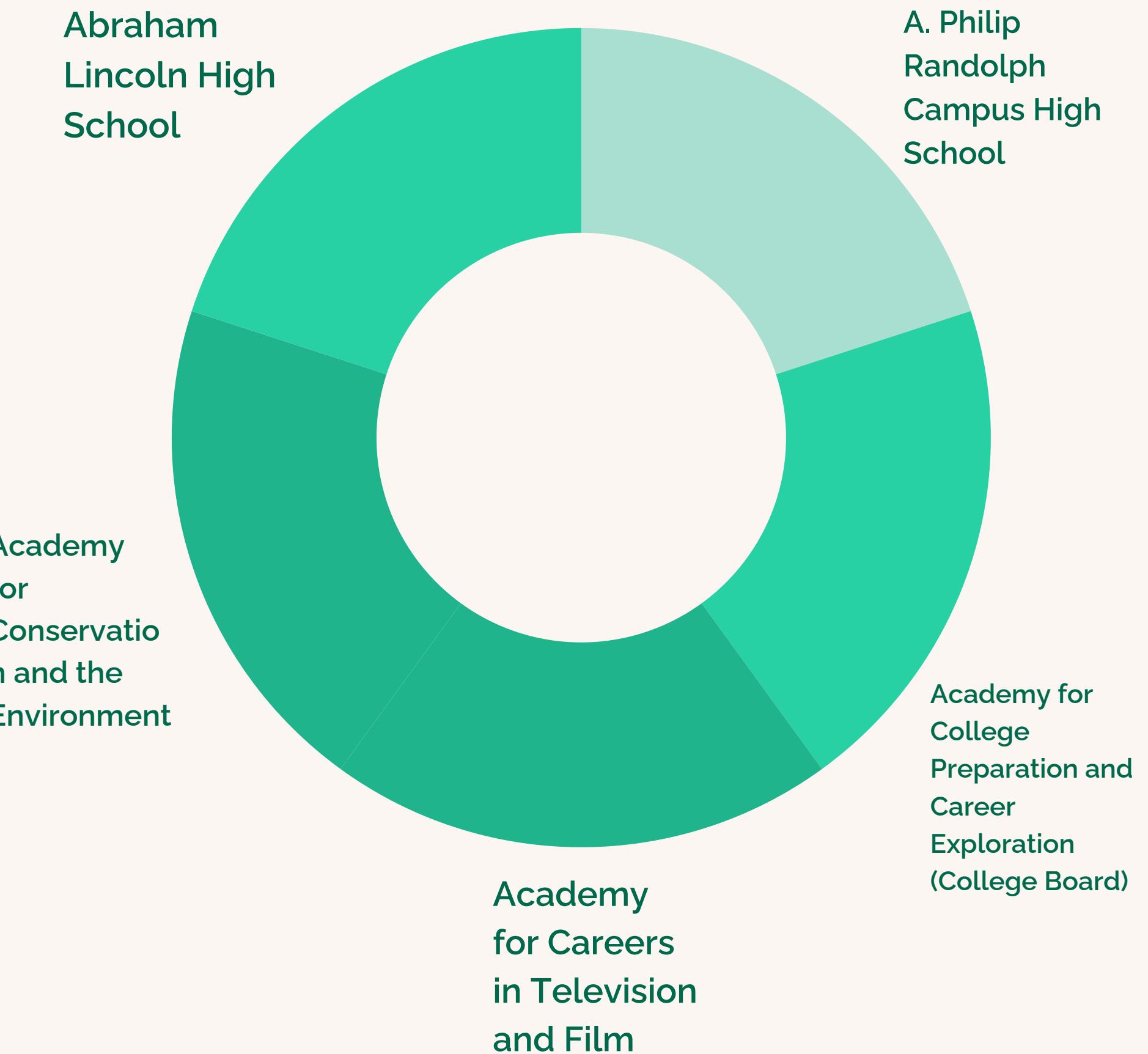
Implication: Majority of data is sufficiently complete for robust analysis



Top 5 schools

There are four schools with average SAT scores of over 2000! Now let's analyze performance by New York City borough.

