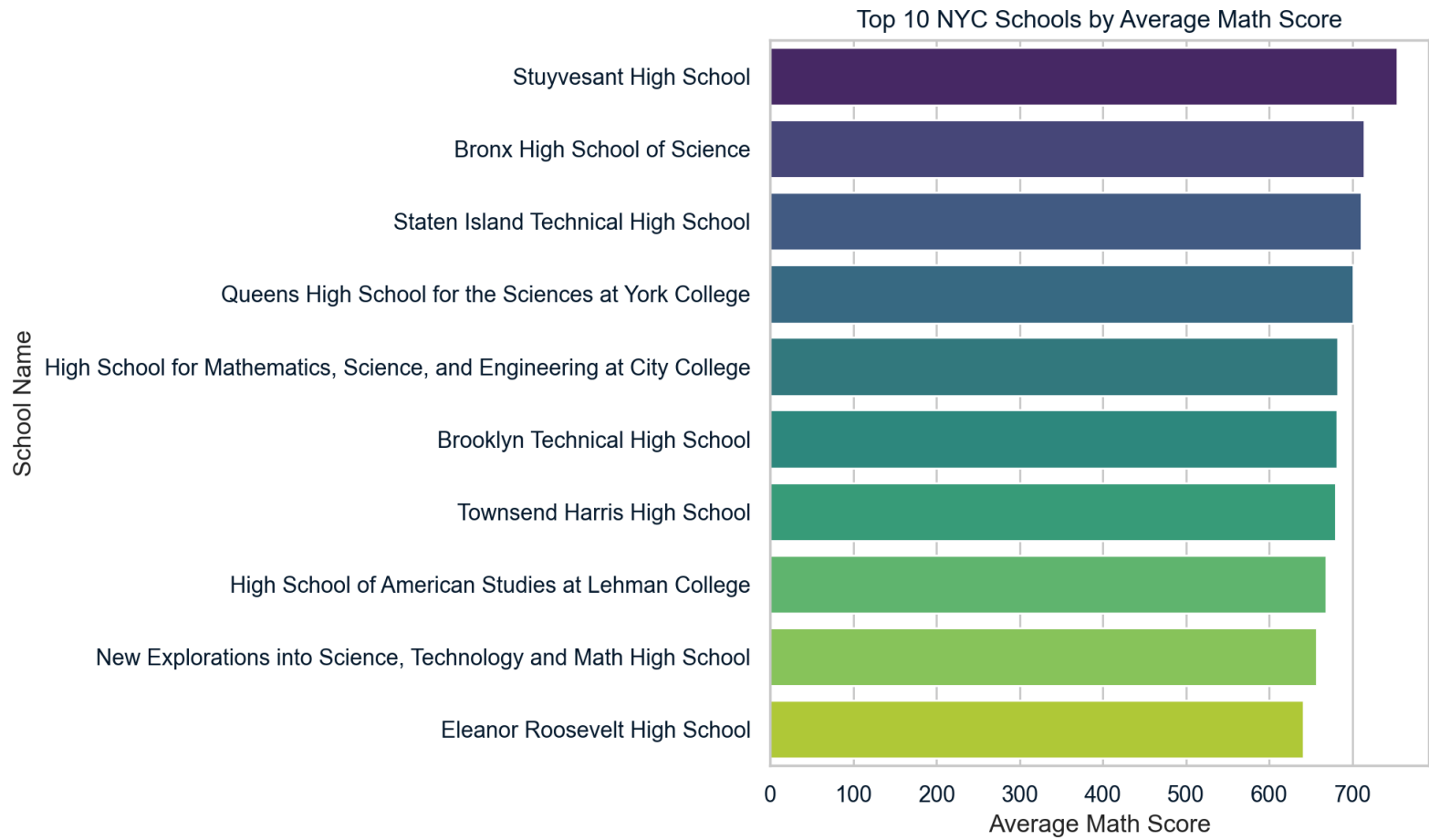Every year, American high school students take SATs, which are standardized tests intended to measure literacy, numeracy, and writing skills. There are three sections - reading, math, and writing, each with a **maximum score of 800 points**. These tests are extremely important for students and colleges,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

	school_name	b...	buildin...	aver...	average_r...	average_...	percent...
0	New Explorations into Science, Technology a...	Manhattan	M022	657	601	601	
1	Essex Street Academy	Manhattan	M445	395	411	387	78.9
2	Lower Manhattan Arts Academy	Manhattan	M445	418	428	415	65.1
3	High School for Dual Language and Asian St...	Manhattan	M445	613	453	463	95.9
4	Henry Street School for International Studies	Manhattan	M056	410	406	381	59.7

