For Immediate Release: April 27, 2016

Contact: Charles B. Pyle, Director of Communications, (804) 371-2420
Michelle Stoll, Communications Projects Coordinator, (804) 225-2543

Computer Adaptive Technology
Means Shorter Math Tests for Students

RICHMOND, Va. — The expansion of computer adaptive testing will result in approximately 380,000 Virginia elementary and middle school students taking shorter Standards of Learning (SOL) mathematics tests this spring. For example, the computer-adaptive version of the online test third graders are taking has 32 items, 18 fewer than the 50-item tests grade-3 students took last year.

The computer-adaptive versions of the grade-7 and grade-8 math tests — also new this year — each have 53 items, seven fewer than the 60 questions on the traditional versions of the tests. Computer adaptive SOL testing was first introduced during 2014-2015, with the debut of a 53-item computer-adaptive version of the sixth-grade math test.

"Computer adaptive testing can help reduce stress and frustration for students, teachers and parents," Governor Terry McAuliffe said. "No student should spend hours struggling through a standardized test."

McAuliffe and the state Board of Education have advocated the expansion of computer adaptive testing as a means of better measuring academic growth and improving the assessment experience of students. The General Assembly has approved requests from the governor totaling $7.2 million to convert all math and reading SOL tests in grades 3-8 to the computer adaptive format by fall 2017.

"When this change is fully implemented, elementary and middle school students will experience significant reductions in test-taking times and most will complete their math and reading SOLs in less than two hours," Secretary of Education Anne Holton said.

"Computer adaptive testing is a win-win: Students benefit from a customized assessment with fewer test items, while schools and the commonwealth get a more precise measurement of content mastery and growth, especially for high performing students," Superintendent of Public Instruction Steven R. Staples said. "Also, the new federal Every Student Succeeds Act expressly permits the use of computer adaptive testing as part of state accountability systems."

Computer adaptive SOL tests begin with a question or problem of moderate difficulty. If a student answers the item correctly, the computer selects a slightly more challenging problem as the next item. Conversely, an incorrect response results in the selection of a slightly less difficult item.

Students' scores are determined by the number of questions answered correctly and the relative difficulty of the correctly answered items. Because student responses on a computer adaptive test are scored in the sequence in which they are presented, students are not able to skip items or return to previous answers. All students must answer the same number of items to complete a test.

Computer adaptive testing is a scientifically validated and widely used assessment format. The Algebra Readiness Diagnostic Test, which Virginia students have been taking since 2002, is administered in a computer adaptive format. In addition, computer adaptive testing is used by professional boards, the military and other organizations.

# # #