Assessment Brief

Number 1

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STANFORD 10 TEST
ANNUAL DIVISION HIGHLIGHTS

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ABSTRACT

Virginia Beach City Public Schools partial battery scores (combination of reading, language, and mathematics subtests) were above the 50th percentile for the past three years. Except for grade 4 Total Language, all grade level content area totals have either remained stable or steadily increased from 2005 to 2007.

On average, African-American students in all grade levels held the lowest percentile ranks in all content area totals. For the past three years, the percentile ranks for grade 9 students have been below the 50th percentile on the Mathematics Procedures subtest.

Background

The *Stanford Achievement Test Series*, Tenth Edition, (Stanford 10) is a nationally norm-referenced test that is administered to all Virginia Beach public school students in grades 4, 6, and 9 in the fall of each school year. The test results provide information on how Virginia Beach students compare to students across the nation.

The Stanford 10 measures students' achievement in reading, mathematics, language, science, and social science. Virginia Beach students in grades 4, 6, and 9 take the Stanford 10 in reading, language, and mathematics. All test questions on the Stanford 10 are multiple-choice and reflect academic content that is commonly taught in schools across America.

The Stanford 10 reading test includes subtests in Reading Vocabulary and Reading Comprehension. (The Word Study Skills subtest is included as part of the test for fourth graders only.) Reading passages include original short stories and articles written by published authors of children's and young people's literature. Three types of reading are included: literary, informational, and functional. The language test measures prewriting, composing, editing, and spelling in a holistic fashion that reflects the developmental nature of the writing process. The questions are presented in the context of scenarios that engage students in the assessment and give them a real reason to answer the questions. The Stanford 10 mathematics subtests include Mathematics Problem Solving and Mathematics Procedures.

Key Topics:

These subtests assess the mathematical content recommended by the National Council of Teachers of Mathematics and include number sense and operations; patterns, relationships, and algebra; geometry and measurement; and data, statistics, and probability. Questions are constructed so that students apply basic mathematic procedures and problem-solving strategies to arrive at a solution.

The data presented in this report are based on percentile ranks. Percentile ranks can be used to reliably determine how Virginia Beach students performed in comparison to the national norm group. The national norm group for Stanford 10 is based on the performance of students across the nation who were part of the national standardization sample in 2002. Percentile ranks range from a low of 1 to a high of 99, with 50 denoting average performance. The percentile rank corresponding to a given score indicates the percentage of a reference group obtaining scores equal to or less than that score. Scaled scores do provide more reliable indicators of gain/loss and may be compared from one grade level to another.

Method

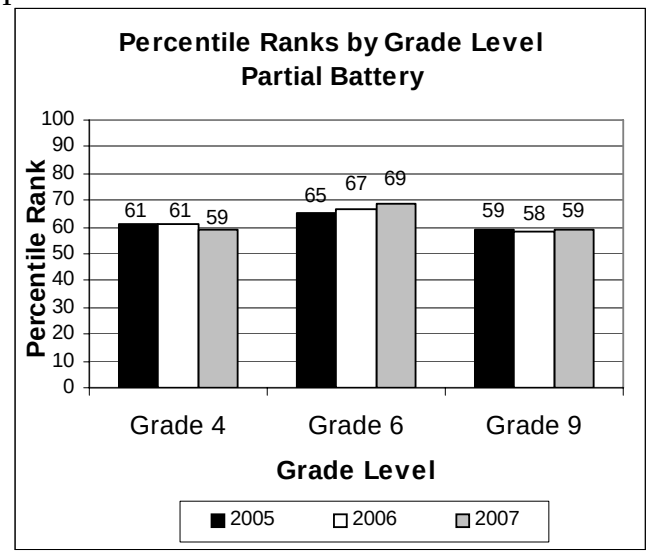
The Virginia Beach data summarized herein were extracted from the district's data warehouse after Stanford 10 scores were linked with student demographic records. Total Reading, Total Mathematics, and Total Language scores include only scores for students who took all subtests within the subject area. Partial Battery scores are only available for students who have taken all subtests in Total Reading, Total Mathematics, and Total Language. South Eastern Cooperative Educational Program (SECEP) results are not included in the division or school summary results reported. Center students (Center for Effective Learning, Virginia Beach Central Academy, and Open Campus) are included in the division summary, but excluded from the individual school summary results shared in this report. In addition, American Indian and Hawaiian/Pacific Islander students are excluded from the subgroup summary reporting because they comprise less than 1 percent of the student population. Percentile rank changes of three percentile points or more have been noted in this report.