Rows: 5   ⤢ Expand

Below are the Schools whose average_math score is equal or above 640, which is more than 80 percent of the total 800 marks and then have been ordered in descending order in other table.

	school_name	borough	buildin...	aver...	average_r...	average_...	percent...
0	New Explorations into Science, Technology a...	Manhattan	M022	657	601	601	
45	Eleanor Roosevelt High School	Manhattan	M855	641	617	631	
68	High School for Mathematics, Science, and E...	Manhattan	M812	683	610	596	
88	Stuyvesant High School	Manhattan	M477	754	697	693	
93	Staten Island Technical High School	Staten Island	R440	711	660	670	
170	Bronx High School of Science	Bronx	X445	714	660	667	
174	High School of American Studies at Lehman ...	Bronx	X905	669	672	672	
280	Brooklyn Technical High School	Brooklyn	K430	682	608	606	
333	Townsend Harris High School	Queens	Q515	680	640	661	
365	Queens High School for the Sciences at York ...	Queens	Q774	701	621	625	

Rows: 10   ⤢ Expand

in...	school_name	borough	average_math
88	Stuyvesant High School	Manhattan	754
170	Bronx High School of Science	Bronx	714
93	Staten Island Technical High School	Staten Island	711
365	Queens High School for the Sciences at York College	Queens	701
68	High School for Mathematics, Science, and Engineering at City Colle...	Manhattan	683
280	Brooklyn Technical High School	Brooklyn	682
333	Townsend Harris High School	Queens	680
174	High School of American Studies at Lehman College	Bronx	669
0	New Explorations into Science, Technology and Math High School	Manhattan	657
45	Eleanor Roosevelt High School	Manhattan	641
5	Bard High School Early College	Manhattan	634
213	Baccalaureate School for Global Education	Queens	633
204	Bard High School Early College Queens	Queens	631
237	Brooklyn Latin School	Brooklyn	625
3	High School for Dual Language and Asian Studies	Manhattan	613
26	NYC Lab School for Collaborative Studies	Manhattan	595

Rows: 375   Expand

index	school_name	average_math
0	Stuyvesant High School	754
1	Bronx High School of Science	714
2	Staten Island Technical High School	711
3	Queens High School for the Sciences at York College	701
4	High School for Mathematics, Science, and Engineering at City College	683
5	Brooklyn Technical High School	682
6	Townsend Harris High School	680
7	High School of American Studies at Lehman College	669
8	New Explorations into Science, Technology and Math High School	657
9	Eleanor Roosevelt High School	641

