Understanding MCA Scale Scores

What is a scale score and what do the numbers represent?

A scale score is created when there is a conversion of the obtained results onto a standardized scale. MCA scale scores translate the ability level estimated based on the difficulty of items correctly answered onto a common scale for all students tested. Your Student 762

The MCA scale score has two components: the tested grade and the student score.

- The tested grade component is identified by the first digit(s) and represent the grade of the test taken. Depending on the grade, this component will be one or two digits.
- The student score component is identified by the last two digits and represents the score the student earned on the test.

How is the scale score set and what are the ranges?

MCA scale scores are different for each grade, subject, and year. The scale score is created using only the questions that assess grade-level standards; and by setting each component. The tested grade component is set based on the grade of the test the student took. For High School Science, the tested grade component is always a 10, regardless of the grade the student took the assessment in. The student score component is set based on the student's performance on the test and is set differently for each subject.

For Science, the student score component is based on the number of questions the student answered correctly. The range of scores is 1 to 99 for all grades.

For Mathematics and Reading, the student score component is based on a student's item response pattern on the adaptive test. This means the score is based on the difficulty of the questions asked and whether the student answers the questions correctly. The range of scores varies by grade and subject (see graphs below).

For more information about the creation of MCA scale scores, please refer to the help document, Where Do Scale Scores Come From?



The last two

digits represent

the score the student earned.

Can I compare scale scores from one grade to another?

No, you cannot compare scale scores from one grade to another.

MCA scale scores are based on grade-level content; therefore they are independent from grade to grade and do not overlap. This means that the lowest performing fifth grader will always receive a higher score than the highest performing fourth grader.

Since MCA scale scores are independent, you cannot subtract scale scores from one year to the next. For subtraction to have meaning, students in multiple grades would need to be able to have the same score. For more information about determining if a student has improved from year to year, please refer to the help document, What Are Appropriate Uses of Scale Scores?

How do the MCA scale scores translate into MCA Achievement Levels?

Each grade and subject has four achievement levels:

- D Does Not Meet Standards
- P Partially Meets Standards
- M Meets Standards
- E Exceeds Standards

Does Not Meet Standards does not have a set student score or range; both vary by grade and subject.

Partially Meets Standards always starts at a student score of 40, and the range is always the same.

Meets Standards always starts at a student score of 50, and the range varies by grade and subject.

Exceeds Standards does not have a set student score or range; both vary by grade and subject.

Scale Score Ranges for Each Achievement Level						
		D I	P	M	E E	
Mathematics	Grade 3	315 - 339	340 - 349	350 - 365		366 - 399
	Grade 4	409 - 439	440 - 449	450 - 465		466 - 499
	Grade 5	515 - 539	540 - 549	550 - 562		563 - 586
	Grade 6	611 - 639	640 - 649	650 - 661		662 - 688
	Grade 7	718 - 739	740 - 749	750 - 759		760 - 782
	Grade 8	813 - 839	840 - 849	850 - 860		861 - 888
	Grade 11	1101 - 1139	1140 - 1149	1150 - 1163		1164 - 1195
Reading	Grade 3	301 - 339	340 - 349	350 - 373		374 - 399
	Grade 4	411 - 439	440 - 449	450 - 465		466 - 490
	Grade 5	517 - 539	540 - 549	550 - 566		567 - 591
	Grade 6	606 - 639	640 - 649	650 - 666		667 - 699
	Grade 7	703 - 739	740 - 749	750 - 766		767 - 798
	Grade 8	802 - 839	840 - 849	850 - 866		867 - 898
	Grade 10	1012 - 1039	1040 - 1049	1050 - 1063		1064 - 1094
Science	Grade 5	501 - 539	540 - 549	550 - 569		570 - 599
	Grade 8	801 - 839	840 - 849	850 - 861		863 - 899
	HS	1001 - 1039	1040 - 1049	1050 - 1062		1063 - 1099