

TOUCHMATH®



ALIGNMENT TO 2010 PENNSYLVANIA ACADEMIC STANDARDS MATHEMATICS

ALL GRADES

TouchMath® Kindergarten Standards Edition Program

TouchMath® First Grade Standards Edition Program

TouchMath® Second Grade Standards Edition Program

TouchMath® Upper Grades Standards Edition Program

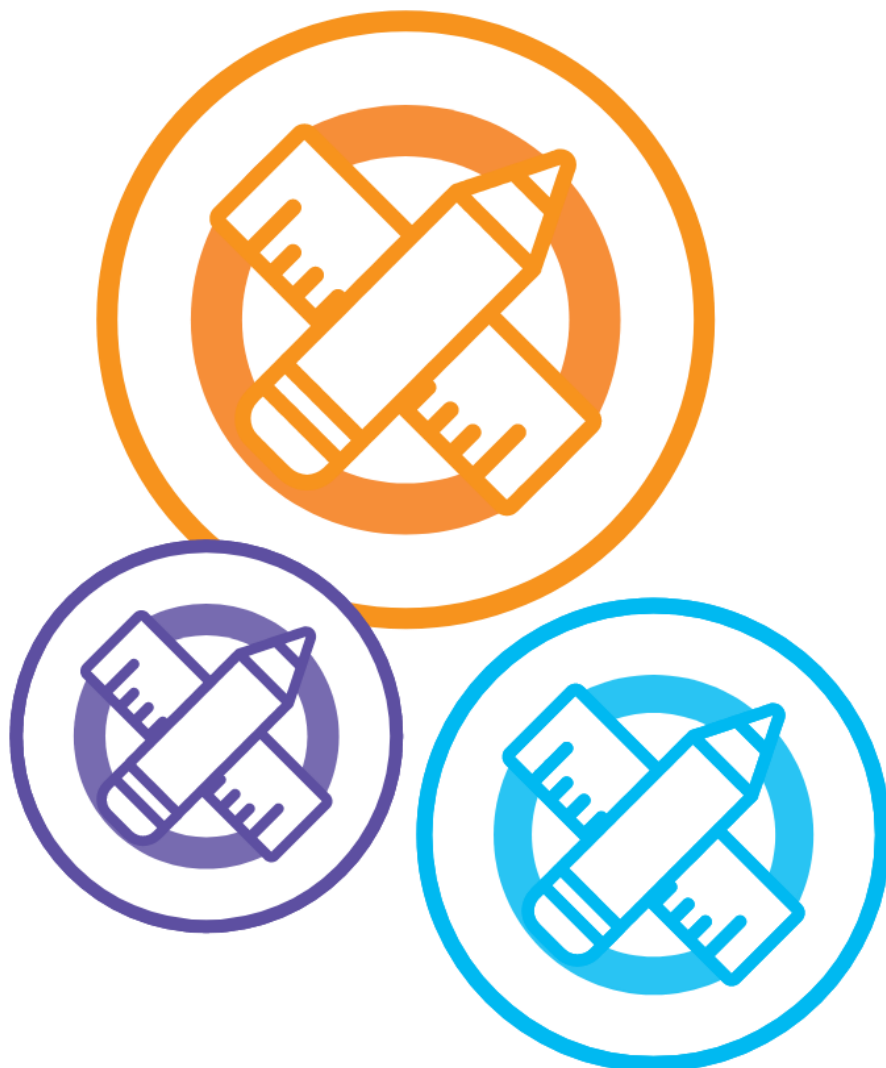
TouchMath offers added supplemental products to speed mastery –contact us for more information.

Call: **1-800-888-9191**

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KINDERGARTEN

TouchMath® carefully scaffolds to build understanding in two key instruction areas in kindergarten: (1) representing, relating, and operating on whole numbers, initially with sets of objects; and (2) describing shapes and space.

TouchMath uses a patented, research-based C-R-A approach that moves from the Concrete (manipulatives) to the Representational (numerals and pictures) to the Abstract (word problems and mathematical reasoning). The Mathematical Practices are interwoven into the activities.

