## 2008 Mathematics Test Standard and Performance Indicator Map with Answer Key Grade 6

| Question | Type | Points | Strand | Content Performance Indicator | Answer Key |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Book 1 |  |  |  |  |  |
| 1 | Multiple Choice | 1 | Algebra | 5.A04 Solve simple one-step equations using basic wholenumber facts | A |
| 2 | Multiple Choice | 1 | Number Sense and Operations | 6.N21 Find multiple representations of rational numbers (fractions, decimals, and percents 0 to 100) | B |
| 3 | Multiple Choice | 1 | Number Sense and Operations | 6.N13 Define absolute value and determine the absolute value of rational numbers (including positive and negative) | D |
| 4 | Multiple Choice | 1 | Geometry | 6.G04 Determine the volume of rectangular prisms by counting cubes and develop the formula | C |
| 5 | Multiple Choice | 1 | Number Sense and Operations | 6.N07 Express equivalent ratios as a proportion | C |
| 6 | Multiple Choice | 1 | Statistics and Probability | 5.S06 Record experiment results using fractions/ratios | B |
| 7 | Multiple Choice | 1 | Algebra | 5.A03 Substitute assigned values into variable expressions and evaluate using order of operations | C |
| 8 | Multiple Choice | 1 | Statistics and Probability | 5.S07 Create a sample space and determine the probability of a single event, given a simple experiment (e.g., rolling a number cube) | C |
| 9 | Multiple Choice | 1 | Geometry | 6.G07 Determine the area and circumference of a circle, using the appropriate formula | C |
| 10 | Multiple Choice | 1 | Measurement | 6.M05 Identify equivalent metric units of capacity (milliliter to liter and liter to milliliter) | D |
| 11 | Multiple Choice | 1 | Number Sense and Operations | 6.N18 Add, subtract, multiply and divide mixed numbers with unlike denominators | C |
| 12 | Multiple Choice | 1 | Geometry | 5.G13 Plot points to form basic geometric shapes (identify and classify) | D |
| 13 | Multiple Choice | 1 | Algebra | 6.A02 Use substitution to evaluate algebraic expressions (may include exponents of one, two, and three) | D |
| 14 | Multiple Choice | 1 | Number Sense and Operations | 6.N19 Identify the multiplicative inverse (reciprocal) of a number | B |
| 15 | Multiple Choice | 1 | Statistics and Probability | 6.S05 Determine the mean, mode and median for a given set of data | C |
| 16 | Multiple Choice | 1 | Number Sense and Operations | 6.N26 Estimate a percent of quantity (0\% to 100\%) | D |
| 17 | Multiple Choice | 1 | Algebra | 6.A06 Evaluate formulas for given input values (circumference, area, volume, distance, temperature, interest, etc.) | C |
| 18 | Multiple Choice | 1 | Number Sense and Operations | 6.N23 Represent repeated multiplication in exponential form | C |

# 2008 Mathematics Test Standard and Performance Indicator Map with Answer Key Grade 6 (continued) 

| Question | Type | Points | Strand | Content Performance Indicator | Answer <br> Key |
| :---: | :--- | :---: | :--- | :--- | :--- | :---: |
| Book 1 (continued) | Multiple Choice | 1 | Measurement | 6.M03 Identify equivalent <br> customary units of capacity (cups to <br> pints, pints to quarts, and quarts to <br> gallons) | D |
| 19 | Multiple Choice | 1 | Statistics and Probability | 6.S07 Read and interpret graphs | A |
| 20 | Multiple Choice | 1 | Number Sense and Operations | 6.N25 Evaluate expressions having <br> exponents where the power is an <br> exponent of one, two, or three | D |
| 21 | Multiple Choice | 1 | Geometry | $6 . G 05$ Identify radius, diameter, <br> chords, and central angles of a <br> circle | B |
| 23 | Multiple Choice | 1 | Number Sense and Operations | 6.N16 Add and subtract fractions <br> with unlike denominators | D |
| 24 | Multiple Choice | 1 | Number Sense and Operations | 6.N09 Solve proportions using <br> equivalent fractions | D |
| 25 | Multiple Choice | 1 | Statistics and Probability | $5 . S 05$ List the possible outcomes for <br> a single-event experiment | A |

Book 2

| 26 | Short Response | 2 | Measurement | 6.M01 Measure capacity and <br> calculate volume of a rectangular <br> prism | $\mathrm{n} / \mathrm{a}$ |
| :---: | :--- | :---: | :--- | :--- | :---: |
| 27 | Extended Response | 3 | Algebra | 5. A04 Solve simple one-step <br> equations using basic whole- <br> number facts | $\mathrm{n} / \mathrm{a}$ |
| 28 | Extended Response | 3 | Geometry | $5 . G 13$ Plot points to form basic <br> geometric shapes (identify and <br> classify) | $\mathrm{n} / \mathrm{a}$ |
| 29 | Short Response | 2 | Statistics and Probability | $5 . S 06$ Record experiment results <br> using fractions/ratios | $\mathrm{n} / \mathrm{a}$ |
| 30 | Extended Response | 3 | Number Sense and Operations | 6.N12 Solve percent problems <br> involving percent, rate, and base | $\mathrm{n} / \mathrm{a}$ |
| 31 | Short Response | 2 | Statistics and Probability | $6 . S 08$ Justify predictions made from <br> data | $\mathrm{n} / \mathrm{a}$ |
| 32 | Short Response | 2 | Measurement | 6.M07 Estimate volume, area, and <br> circumference (see figures <br> identified in geometry strand) | $\mathrm{n} / \mathrm{a}$ |
| 33 | Extended Response | 3 | Statistics and Probability | 6.S08 Justify predictions made from <br> data | $\mathrm{n} / \mathrm{a}$ |
| 34 | Short Response | 2 | Number Sense and Operations | $6 . N 10$ Verify the proportionality <br> using the product of the means <br> equals the product of the extremes | $\mathrm{n} / \mathrm{a}$ |
| 35 | Short Response | 2 | Algebra | 6. A02 Use substitution to evaluate <br> algebraic expressions (may include <br> exponents of one, two, and three) | $\mathrm{n} / \mathrm{a}$ |

