Analysis Summary:

From our report we were able to make many assessments about the state of math and reading performance across various schools. Our first big picture came with the “per school summary” where we were able to organize the most important pieces of information which we use to make assessments about school performance, all in one large dataframe. This information covers financial data, including the school’s ability to fund each of its students, measured in total school budget and per student budget. We were also able to largely determine school performance by tracking the average scores in math and reading as well as the pass percentages for each individual class as well as an overall percentage, describing the school’s ability to get any given student to pass math and reading.

Conclusions:

With this dataframe, we draw major conclusions, such as the massive differential in overall performance between charter schools and district schools. While charter schools have roughly 16% more students passing reading compared to district schools, a whopping 27% more students pass math in charter schools compared to district schools making for an overall 37% difference in passing both classes. By this we can make strong arguments that charter schools push their kids to achieve higher, grade-wise, in these core subjects compared to district schools. Whether this can be attested to the larger student population in district schools or another reason, the data clearly points to grade success for charter schools.

The second major conclusion we can draw comes with observing the differences in school budgets per student. Contrary to intuition, we find that the more a school spends on each student, the lower their grades result in across all metrics. As far as determining what a budgeting “sweet spot” would be, continuing the trend of decreasing budget per student would result in undoubtable failure for schools that budget no money to any of their students. Working off what we have, and the fact that it isn’t likely for schools to get higher than 92% overall passing rate, we can say a $580 - $585 is our “sweet spot” for budgeting and any more or less money for the students would correlate with decreased performance.