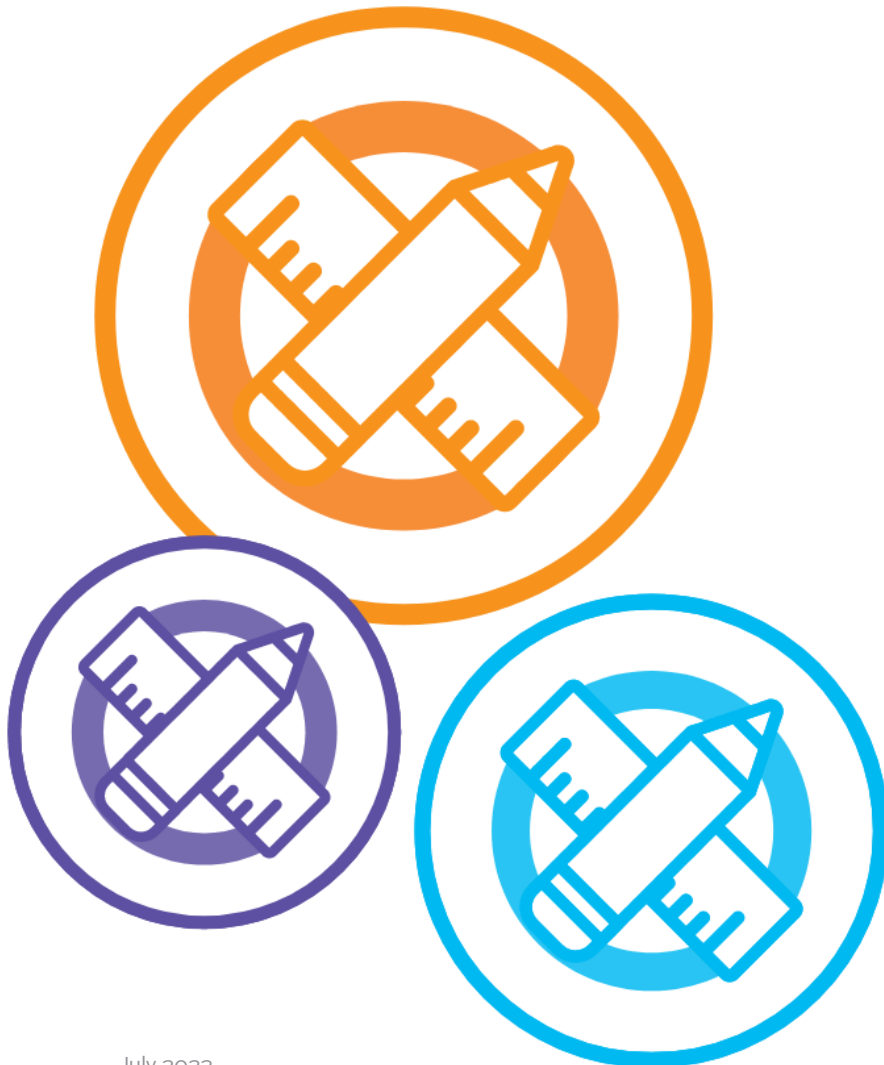
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Alignment to 2010 Pennsylvania Academic Standards | Mathematics | Kindergarten
 Referencing Units and Modules in the TouchMath® Kindergarten Standards Edition Program

TouchMath® Unit/Module	2010 Pennsylvania Academic Standards Kindergarten
Grade K Standards Edition Unit 1: Numbers Level 1	
1. Representing 0 – 3	K.CC.1
2. Representing 4 – 5	K.CC.1-2
3. Comparing	K.CC.6-7
4. Addition	K.OA.1-2
5. Subtraction	K.OA.3-4
6. Addition and Subtraction	K.OA.1-5

TouchMath® Unit/Module	2010 Pennsylvania Academic Standards Kindergarten
Grade K Standards Edition Unit 2: Numbers Level 2	
1. Representing 6 – 7	K.CC.1
2. Representing 8 – 9	K.CC.1
3. Addition	K.OA.1-2
4. Subtraction	K.OA.1-2; K.CC.2
5. Addition and Subtraction	K.OA.1-2
6. Composing and Decomposing Numbers	K.OA.1-2