OVERALL PERCENTILE RANKS
Fall 2005, Fall 2006, Fall 2007

Partial Battery (Reading, Mathematics, and Language combined)

The percentile ranks for grades 4 and 9 have remained steady over the past three years as seen in Figure 1. The percentile ranks for grade 6 have steadily increased 4 percentage points from 2005 to 2007. Overall, grade 6 had higher percentile ranks than grades 4 and 9 in 2005, 2006, and 2007.

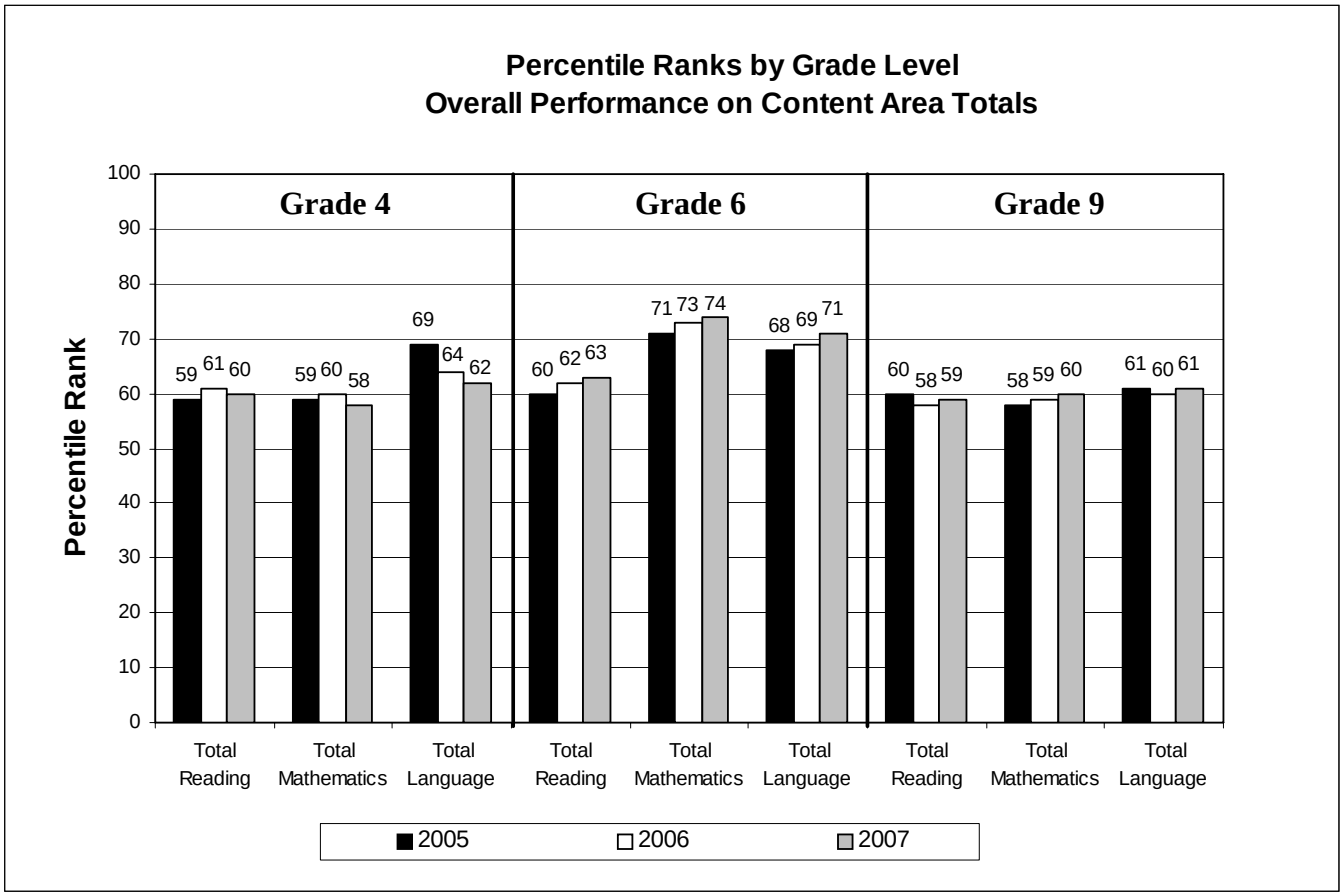
Figure 1



Content Area Totals

Even though the percentile ranks for grade 4 Total Language are higher than Total Reading and Total Mathematics, they have steadily decreased by 7 percentile points over the past three years as seen in Figure 2. The percentile ranks in grade 4 for both Total Reading and Total Mathematics have remained stable in 2005, 2006, and 2007. The percentile ranks for grade 6 have steadily increased by 3 percentage points each in Total Reading, Total Mathematics, and Total Language over the past three years. The percentile ranks for grade 9 have remained stable in Total Reading, Total Mathematics, and Total Language.

