

<b>INFORMATION ONLY</b>
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March 28, 2006

TO THE ADMINISTRATOR ADDRESSED:

SUBJECT: Performance Standards for the TAKS Grade 8 Science Test

In a few weeks the first administration of the Texas Assessment of Knowledge and Skills (TAKS) grade 8 science test will take place across the state. This middle school science assessment, which measures Texas Essential Knowledge and Skills (TEKS) student expectations taught at grades 6, 7, and 8, will serve as an important bridge between the elementary grade 5 TAKS science test and the grade 10 and exit level TAKS science tests. The addition of the middle school science assessment will augment our student assessment program's ability to provide Texas students, schools, and the public with an accurate gauge of students' academic progress in learning the key components of the state-mandated curriculum.

**Setting Performance Standards**

In June 2005 a standard-setting panel was convened to discuss the performance standards for the grade 8 science test. This panel was composed of Texas teachers, science coordinators, campus administrators, education service center science specialists, and community and business leaders. After receiving thorough training in the standard-setting process and systematically discussing what students should know and be able to do in grade 8 science, the panelists made judgments about the number of items that students should have to answer correctly to meet the standard and achieve commended performance. The panel evaluated the reasonableness of their judgments in relation to the adopted standards for the TAKS science tests at grades 5, 10, and exit level and made a final recommendation for specific performance standards for Met Standard and Commended Performance.

At its meeting in October 2005, the State Board of Education adopted the standard-setting panel's recommendations for the TAKS grade 8 science test and established a two-year phase-in period for the Met Standard requirement. Like other TAKS tests, the standard error of measurement (SEM) statistic will be used to determine the standards during this phase-in period. The passing standard will be set at 2 SEM below the panel's recommendation in 2006, at 1 SEM below in 2007, and at the panel's recommendation in 2008.

**Met Standard in 2006**

In 2006, eighth-grade students will be required to answer correctly 27 of 50 items to meet the standard.

**Commended Performance Standard for 2006**

In October 2005 the State Board of Education also approved the Commended Performance standard at the panel's recommendation, with no phase-in period. Therefore, for the spring 2006 administration, students must answer correctly 44 of 50 items to achieve commended performance, which is a scale score of 2400.

### **Equating and Performance Standards for Future Years**

Although the rigor of the passing standard will increase during the phase-in period, all grade 8 science tests will be equated to the April 2006 test in order to ensure that the difficulty of the test remains consistent from year to year. Equating these tests will be accomplished through converting each raw score point to the TAKS scale score system—2100 at Met Standard and 2400 at Commended Performance. Maintaining comparability of these scale scores from year to year even during the phase-in period) helps to ensure that all students are evaluated fairly. Through the scale scores, the level of performance required to meet the standard and achieve commended performance will remain the same from year to year. This is true even if the grade 8 science tests vary slightly in their difficulty across administrations, due to the fact that a new test is used for each administration. For this reason, the number of items students may need to answer correctly may vary from year to year. For example, if a test is slightly more difficult than the test given the year before, students may need to answer fewer items correctly to meet the standard; but if a test is slightly easier than the test given the year before, students may need to answer more items correctly. Through this equating process, the same “hurdle” is established for each grade 8 science test administered.

For the spring 2007 grade 8 science test, the Met Standard will be 1 SEM below the panel recommended standard. This corresponds to approximately 30 items correct out of 50 items tested. The “approximately” piece is very important to keep in mind. The 1 SEM standard is 30/50 items on the spring 2006 test form. If the test in 2007 test is constructed to exactly the same difficulty as that of the 2006 test, then the met standard for that year will be exactly 30/50 items. Depending on the items that are available to be placed on this new test form, a slightly easier test (meaning students would have to get more items right) or a slightly harder test (students would not have to get as many items correct) may be necessary.

Likewise the Met Standard for the spring 2008 test will be based on the difficulty of the original spring 2006 test. The panel recommended standard will be approximately 33 items correct out of 50. Again the number of items needed to meet this standard will be equivalent in difficulty to 33/50 items on the spring 2006 test form. In spring 2008 the panel recommended standard will be a scale score of 2100. The 2100 scale score will be the Met Standard for all future years unless the State Board of Education adopts a formal change.

### **Phase-in Report**

The standard TAKS reports for spring 2006 will include a phase-in summary report for grade 8 science to assist districts during the transition period. This report may help districts evaluate and enhance their middle school instructional programs in science before students have to meet the panel’s recommended standard in 2008.

### **Questions**

Additional information about TAKS and the standard-setting process is available on the agency website at <http://www.tea.state.tx.us/student.assessment>. If you have questions or comments regarding the implementation of performance standards for the grade 8 TAKS science test, please contact the Student Assessment Division at (512) 463-9536.

Please share this information with appropriate staff in your district who might find it informative. Thank you for your assistance in disseminating this information.

Sincerely,

Shirley J. Neeley

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