TouchMath® Unit/Module	2010 Pennsylvania Academic Standards Kindergarten
Grade K Standards Edition Unit 3: Numbers Level 3	
1. Composing and Decomposing 10	K.NBT.1
2. Numbers 10 – 15	K.OA.1
3. Numbers 16 – 20	K.OA.2
4. Place Value	K.NBT.1-2
5. Word Problems	K.NBT.3; K.OA.2
6. Counting	K.CC.1-4

TouchMath® Unit/Module	2010 Pennsylvania Academic Standards Kindergarten
Grade K Standards Edition Unit 4: Numbers Level 4	
1. Describing Objects	K.G.1
2. Sorting and Classifying	K.G.2-3
3. Data	K.MD.1
4. 2-D Shapes	K.G.4
5. 3-D Shapes	K.G.5
6. Shapes in the Environment	K.G.6

TOUCHMATH[®]



ALIGNMENT TO 2010 PENNSYLVANIA ACADEMIC STANDARDS MATHEMATICS

FIRST GRADE

TouchMath[®] carefully scaffolds to build understanding in four key instruction areas in first grade: (1) strategies of addition and subtraction within 20; (2) whole number relationships and place value; (3) linear measurement; and (4) geometric concepts.

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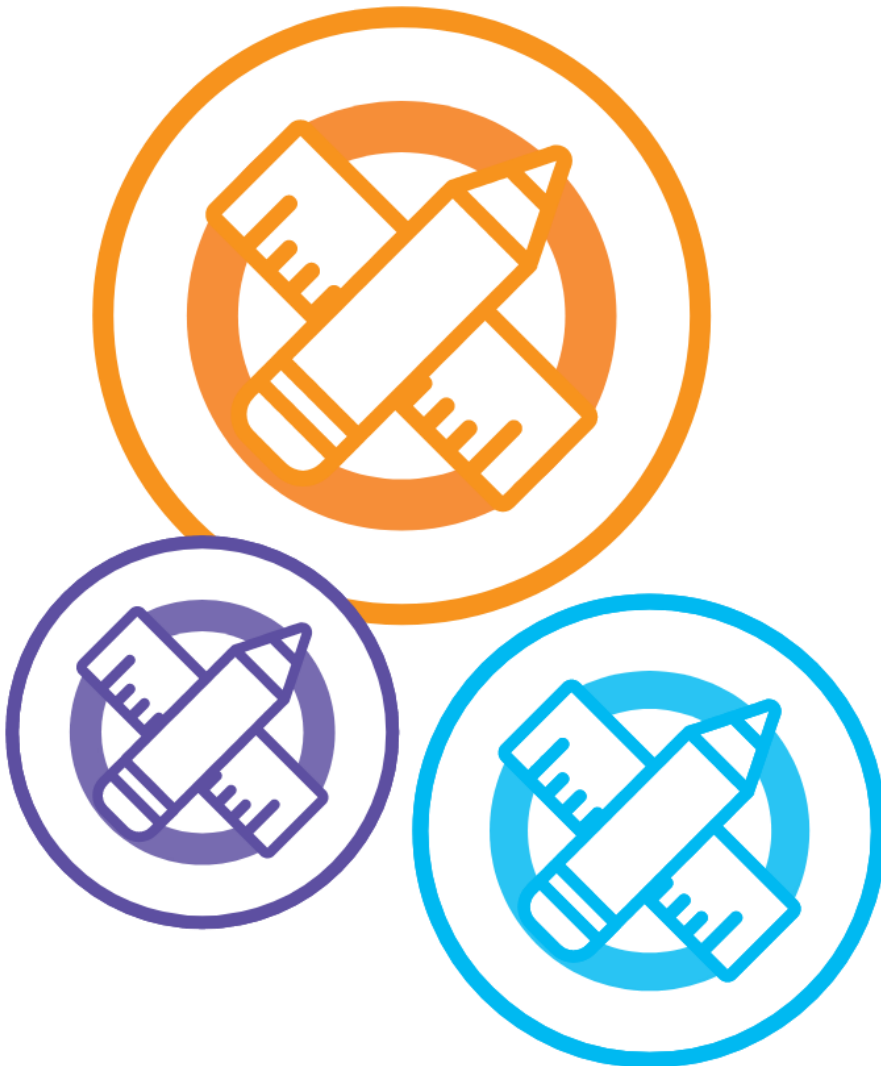
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Alignment to 2010 Pennsylvania Academic Standards | Mathematics | First Grade
 Referencing Activity Sheets in the TouchMath® First Grade Standards Edition Program