Figure 2

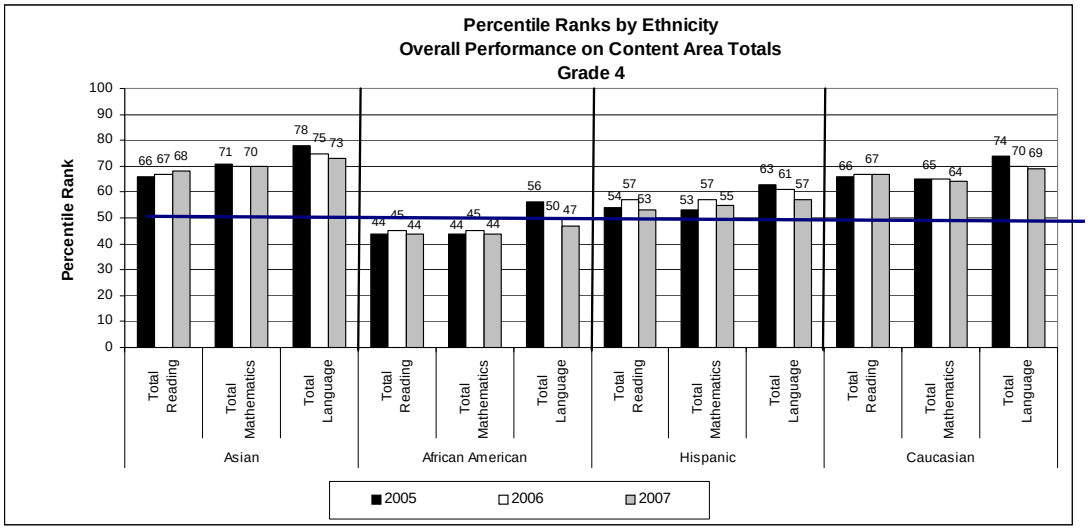


Content Area Totals by Ethnicity

Grade 4

Overall, the percentile ranks for grade 4 have remained steady in Total Reading and Total Mathematics for all ethnic groups over the last three years as seen in Figure 3. Although the percentile ranks for Total Language were the highest for each ethnic group in 2005, 2006, and 2007, the percentile ranks have been decreasing steadily each year. Grade 4 African-American students have been performing below the 50th percentile in Total Reading and Total Mathematics over the past three years. As a group, grade 4 African-American students performed below the 50th percentile in Total Reading, Total Mathematics, and Total Language in 2007. On average, Asian students have outperformed all other ethnic groups in 2005, 2006, and 2007.

