New York State Education Department

## 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 3

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

Book 1

| 1 | Multiple Choice | 1 | Measurement | 3.M02 Use a ruler/yardstick to measure to the nearest standard unit (whole and $1 / 2$ inches, whole feet, and whole yards) | D |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Multiple Choice | 1 | Number Sense and Operations | 3.N02 Read and write whole numbers to 1,000 | C |
| 3 | Multiple Choice | 1 | Number Sense and Operations | 3.N18 Use a variety of strategies to add and subtract 3-digit numbers (with and without regrouping) | D |
| 4 | Multiple Choice | 1 | Number Sense and Operations | 3.N16 Identify odd and even numbers | C |
| 5 | Multiple Choice | 1 | Geometry | 3.G03 Name, describe, compare, and sort three-dimensional shapes: cube, cylinder, sphere, prism, and cone | B |
| 6 | Multiple Choice | 1 | Number Sense and Operations | 3.N04 Understand the place value structure of the base ten number system: <br> 10 ones $=1$ ten <br> 10 tens $=1$ hundred <br> 10 hundreds $=1$ thousand | D |
| 7 | Multiple Choice | 1 | Measurement | 3.M07 Count and represent combined coins and dollars, using currency symbols (\$0.00) | C |
| 8 | Multiple Choice | 1 | Geometry | 3.G02 Identify congruent and similar figures | A |
| 9 | Multiple Choice | 1 | Number Sense and Operations | 3.N19 Develop fluency with singledigit multiplication facts | C |
| 10 | Multiple Choice | 1 | Number Sense and Operations | 3.N21 Use the area model, tables, patterns, arrays, and doubling to provide meaning for multiplication | A |
| 11 | Multiple Choice | 1 | Number Sense and Operations | 3.N08 Use the zero property of multiplication | A |
| 12 | Multiple Choice | 1 | Number Sense and Operations | 3.N27 Check reasonableness of an answer by using estimation | C |
| 13 | Multiple Choice | 1 | Number Sense and Operations | 3.N24 Develop strategies for selecting the appropriate computational and operational method in problem solving situations | D |
| 14 | Multiple Choice | 1 | Number Sense and Operations | 3.N06 Use and explain the commutative property of addition and multiplication | B |
| 15 | Multiple Choice | 1 | Algebra | 3.A02 Describe and extend numeric $(+,-)$ and geometric patterns | A |

## 2010 Mathematics Tests Standard and Performance Indicator Map with Answer Key Grade 3 (continued)

| Question | Type | Points | Strand | Content Performance Indicator | Answer Key |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Book 1 (continued) |  |  |  |  |  |
| 16 | Multiple Choice | 1 | Number Sense and Operations | 3.N11 Use manipulatives, visual models, and illustrations to name and represent unit fractions ( $1 / 2$, $1 / 3,1 / 4,1 / 5,1 / 6$, and $1 / 10$ ) as part of a whole or a set of objects | D |
| 17 | Multiple Choice | 1 | Algebra | 3.A01 Use the symbols <, >, = (with and without the use of a number line) to compare whole numbers and unit fractions $(1 / 2,1 / 3$, $1 / 4,1 / 5,1 / 6$, and $1 / 10$ ) | B |
| 18 | Multiple Choice | 1 | Measurement | 3.M09 Tell time to the minute, using digital and analog clocks | A |
| 19 | Multiple Choice | 1 | Statistics and Probability | 3.S07 Read and interpret data in bar graphs and pictographs | D |
| 20 | Multiple Choice | 1 | Measurement | 3.M01 Select tools and units (customary) appropriate for the length measured | B |
| 21 | Multiple Choice | 1 | Geometry | 3.G05 Identify and construct lines of symmetry | D |
| 22 | Multiple Choice | 1 | Number Sense and Operations | 3.N12 Understand and recognize the meaning of numerator and denominator in the symbolic form of a fraction | A |
| 23 | Multiple Choice | 1 | Number Sense and Operations | 3.N07 Use 1 as the identity element for multiplication | B |
| 24 | Multiple Choice | 1 | Number Sense and Operations | 3.N22 Demonstrate fluency and apply single-digit division facts | D |
| 25 | Multiple Choice | 1 | Statistics and Probability | 3.S08 Formulate conclusions and make predictions from graphs | D |

Book 2

| 26 | Short Response | 2 | Number Sense and Operations | 3.N18 Use a variety of strategies to <br> add and subtract 3-digit numbers <br> (with and without regrouping) | $\mathrm{n} / \mathrm{a}$ |
| :---: | :--- | :---: | :--- | :--- | :---: |
| 27 | Short Response | 2 | Statistics and Probability | 3.S05 Display data in pictographs <br> and bar graphs | $\mathrm{n} / \mathrm{a}$ |
| 28 | Short Response | 2 | Algebra | 3.A02 Describe and extend numeric <br> $(+,-$ ) and geometric patterns | $\mathrm{n} / \mathrm{a}$ |
| 29 | Short Response | 2 | Geometry | 3.G01 Define and use correct <br> terminology when referring to <br> shapes (circle, triangle, square, <br> rectangle, rhombus, trapezoid, and <br> hexagon) | $\mathrm{n} / \mathrm{a}$ |
| 30 | Extended Response | 3 | Statistics and Probability | 3.S07 Read and interpret data in bar <br> graphs and pictographs | $\mathrm{n} / \mathrm{a}$ |
| 31 | Extended Response | 3 | Number Sense and Operations | 3.N18 Use a variety of strategies to <br> add and subtract 3-digit numbers <br> (with and without regrouping) | $\mathrm{n} / \mathrm{a}$ |