TouchMath® Unit/Module	2010 Pennsylvania Academic Standards First Grade
Grade 1 Standards Edition Unit 1: Numeracy Level 1	
1. Counting	K.CC.1; K.CC.2; 1.OA.1
2. TouchPoints	K.CC.1; K.CC.2; K.OA.1; 1.OA.2
3. Within 5	1.NBT.1
4. Addition within 9	1.NBT.2; 1.OA.1
5. Subtraction within 9	1.NBT.2; 1.OA.1
6. Within 9	1.NBT.2; 1.OA.1; K.CC.2

TouchMath® Unit/Module	2010 Pennsylvania Academic Standards First Grade
Grade 1 Standards Edition Unit 2: Numeracy Level 2	
1. Place Value	1.NBT.1-3
2. Addition within 13	1.NBT.2; 1.OA.1; K.CC.2
3. Addition within 20	1.NBT.2; 1.OA.1; K.CC.2
4. Backward Counting	1.NBT.2; 1.OA.1; K.CC.2
5. Subtraction within 20	1.NBT.1-2; 1.OA.1; K.CC.2
6. Within 20	1.NBT.1-2; 1.OA.1; K.CC.2

TouchMath® Unit/Module	2010 Pennsylvania Academic Standards First Grade
Grade 1 Standards Edition Unit 3: Numeracy Level 3	
1. Place Value	1.NBT.1-3
2. Addition within 100	1.OA.1
3. Mixed Addition	1.OA.1-2
4. Addition Strategies	1.OA.4-5
5. Subtraction within 100	1.NBT.4; 1.OA.2
6. Subtraction Strategies	1.NBT.4; 1.OA.2
7. Within 100	1.NBT.4; 1.OA.2

TouchMath® Unit/Module	2010 Pennsylvania Academic Standards First Grade
Grade 1 Standards Edition Unit 4: Measurement, Data and Geometry	
1. Time and Money	1.MD.3
2. Length	1.MD.1-2
3. Data	1.MD.4
4. 2-D Shapes	1.G.1-2
5. 3-D Shapes	1.G.3
6. Fractional Parts of Shapes	1.G.3

TOUCHMATH[®]



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SECOND GRADE

TouchMath[®] carefully scaffolds to build understanding in four key instruction areas in second grade: (1) extending understanding of base-ten notation; (2) building fluency with addition and subtraction; (3) using standard units of measure; and (4) describing and analyzing shapes.

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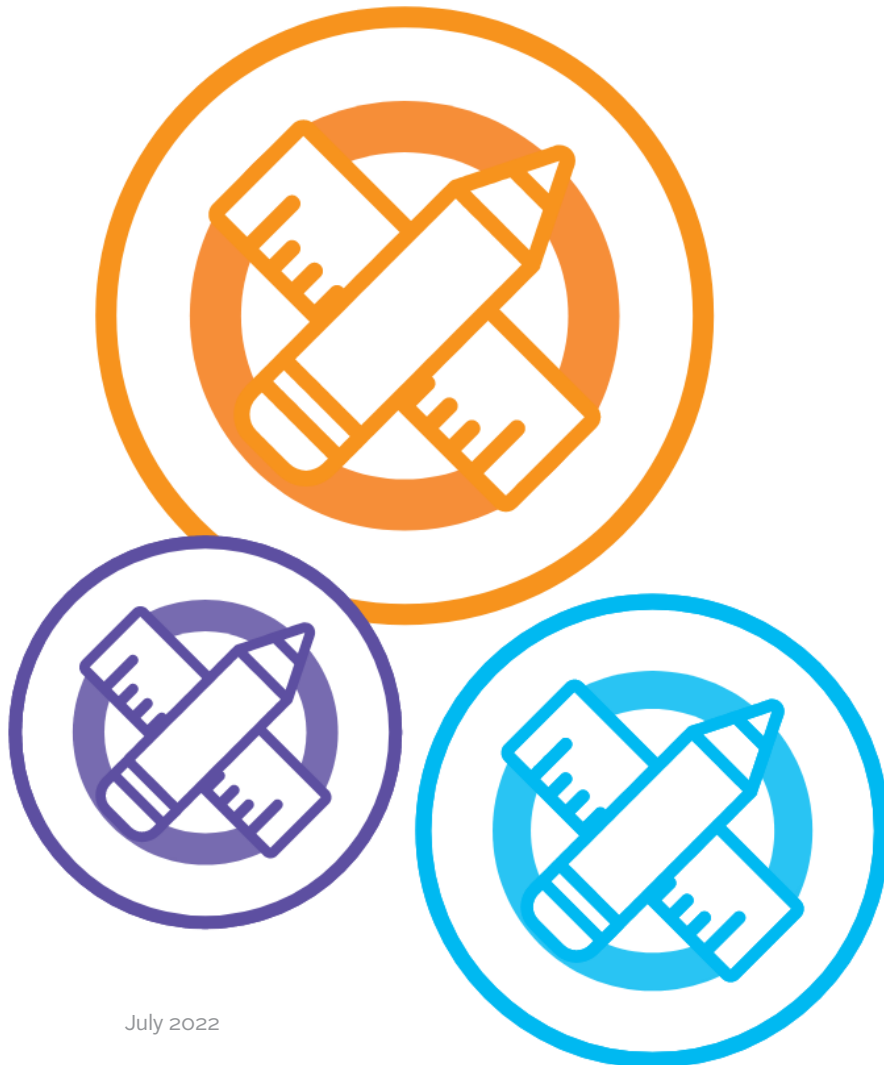
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Alignment to 2010 Pennsylvania Academic Standards | Mathematics | Second Grade
 Referencing Activity Sheets in the TouchMath® Second Grade Standards Edition Program