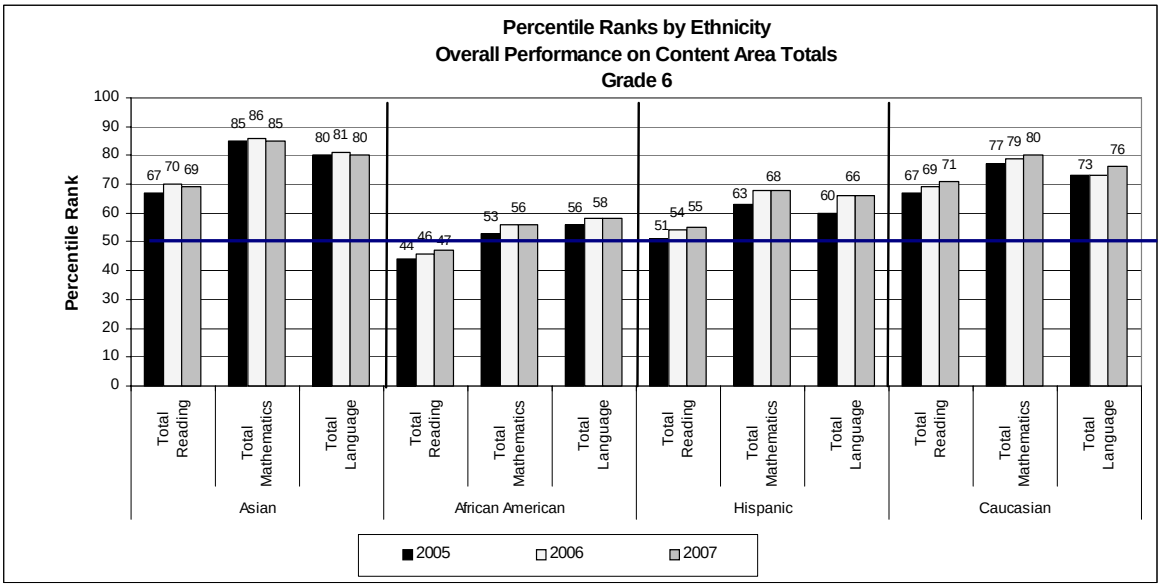
Figure 3



Grade 6

Overall, the percentile ranks for grade 6 Asian students have remained steady in Total Reading, Total Mathematics, and Total Language as seen in Figure 4. The percentile ranks for grade 6 African-American students have increased from 2005 to 2007 in Total Reading and Total Mathematics by 3 percentage points each, while Total Language remained steady over the past 3 years. The percentile ranks for grade 6 Hispanic and Caucasian students have increased in Total Reading, Total Mathematics, and Total Language from 2005 to 2007. On average, grade 6 African-American students have been performing below the 50th percentile in Total Reading over the past three years. In most comparisons, Asian students have outperformed all other ethnic groups.

