This report summarizes district wide standardized test results across all schools. The variables studied included school sizes, schools budgets, math and reading scores, as well as percentage of students passing both math and reading tests. The following summaries were created as a result of the analysis:

* **District Summary**: Calculated total number schools and students in the district, total budget for schools, average math and reading scores across the district, and the percentage of students passing math, reading, and both tests for the district.
* **School Summary**: Highlighted school type, as well as showed total students and budget per school, calculated per capita budget, average math and reading scores, and percentage of students passing math, reading, and both tests for each school.
* **School Performance**: Showed top 5 and bottom 5 ranking schools sorted by percentage of students passing both math and reading tests.
* **Grade Level Performance**: Displayed average math and reading scores across grade levels 9-12 for each school.
* **Spending summary**: Displayed average math and reading scores, as well as percentage passing math, reading, and both tests across 4 levels (“<$585, “$585-630”, “$630-645”,

“$645-680”) of per capita spending.

* **Size summary**: Displayed math and reading summary statistics across 3 levels (“<1000”, “1000-2000”, “2000-5000”) of student population.
* **Type summary**: Displayed math and reading summary statistics for both District and Charter schools.

The first takeaway from this analysis is the drastic difference in test results for charter schools vs. district schools. Charter schools performed drastically better than district schools, highlighted by 90.43% of students passing both math and reading tests, whereas just 53.67% of district students passed both tests. Given that all district schools fall in the large category for student population, and only 1 charter school falls within that category, it is hard to identify if the difference in test scores can be explained solely by the fact district schools have larger student populations. Perhaps insight into student faculty ratio could help explain the findings. Another possible explanation could be that charter schools have a gpa or aptitude requirement to enroll, meaning their student population is systematically different from that of the district schools.

When analyzing district schools versus charter schools, we can also see that they appear to be struggling with the math tests. With an average math score of just 76.96 for district schools, compared to an 80.97 score for reading tests, we can see this difference. Furthermore, just 66.54% of students passed the math tests, whereas 80.80% of students passed the reading tests. When compared to charter schools, there is a slight dip in average math scores (83.47), versus average reading scores (83.90), but it is much more negligible than the difference observed in district schools. There is also a slight difference in percentage of students passing math tests (93.62), versus reading tests (96.59), but again, it is much smaller than the difference observed for district schools. Without further insights into how the students were prepared for the test and how the test was administered, it is tough to draw any further conclusions. It appears as though the district schools should further analyze methods for teaching math and preparing students for the math test.