TouchMath® Unit/Module	2010 Pennsylvania Academic Standards Second Grade
Grade 2 Standards Edition Unit 1: Addition and Subtraction 1	
1. Within 13	2.OA.1; 1.OA.1
2. Within 20	2.OA.2; 1.OA.2
3. Within 50	2.OA.1; 2.OA.4; 1.OA.1
4. Addition with Regrouping	2.NBT.2; 2.NBT.5-7; 1.NBT.1
5. Subtraction with Regrouping	2.NBT.2; 2.NBT.5-7; 1.NBT.1
6. Mixed Regrouping	2.NBT.5-6; 2.OA.1; 2.OA.4; 1.OA.1

TouchMath® Unit/Module	2010 Pennsylvania Academic Standards Second Grade
Grade 2 Standards Edition Unit 2: Addition and Subtraction 2	
1. Place Value	2.NBT.1-2
2. Counting and Reading	2.NBT.3; 2.OA.2
3. Reading and Writing	2.NBT.3-4; 2.OA.1-2
4. Addition within 100	2.OA.1-3; 2.OA.4; 1.OA.1
5. Subtraction within 100	2.OA.1-3; 2.OA.4; 1.OA.1
6. Within 100	2.NBT.1-2; 2.OA.1-2

TouchMath® Unit/Module	2010 Pennsylvania Academic Standards Second Grade
Grade 2 Standards Edition Unit 3: Operations with Multi-Digit Numbers	
1. Multiples of 10 and 100	3.NBT.3; 2.OA.1-2
2. Addition within 1,000	2.OA.3-4; 2.NBT.1
3. Subtraction within 1,000	2.OA.3-4; 2.NBT.1; 1.NBT.1
4. Mixed Operations	3.NBT.3; 2.OA.1-2; 1.NBT.2
5. Multiplication 1	2.OA.3
6. Multiplication 2	2.OA.4

TouchMath® Unit/Module	2010 Pennsylvania Academic Standards Second Grade
Grade 2 Standards Edition Unit 4: Measurement, Data and Geometry	
1. Time	2.MD.7
2. Money	2.MD.8
3. Data	2.MD.9
4. Measurements	2.MD.10
5. Operations with Length	2.MD.5-6
6. Multiplication 2	2.OA.4

TOUCHMATH[®]



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UPPER GRADES

TouchMath[®] Upper Grades includes 10 topic-based Units covering K-6 standards. Each Unit provides support for individual learning by presenting information in multiple ways and by ensuring students have the appropriate amount of meaningful repetition to master the skills. Both the content and the activities are scaffolded with small steps to ensure students understand and apply relationships to each skill.