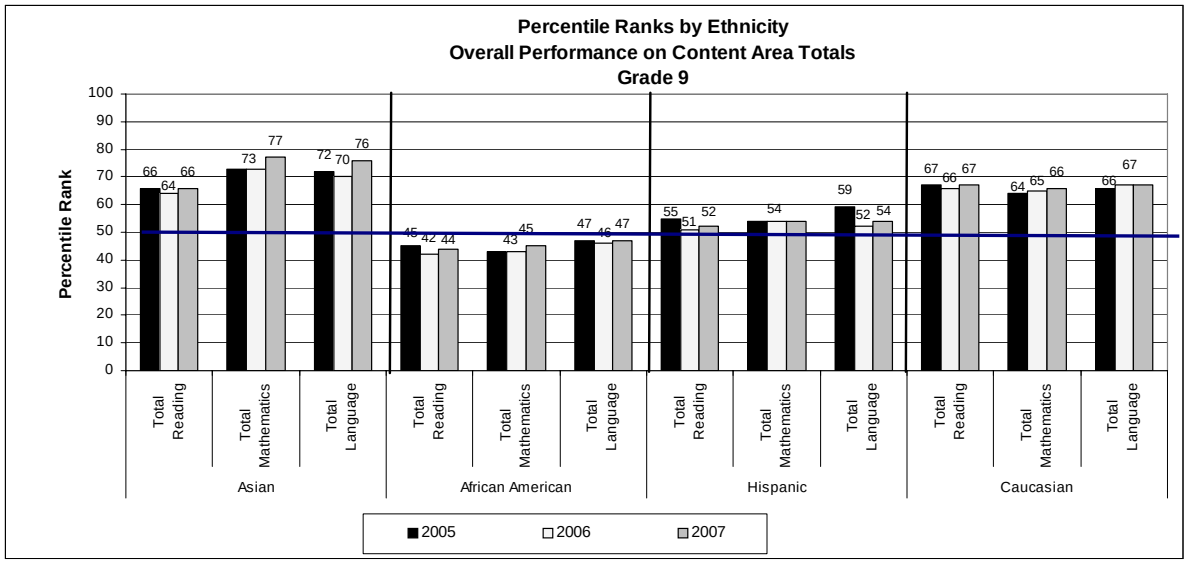
Figure 4



Grade 9

Overall, the percentile ranks for grade 9 African-American and Caucasian students have remained steady in Total Reading, Total Mathematics, and Total Language as seen in Figure 5. The percentile ranks for grade 9 Asian students have increased in Total Mathematics and Total Language by 4 percentage points each, while Total Reading remained steady from 2005 to 2007. Overall, the percentile ranks for grade 9 Hispanic students decreased in Total Reading by 3 percentage points and Total Language by 5 percentage points, while Total Mathematics remained steady from 2005 to 2007. Grade 9 African-American students have been performing below the 50th percentile in Total Reading, Total Mathematics, and Total Language over the past three years. Asian students have outperformed all other ethnic groups in Total Mathematics and Total Language, while Caucasian students outperformed all other ethnic groups in Total Reading for the past three years.

Figure 5

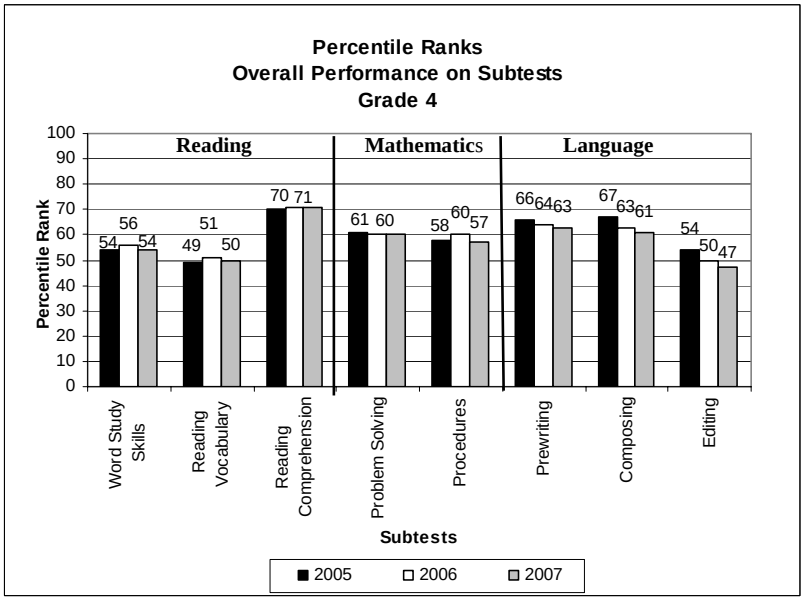


Subtest Performance

Grade 4

The percentile ranks for grade 4 have remained steady on reading and mathematics subtests over the past three years as seen in Figure 6. The percentile ranks for grade 4 were higher in Reading Comprehension than any other grade 4 subtests. The percentile ranks for grade 4 students have steadily decreased on all of the language subtests 3 to 7 percentage points from 2005 to 2007.

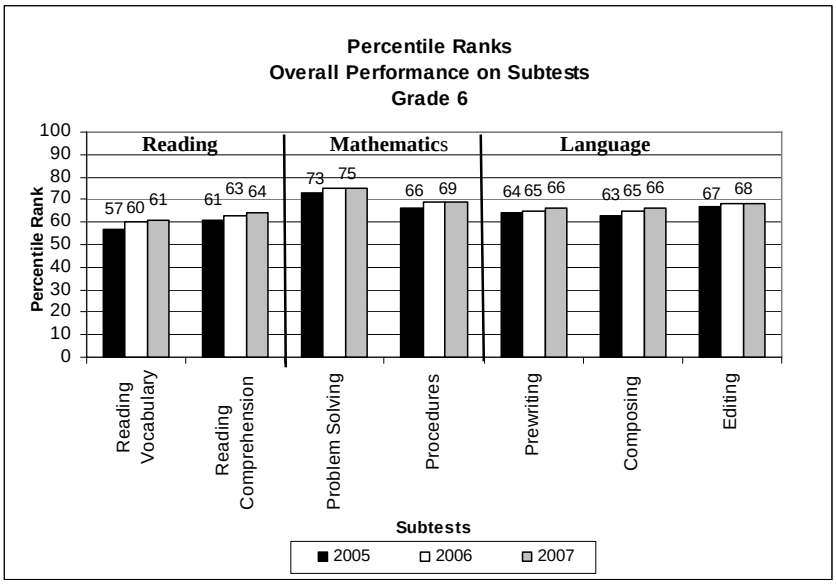
Figure 6



Grade 6

The percentile ranks for grade 6 have steadily increased on both reading subtests, Mathematics Procedures, and Language Composing from 3 to 4 percentage points from 2005 to 2007 as seen in Figure 7. The percentile ranks for grade 6 Language Prewriting and Mathematics Problem Solving have remained stable over the past three years. The percentile ranks for grade 6 were higher in Problem Solving than any other subtest for 2005, 2006, and 2007.

