

## Education - P-12

Dr. John B. King, Jr., Senior Deputy Commissioner of Education, P-12

## 2010 Mathematics Tests Standard and Performance Indicator Map with Answer Key Grade 5

| Question | Type | Points | Strand | Content Performance Indicator | Answer <br> Key |
| :--- | :--- | :--- | :--- | :--- | :--- |

## Book 1

| 1 | Multiple Choice | 1 | Measurement | 5.M02 Identify customary equivalent units of length | C |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Multiple Choice | 1 | Geometry | 5.G07 Know that the sum of the interior angles of a triangle is 180 degrees | A |
| 3 | Multiple Choice | 1 | Algebra | 4.A02 Use the symbols $<,>,=$, and $\neq$ (with and without the use of a number line) to compare whole numbers and unit fractions and decimals (up to hundredths) | B |
| 4 | Multiple Choice | 1 | Number Sense and Operations | 5.N02 Compare and order numbers to millions | D |
| 5 | Multiple Choice | 1 | Number Sense and Operations | 5.N17 Use a variety of strategies to divide three-digit numbers by oneand two-digit numbers Note: Division by anything greater than a two-digit divisor should be done using technology. | A |
| 6 | Multiple Choice | 1 | Geometry | 5.G09 Identify pairs of congruent triangles | C |
| 7 | Multiple Choice | 1 | Number Sense and Operations | 5.N16 Use a variety of strategies to multiply three-digit by three-digit numbers Note: Multiplication by anything greater than a three-digit multiplier/multiplicand should be done using technology. | C |
| 8 | Multiple Choice | 1 | Number Sense and Operations | 5.N20 Convert improper fractions to mixed numbers, and mixed numbers to improper fractions | B |
| 9 | Multiple Choice | 1 | Geometry | 5.G05 Know that the sum of the interior angles of a quadrilateral is 360 degrees | C |
| 10 | Multiple Choice | 1 | Number Sense and Operations | 5.N15 Find the common factors and the greatest common factor of two numbers | C |
| 11 | Multiple Choice | 1 | Statistics and Probability | 4.S04 Read and interpret line graphs | B |
| 12 | Multiple Choice | 1 | Geometry | 4.G08 Classify angles as acute, obtuse, right, and straight | D |
| 13 | Multiple Choice | 1 | Algebra | 5.A04 Solve simple one-step equations using basic wholenumber facts | C |
| 14 | Multiple Choice | 1 | Geometry | 5.G04 Classify quadrilaterals by properties of their angles and sides | B |

# 2010 Mathematics Tests Standard and Performance Indicator Map with Answer Key Grade 5 (continued) 

| Question | Type | Points | Strand | Content Performance Indicator | Answer Key |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Book 1 (continued) |  |  |  |  |  |
| 15 | Multiple Choice | 1 | Algebra | 5.A02 Translate simple verbal expressions into algebraic expressions | D |
| 16 | Multiple Choice | 1 | Number Sense and Operations | 5.N01 Read and write whole numbers to millions | C |
| 17 | Multiple Choice | 1 | Number Sense and Operations | 5.N22 Add and subtract mixed numbers with like denominators | A |
| 18 | Multiple Choice | 1 | Geometry | 5.G02 Identify pairs of similar triangles | A |
| 19 | Multiple Choice | 1 | Number Sense and Operations | 4.N25 Add and subtract decimals to tenths and hundredths using a hundreds chart | C |
| 20 | Multiple Choice | 1 | Algebra | 5.A03 Substitute assigned values into variable expressions and evaluate using order of operations | A |
| 21 | Multiple Choice | 1 | Number Sense and Operations | 4.N23 Add and subtract proper fractions with common denominators | D |
| 22 | Multiple Choice | 1 | Statistics and Probability | 5.S03 Calculate the mean for a given set of data and use to describe a set of data | C |
| 23 | Multiple Choice | 1 | Number Sense and Operations | 5.N10 Compare decimals using $<$, $>$, or $=$ | D |
| 24 | Multiple Choice | 1 | Number Sense and Operations | 5.N05 Compare and order fractions including unlike denominators (with and without the use of a number line) Note: Commonly used fractions such as those that might be indicated on ruler, measuring cup, etc. | C |
| 25 | Multiple Choice | 1 | Geometry | 5.G10 Identify corresponding parts of congruent triangles | D |
| 26 | Multiple Choice | 1 | Number Sense and Operations | 5.N08 Read, write, and order decimals to thousandths | D |

Book 2

| 27 | Short Response | 2 | Algebra | 5.A06 Evaluate the perimeter <br> formula for given input values | $\mathrm{n} / \mathrm{a}$ |
| :---: | :--- | :---: | :--- | :--- | :---: |
| 28 | Short Response | 2 | Measurement | 5.M08 Measure and draw angles <br> using a protractor | $\mathrm{n} / \mathrm{a}$ |
| 29 | Short Response | 2 | Algebra | 5.A08 Create algebraic or geometric <br> patterns using concrete objects or <br> visual drawings (e.g., rotate and <br> shade geometric shapes) | $\mathrm{n} / \mathrm{a}$ |
| 30 | Short Response | 2 | Geometry | 5.G08 Find a missing angle when <br> given two angles of a triangle | $\mathrm{n} / \mathrm{a}$ |
| 31 | Extended Response | 3 | Number Sense and Operations | 5.N11 Understand that percent <br> means part of 100, and write <br> percents as fractions and decimals | $\mathrm{n} / \mathrm{a}$ |
| 32 | Extended Response | 3 | Geometry | $5 . G 01$ Calculate the perimeter of <br> regular and irregular polygons | $\mathrm{n} / \mathrm{a}$ |


| Question | Type | Points | Strand | Content Performance Indicator | Answer <br> Key |
| :---: | :---: | :---: | :--- | :--- | :--- |
| Book 2 (continued) |  |  |  |  |  |
| 33 | Extended Response | 3 | Statistics and Probability | 5.S02 Display data in a line graph to <br> show an increase or decrease over <br> time | $\mathrm{n} / \mathrm{a}$ |
| 34 | Extended Response | 3 | Measurement | 5.M07 Calculate elapsed time in <br> hours and minutes | $\mathrm{n} / \mathrm{a}$ |