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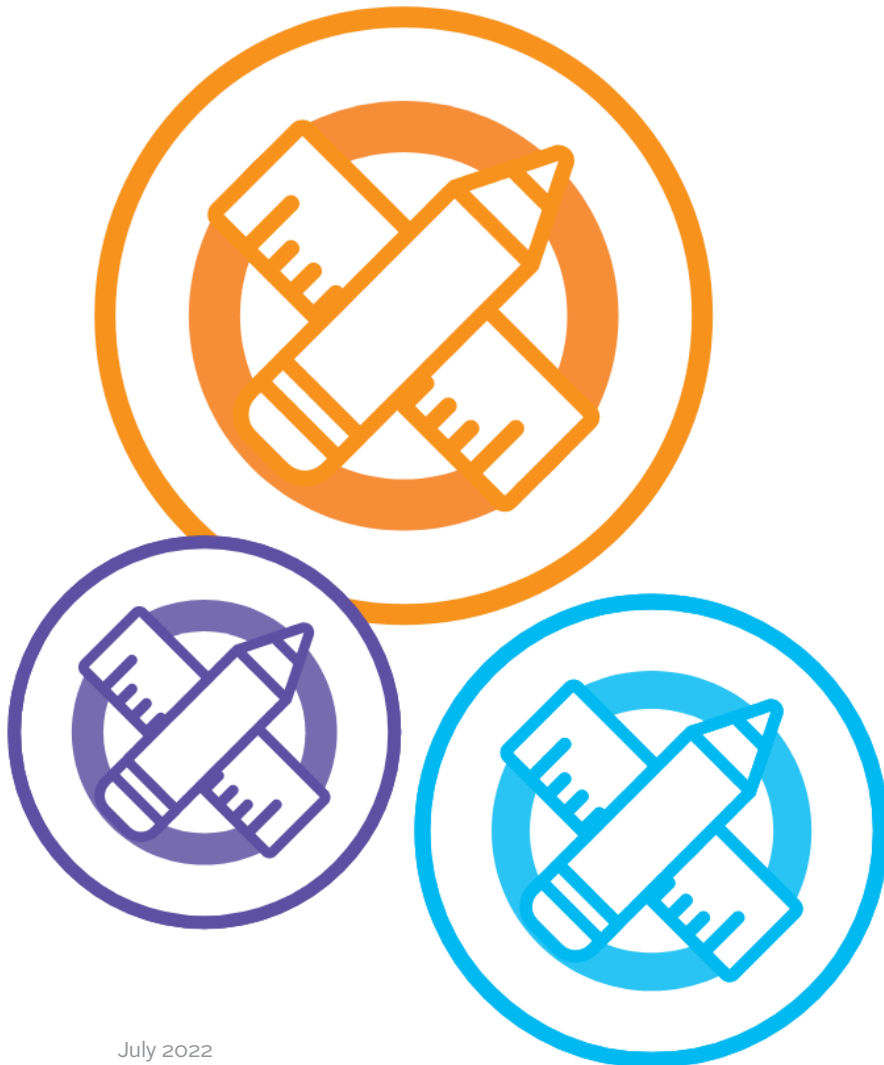
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Alignment to 2010 Pennsylvania Academic Standards | Mathematics | Upper Grades
Referencing Activity Sheets in the TouchMath® Upper Grades Standards Edition Program

TouchMath® Unit/Module	2010 Pennsylvania Academic Standards Upper Grades
Upper Grades Standards Edition Unit 1: Addition and Subtraction Level 1	
1. Forward Counting	K.CC.4; K.CC.5-6; 1.NBT.1-2
2. Addition	K.NBT.1; 1.OA.1; 2.OA.2; 1.NBT.3; 2.NBT.1
3. Backward Counting	K.CC.4; K.CC.5-6; 1.NBT.1-2
4. Subtraction	K.NBT.1; 1.OA.1; 2.OA.2; 1.NBT.3; 2.NBT.1
5. Fact Families	1.OA.6-8; 2.OA.1; 3.OA.5
6. Place Value	1.NBT.1; 2.NBT.1; 3.NBT.1; 4.NBT.1-2
7. Strategies	1.OA.6-8; 2.OA.1; 3.OA.5
8. Mixed Addition and Subtraction	K.CC.4; K.CC.5-6; 1.NBT.1-2; 1.NBT.1; 2.NBT.1; 3.NBT.1; 4.NBT.1-2