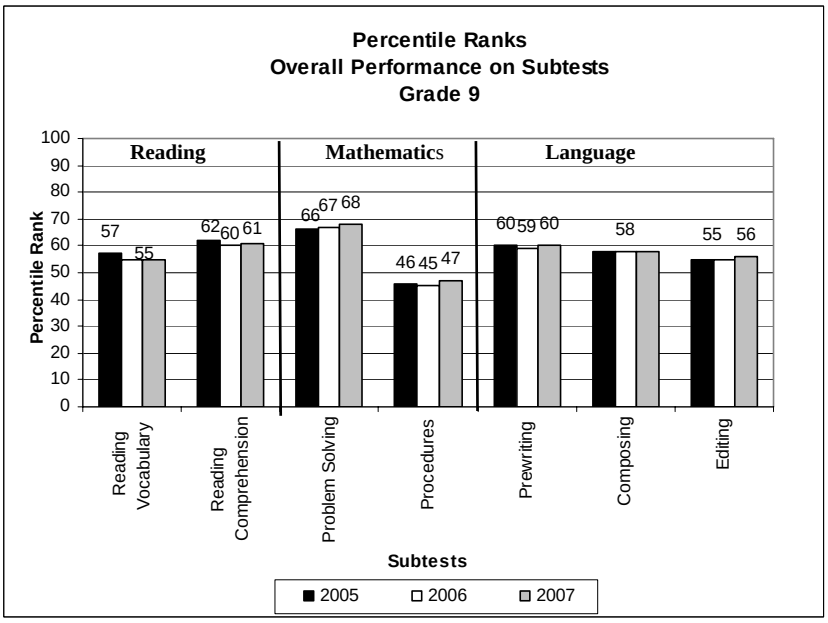
Figure 7



Grade 9

The percentile ranks for grade 9 have remained consistent on all subtests over the past three years with a slight increase in Mathematics Problem Solving as seen in Figure 8. As a group, grade 9 students scored higher in Mathematics Problem Solving than any other subtest for 2005, 2006, and 2007.

Figure 8



School Performance - Partial Battery percentile ranks reported in 10 percentile increments are as follows:

Grade 4

The number of elementary schools scoring at or above the 50th percentile national average for the Partial Battery has decreased over the past three years as seen in Table 1. In 2005, 52 of the 56 elementary schools scored at or above the 50th percentile for the Partial Battery. In 2006, 50 of the 56 schools scored at or above the 50th percentile, while in 2007, 48 of the 55 schools scored at or above the 50th percentile.

Table 1

Grade 4 - Partial Battery Percentiles			
Number of Schools			Percentile Range
2005	2006	2007	
0	0	0	90-99
1	1	1	80-89
5	7	4	70-79
24	19	20	60-69
22	23	23	50-59
3	5	7	40-49
1	1	0	30-39

Grade 6

The number of middle schools scoring at or above the 50th percentile national average for the Partial Battery has remained stable from 2005 to 2007. In 2006 and 2007, 100 percent of the middle schools scored at or above the 50th percentile national average in Partial Battery.

Table 2

Grade 6 - Partial Battery Percentiles			
Number of Schools			Percentile Range
2005	2006	2007	
1	1	1	90-99
0	0	0	80-89
1	5	6	70-79
10	7	6	60-69
1	1	1	50-59
1	0	0	40-49
0	0	0	30-39

Grade 9

The number of high schools scoring at or above the 50th percentile national average for the Partial Battery remained relatively stable over the past three years.

Table 3

Grade 9 - Partial Battery Percentiles			
Number of Schools			Percentile Range
2005	2006	2007	
0	0	0	90-99
0	0	0	80-89
0	0	1	70-79
6	5	5	60-69
4	5	4	50-59
1	1	1	40-49
0	0	0	30-39