# Annual Report on End of Year Tests and Assessments

## Exhibit A: ERB Skills Testing - Overview

Standardized achievement tests provide important information to both the school and parents. However, we should be clear about what are and are not the valid implications of the information. SFDS believes that a comprehensive assessment of the school's curriculum and instructional program must include a variety of techniques with not only standardized tests, but also an analysis of a student's portfolio of her/his actual school work, direct observation of teaching, and curriculum reviews benchmarked against state and national standards. With this in mind, following is a summary of our results along with a note regarding meaningful differences in percentiles and how SFDS uses the information we receive from ERB skills testing.

### Summary results of 2011 ERB scores

The SFDS students consistently score higher than the group norm for students in Independent Schools. This year and in years past, on average, SFDS students score between the 65th and 75th percentile compared to the ERB norm for students in Independent Schools.

- Most SFDS students score above the 50th percentile compared to Independent School norms.
- A little less than half of SFDS students score between the 50th percentile and the 75th percentile.
- Another group, also slightly less than half, score above the 75th percentile compared to the Independent School norm.
- A small percentage of SFDS students score below the 50th percentile.

This summary conclusion was observed by reviewing the subtest scores for each grade this year. We then compared this year's scores to the scores of the grade level cohort from the two previous years (same students a year and two years younger) and the same grade level from each of the previous two years. The ERB provides a summary providing average percentile scores for SFDS students and compares them to National, Suburban and Independent Scores norms. Historically, Suburban students score higher than the National sample, and Independent School students score higher than Suburban norms.

- A student in independent schools who scores at the 50th percentile compared to his/her independent school peers, scores at the 90th percentile compared to a national sample of students.

### A note about ERB percentiles and statistical reliability

When assessing ERB scores, a critical question is "What is a meaningful difference in percentile scores?" The answer to this question is a statistical calculation called the "Standard Error of Measurement (SEM)," and is defined as the extent to which the students' scores would differ if they were retested with a different set of questions measuring the same skills at the same level of difficulty. For ERB tests, when nearly all the student scores sit in the upper range of number of correct items (most students only miss a few items), the SEM is large.

ERB publishes the SEM for each subtest, and it's important to note that because nearly all scores in the Independent School group are very close to each other, small differences in correct answers create larger differences in percentile scores. Consider the following chart taken from this year's 6th grade ERB scores in Reading Comprehension:

| Student | A | B | C | D |
|---|---|---|---|---|
| Items correct out of 37 total | 29 | 33 | 34 | 36 |
| Independent School percentile | 45% | 76% | 84% | 97% |

The difference between the 45th percentile and the 97th percentile is 7 items out of 37 total. Student D at 97th percentile answered 3 more items correct than Student B, and is rated 21 percentile points higher. According to the SEM, there is little meaningful difference between the 75th and 90th percentile. In terms of classroom performance, there may also be little difference between the student who scored at the 75th percentile and the student who scored at the 90th percentile – both are able to read and understand the same level of texts.

How SFDS utilizes ERB test scores

Given the overall high performance of SFDS students and the statistical issues inherent in any standardized test, how do our teachers and administrators use the test results?

- We review the individual results to identify students who are scoring below the 40th percentile of the Independent Score norms. Those students should be receiving supplemental instruction to enable them to continue to master the basic skills tested by the ERBs. If they are not currently receiving assistance, we will contact their families to discuss options for supplemental instruction.

- We look for student scores that differ in a significant way from their classroom performance. For example, there can be students who score high on tests but experience difficulty with classroom learning tasks. There can also be students who score low on ERBs but are performing very well on classroom tasks. In each case, we will review the student's situation to determine how best to respond.

- We examine grade level trends on each of the subtests to determine if specific aspects of SFDS curriculum and instruction may need revision and improvement.

As you will see, the enclosed ERB documents demonstrate our strong performance on ERB skill tests. I encourage you to review the sample questions along with the scores, and then take a moment to visit the documents provided on critical thinking assessment tasks. Both types of testing make valid contributions to our students' development and academic performance, and we believe it is important to understand the implications of both. Thank you for taking the time to review this document and better understand our stance on ERB tests.

## MATHEMATICS

29. What is the average (mean) of $\frac{1}{4}, \frac{1}{3}, \frac{2}{3}$, and $\frac{3}{4}$?

(A) $\frac{1}{2}$

(B) $\frac{3}{5}$

(C) 1

(D) 2

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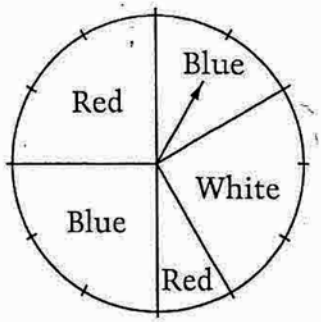
30. Of the following, which is the closest approximation to $\frac{198}{1{,}604}$?

(A) $\frac{1}{8}$

(B) $\frac{2}{17}$

(C) $\frac{1}{16}$

(D) $\frac{1}{80}$




31. What is the probability that the spinner shown above will land on Blue?

(A) $\frac{1}{4}$

(B) $\frac{1}{3}$

(C) $\frac{2}{7}$

(D) $\frac{5}{12}$

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32. If $m = 20$, which of the following is closest to 10?

(A) $10 \times \frac{1}{m}$

(B) $10 \times m$

(C) $10 + \frac{1}{m^2}$

(D) $10 - \frac{1}{m}$



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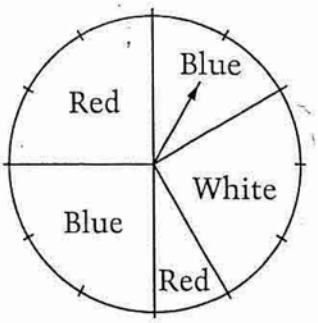


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## San Francisco Day School

Math ERB Scores 2011
SFDS Average Scores compared to Independent School Norms *

| | Grade 5 | Grade 6 | Grade 7 |
|---|---|---|---|
| Math 1&2 | 62% | 81% | 83% |
| Quant Reasoning | 83% | 80% | 88% |

* For example, in Grade 7 Math 1&2, on average SFDS students answered more questions correctly than 83% of comparable independent school students.

** Note: This sample of students does not include those students who qualify for testing accommodations such as extended time and/or use of calculator.
-- The average for the students with testing accommodations was abou 50th percentile; they score about the same as other independent sch students.