TouchMath® Unit/Module	2010 Pennsylvania Academic Standards Upper Grades
Upper Grades Standards Edition Unit 2: Addition and Subtraction Level 2	
1. Counting by 1,000	1.NBT.12.NBT.1; 3.NBT.1
2. Within 20	1.NBT.1; K.OA.1
3. Place Value	1.NBT.1; 2.NBT.1; 3.NBT.1
4. Within 100	1.NBT.2; K.NBT.1
5. Strategies	1.NBT.1; 2.NBT.1; 3.NBT.1
6. Three-Digit Numbers	2.NBT.4; 2.NBT.7

TouchMath® Unit/Module	2010 Pennsylvania Academic Standards Upper Grades
Upper Grades Standards Edition Unit 3: Skip Counting	
1. Skip Counting by 2	2.OA.2; 2.NBT.A.3
2. Skip Counting by 3	2.OA.2; 2.NBT.A.3
3. Skip Counting by 4	2.OA.2; 2.NBT.A.3
4. Skip Counting by 5	2.OA.2; 2.NBT.A.3
5. Skip Counting by 6	2.OA.2; 2.NBT.A.3
6. Skip Counting by 7	2.OA.2; 2.NBT.A.3
7. Skip Counting by 8	2.OA.2; 2.NBT.A.3
8. Skip Counting by 9	2.OA.2; 2.NBT.A.3

TouchMath® Unit/Module	2010 Pennsylvania Academic Standards Upper Grades
Upper Grades Standards Edition Unit 4: Multiplication and Division Level 1	
1. Skip Counting Review	3.OA.1-4
2. Multiplication	3.OA.1-4; 4.OA.1-2; 5.OA.1
3. Divisions	3.OA.1-4; 4.OA.1-4; 5.OA.1
4. Strategies	3.OA.1-4; 4.OA.1-3; 5.OA.1-2
5. Multiples and Factors	4.OA.4; 6.NS.2-4
6. Mixed Multiplication and Division	3.OA.1-4; 4.OA.1-2; 5.OA.1; 4.OA.4; 6.NS.2-4

TouchMath® Unit/Module	2010 Pennsylvania Academic Standards Upper Grades
Upper Grades Standards Edition Unit 5: Multiplication and Division Level 2	
1. Multiplication by One Digit	3.OA.1-4; 4.OA.1
2. Division by One Digit	3.OA.7; 4.OA.5
3. Multiplication using the Algorithm	3.OA.1-4; 4.OA.1-4; 5.OA.1-4; 6.EE.4
4. Division using the Algorithm	3.OA.1-4; 4.OA.1-4; 5.OA.1-4; 6.EE.4
5. Multiplication by Two Digits	3.OA.2; 4.OA.2; 5.OA.2-3; 5.EE.2
6. Division by Two Digits	3.OA.2; 4.OA.2; 5.OA.2-3; 5.EE.2
7. Mixed Practice	3.OA.1-4; 4.OA.1-4; 5.OA.1-4; 6.EE.4

TouchMath® Unit/Module	2010 Pennsylvania Academic Standards Upper Grades
Upper Grades Standards Edition Unit 6: Mixed Operation with Whole Numbers	
1. Relationship of Operations	2.NBT.1; 3.NBT.1-3; 4.NBT.1; 5.NBT.1-2
2. Two-Four Digits by One Digit	2.NBT.6; 4.NBT.5
3. Two-Four Digits by Two Digits	4.NBT.4; 5.NBT.6
4. Three-Four Digits by Three Digits	2.NBT.4; 3.NBT.3; 4.NBT.1; 5.NBT.4
5. Four Digits	4.NBT.6; 5.NBT.6; 6.EE.1
6. Mixed Practice with Operations	2.NBT.1; 3.NBT.1-3; 4.NBT.1; 5.NBT.1-2; 4.NBT.6; 5.NBT.6; 6.EE.1; 2.NBT.4; 3.NBT.3; 4.NBT.1; 5.NBT.4