We will build a query that calculates the number of schools and the average SAT score per borough!

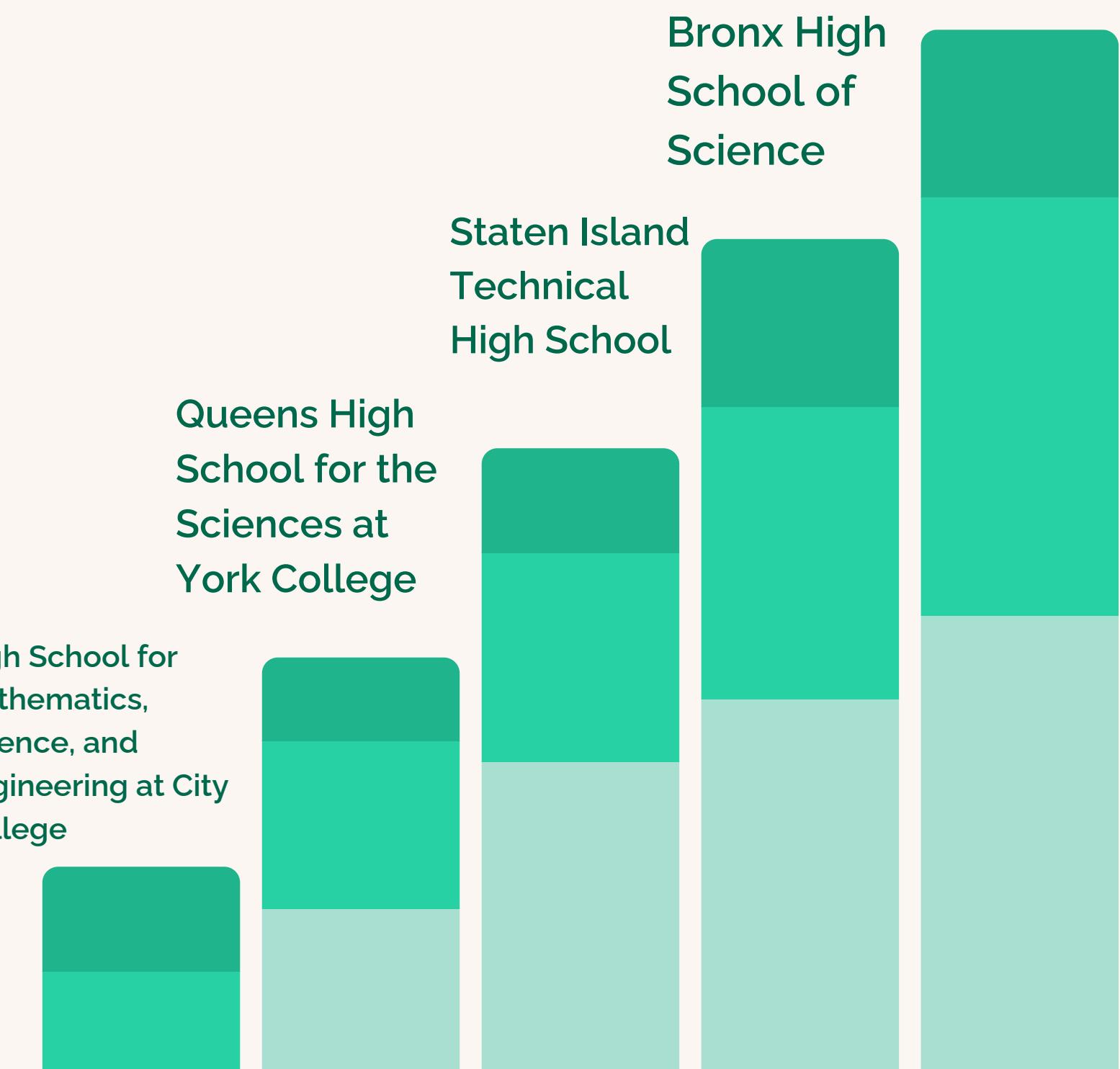


Best schools for math

Out of 375 schools, only 233 (62%) have a unique building_code!