Rows: 10   Expand

Top 10 NYC Schools by Average Math Score

Insight: The schools listed above have the highest average math scores in NYC. These schools demonstrate exceptional performance in mathematics compared to their peers. The top-ranked school(s) stand out with the highest average math scores, indicating strong math programs or student achievement in these institutions.
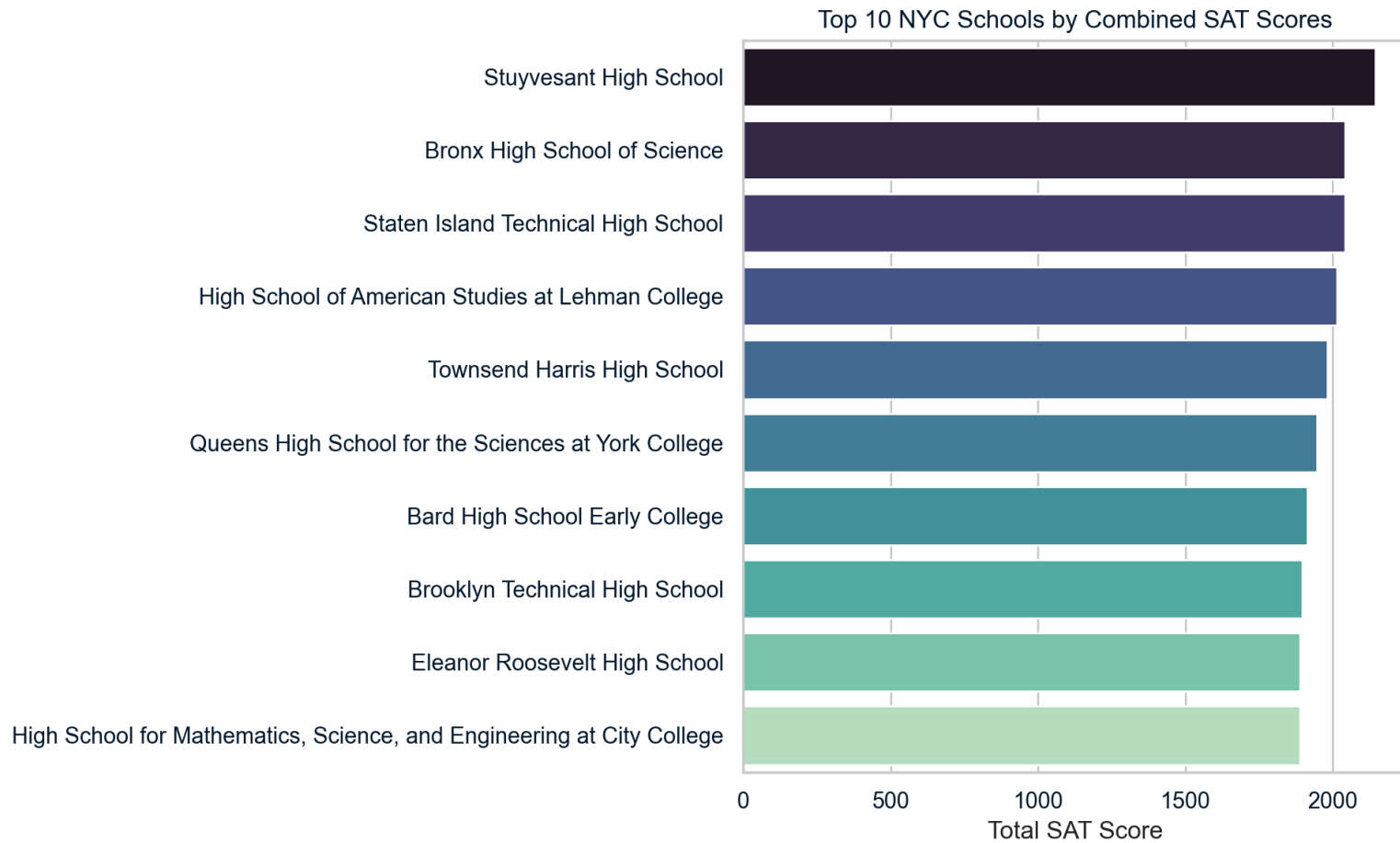
	school_name	b	buildin...	aver...	average_r...	average_...	percent...
0	New Explorations into Science, Technology a...	Manhattan	M022	657	601	601	
1	Essex Street Academy	Manhattan	M445	395	411	387	78.9
2	Lower Manhattan Arts Academy	Manhattan	M445	418	428	415	65.1
3	High School for Dual Language and Asian St...	Manhattan	M445	613	453	463	95.9
4	Henry Street School for International Studies	Manhattan	M056	410	406	381	59.7

Rows: 5

Expand

	school_name	t..
0	Stuyvesant High School	2144
1	Bronx High School of Science	2041
2	Staten Island Technical High School	2041
3	High School of American Studies at Lehman ...	2013
4	Townsend Harris High School	1981
5	Queens High School for the Sciences at York ...	1947
6	Bard High School Early College	1914
7	Brooklyn Technical High School	1896
8	Eleanor Roosevelt High School	1889
9	High School for Mathematics, Science, and E...	1889

Rows: 10

Expand

Top 10 NYC Schools by Combined SAT Scores

Hence above graph indicates that the top school that performs well based on SAT scores is Steyvesant High School in NYC.

	b ...	nu...	av...	...
0	Manhattan	89	1340.13	230.29

Rows: 1 ⤢ Expand

The Borough with the highest Standard Deviation (Performance gap among its Schools) is Manhattan, with 89 schools and a Standard Deviation of 230, showing a huge performance gap among its students.