TouchMath® Unit/Module	2010 Pennsylvania Academic Standards Upper Grades
Upper Grades Standards Edition Unit 7: Fractions, Decimals, and Percents Level 1	
1. Fraction Concepts	3.NF.1-2a-b; 4.NF.3b; 5.NF.1
2. Application of Concepts	3.NF.3a-d; 4.NF.3a; 5.NF.1
3. Inequalities	6.EE.8; 7.EE.4
4. Mixed Numbers	4.NF.3c
5. Fractions Review	3.NF.1-2a-b; 3.NF.3a-d; 4.NF.3b; 5.NF.1
6. Decimals	4.NF.7; 4.MD.2; 5.NBT.3a-b; 5.NBT.4; 5.NBT.7; 6.NS.3
7. Percents	6.RP.3c
8. Relationships of Fractions, Decimals, and Percents	4.NF.7; 4.MD.2; 5.NBT.3a-b; 5.NBT.4; 5.NBT.7; 6.NS.3; 3.NF.1-2a-b; 3.NF.3a-d; 4.NF.3b; 5.NF.1; 3.NF.3a-d; 4.NF.3a; 5.NF.1

TouchMath® Unit/Module	2010 Pennsylvania Academic Standards Upper Grades
Upper Grades Standards Edition Unit 8: Fractions, Decimals, and Percents Level 2	
1. Addition & Subtraction Fractions	5.NF.1-2; 4.NF.3a-d; 4.NF.4a-c; 3.NF.1
2. Multiplication & Division Fractions	7.NS.1; 6.NS.2-3; 5.NF.3; 5.NF.4.a-c
3. Addition & Subtraction Decimals	6.NS.3; 5.NBT.7; 5.NBT.3a-b; 4.NF.7; 4.MD.2
4. Multiplication & Division Decimals	7.NS.1; 6.NS.1 and 3; 5.NBT.4
5. Percents	7.RP.3; 6.RP.3c
6. Mixed Practice	7.RP.3; 6.RP.3c; 6.NS.3; 5.NBT.7; 5.NBT.3a-b; 4.NF.7; 4.MD.2
7. Application	7.NS.1; 6.NS.1 and 3; 5.NBT.4; 4.MD.2
8. Mixed Review	7.NS.1; 6.NS.1 and 3; 5.NBT.4; 4.MD.2 6.NS.3; 5.NBT.7; 5.NBT.3a-b; 4.NF.7; 4.MD.2

TouchMath® Unit/Module	2010 Pennsylvania Academic Standards Upper Grades
Upper Grades Standards Edition Unit 9: Geometry	
1. 2-D Shapes	6.G.1-4; 5.G.3; 4.G.1
2. Lines and Angles	7.G.2; 6.G.2-3
3. Classification of 2-D Figures	5.G.3-4; 4.G.1; 3.G.1-2
4. Perimeters, Area, and Volume	7.G.4-6; 6.G.3; 5.NBT.6; 4.MD.3; 3.G.2
5. Time, Money, and Distance	1.MD.3-6; 2.MD.7-8; 4.MD.2; 6.EE.1
6. Units of Measure	1.MD.1; 2.MD.1-4; 3.MD.1-2; 4.MD.1; 5.MD.1-3
7. Data Representation	2.MD.9-10; 3.MD.1; 5.MD.2; 6.SP.1-3
8. Data Analysis	6.SP.4; 6.SP.5.a-d; 7.SP.2; 7.SP.3-4

TouchMath® Unit/Module	2010 Pennsylvania Academic Standards Upper Grades
Upper Grades Standards Edition Unit 10: Algebra	
1. Operations & Equations	6.EE.1-4; 5.OA.1; 5.OA.3-5; 4.OA.1.2
2. Ratio & Proportions	8.RP.1; 7.RP.1-2; 6.RP1-2; 6.RP.3b-c
3. Rational Numbers	7.EE.4a; 7.EE.4b; 6.EE.3; 6.EE.5
4. Expressions	8.EE.1; 7.EE.1-3; 6.EE.1-4
5. Variables	7.EE.4; 6.EE.5; 5.OA.1; 5.OA.2
6. Patterns & Structure	7.EE.2; 6.EE.1-2
7. Geometry	7.G.1-5; 6.G.1-5, 5.G.3-4