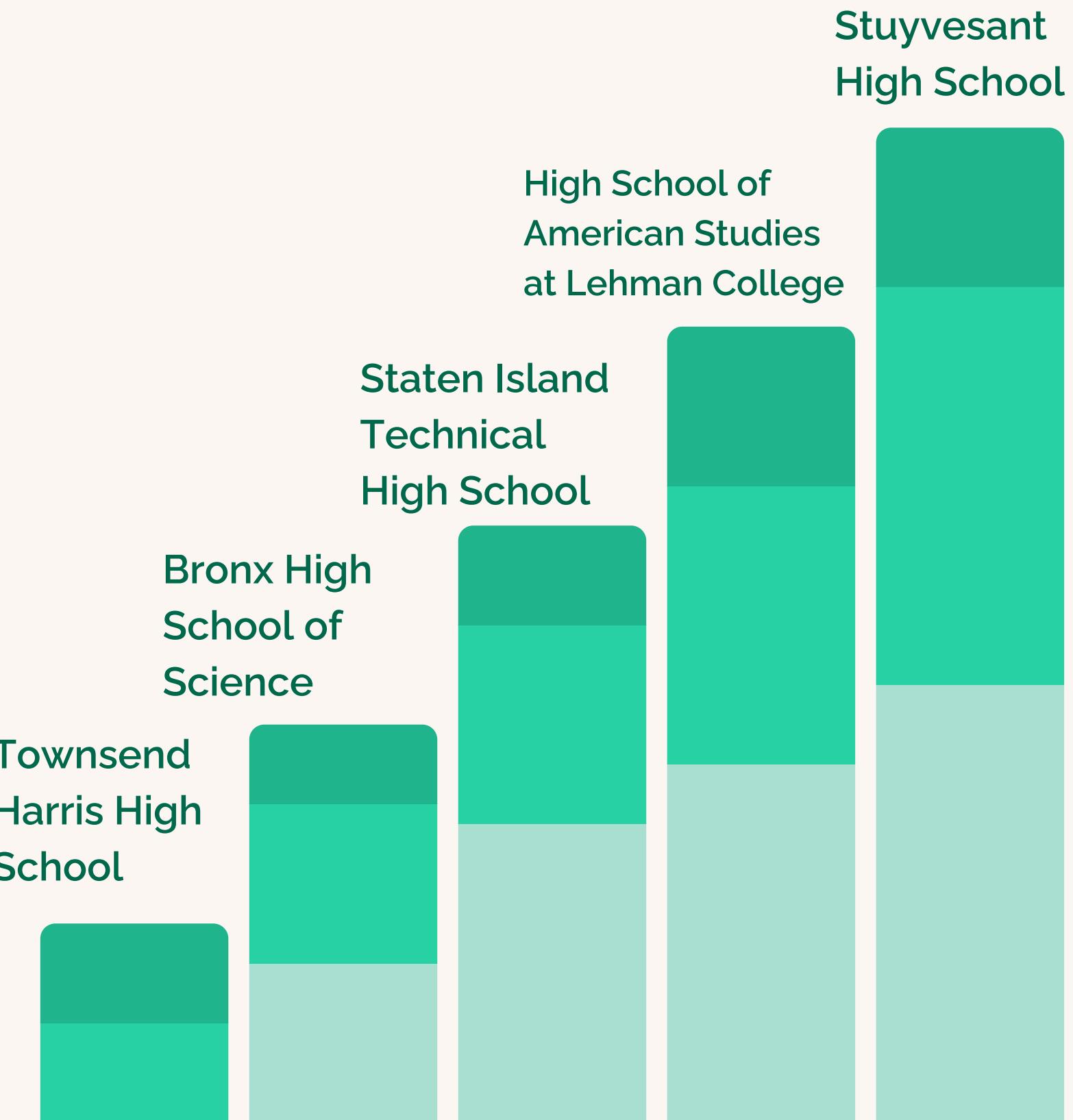
Now let's start our analysis of school performance. As each school reports individually, we will treat them this way rather than grouping them by building_code.

First, let's find all schools with an average math score of at least 80% (out of 800).



Best writing school

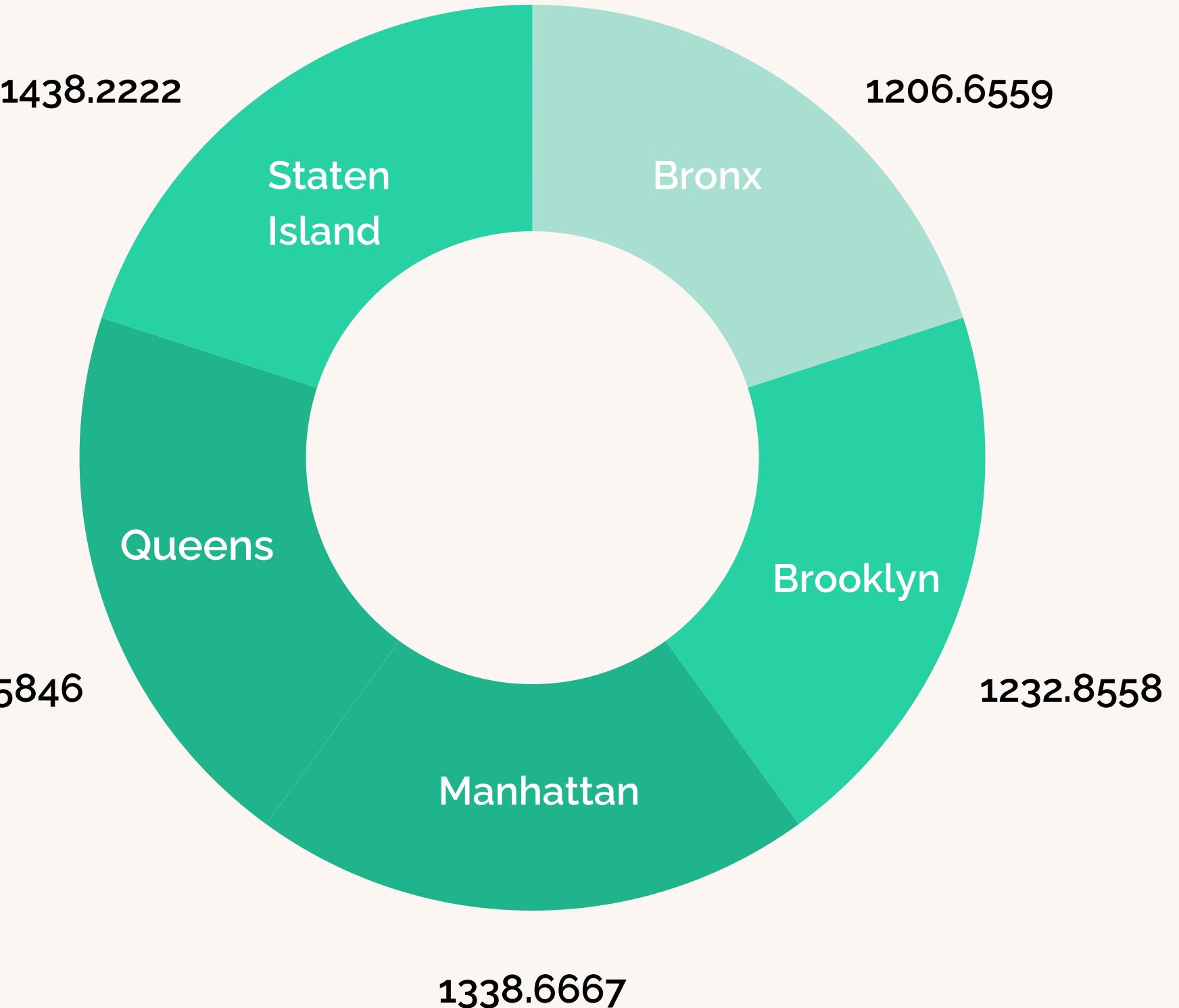
The lowest average score for reading across schools in New York City is less than 40% of the total available points! Now let's find the school with the highest average writing score.



Ranking boroughs

There are four schools with average SAT scores of over 2000! Now let's analyze performance by New York City borough.

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Thank you very much!

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