



# CAMP HILL SCHOOL DISTRICT

## Fourth Grade: Math Standards for Numbers and Operations

### DOMAIN (MATH CONTENT):

Number and Operations in Base Ten

### STANDARDS FOR MATHEMATICAL PRACTICE:

Make sense of problems and persevere in solving them.

Use appropriate tools strategically.

Reason abstractly and quantitatively.

Attend to precision.

Construct viable arguments and critique the reasoning of others.

Look for and make use of structure.

Model with mathematics.

Look for and make sense of regularity in repeated reasoning.

Essential Questions	CC Focus for Instruction	Planned Learning Experiences/ Instructional Strategies	Assessments	Resources
<p>How can we show the value of a multi-digit number?</p> <p>Why is it important to understand the value of a number?</p> <p>---</p> <p>How do generalizations or rules about numbers make it easier to work with multi-digit numbers?</p>	<p>1. Apply place value concepts to show an understanding of multi-digit whole numbers.</p> <p>---</p> <p>2. Use place value understanding and properties of operations to perform multi-digit arithmetic.</p>	<p><u>Direct Instruction:</u> Smartboard activity Teacher Modeling Think-aloud Literature links via trade books Videos (Brain-pop, U-Tube, Discovery Ed.) Vocabulary Graphic Organizers</p> <p><u>Guided Practice:</u> Whole class practice Small group with teacher Quick Practice Daily Routine Work with manipulatives Student Journal Literature links via trade books Differentiated Instruction Cards Videos (Brain-pop, U-Tube, Discovery Ed., Mega-math) Graphic Organizers</p> <p><u>Collaborative Practice:</u> Partner work Pair-share Small group Math talk/student leaders Student activity book Project Student Journal</p>	<p>Anchor MO4.A-T.1.1.1, ME Unit 3 Test ME U3 Quiz 2 4Sight Test Informal teacher observations</p> <p>---</p> <p>A-T.2.1.1 ME U3 Test ME U3 Quiz 1,3 &amp; 4 ME U3 Performance Assessment</p> <p>A-T.2.1.2 ME U5 Quiz 1, 2, 3 ME U5 (Modified) Test or Performance Assessment</p> <p>A-T.2.1.3 ME U7 Quiz 1, 2, 3, 4 ME U7 Test 4Sight Informal Teacher Observations</p>	<p>ME Unit 3 (Addition, Subtraction) Supplementary Teacher Resource Books or websites</p> <p>---</p> <p>ME Unit 3 (Addition, Subtraction) Supplementary Teacher Resource Books or websites</p> <p>ME Unit 5 (Multiplication) Supplementary Teacher Resource Books or websites</p> <p>ME Unit 7 (Division) Supplementary Teacher Resource Books or websites</p>

		Differentiated Instruction Cards Math Center Challenges Games  <u>Independent Practice:</u> Student activity book (SAB) Homework Checks for understanding (TOD) First in Math web practice Differentiated Instruction Cards		
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# CAMP HILL SCHOOL DISTRICT

## Fourth Grade: **Math Standards for Numbers and Operations**

**DOMAIN (MATH CONTENT):**

Number and Operations-Fractions

**STANDARDS FOR MATHEMATICAL PRACTICE:**

- Make sense of problems and persevere in solving them.
- Construct viable arguments and critique the reasoning of others.
- Use appropriate tools strategically.
- Look for and make use of structure.

- Reason abstractly and quantitatively.
- Model with mathematics.
- Attend to precision.
- Look for and express regularity in repeated reasoning.

Essential Questions	CC Focus for Instruction	Planned Learning Experiences/ Instructional Strategies	Assessments	Resources
<p>How do we show and compare numbers that are parts of a whole?</p> <p>—</p> <p>How do understanding relationships among whole numbers help in building fractions?</p> <p>—</p> <p>How can we use decimals and fractions to name and compare numbers that are parts of a whole?</p>	<p>1. Extend the understanding of fractions to show equivalence and ordering.</p> <p>—</p> <p>2. Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers (add/subtract fractions with same denominators)</p> <p>—</p> <p>3. Connect decimal notation to fractions, and compare decimal fractions (base 10 denominator, e.g., 19/100).</p>	<p><u>Direct Instruction:</u>            Smartboard activity            Teacher Modeling            Think-aloud            Literature links via trade books            Videos (Brain-pop, U-Tube, Discovery Ed.)            Vocabulary            Graphic Organizers</p> <p><u>Guided Practice:</u>            Whole class practice            Small group with teacher            Quick Practice            Daily Routine            Work with manipulatives            Student Journal            Literature links via trade books            Differentiated Instruction Cards            Videos (Brain-pop, U-Tube, Discovery Ed., Mega-math)            Graphic Organizers</p> <p><u>Collaborative Practice:</u>            Partner work            Pair-share            Small group            Math talk/student leaders            Student activity book            Project            Student Journal</p>	<p>MO4.A-F.1.1.1            ME U9 Quiz 5            ME U9 (modified) Test            ME U11 Quiz            4Sights            Informal Teacher Observations</p> <p>—</p> <p>A-F.2.1.1 (through .7)            ME U9 Quiz 2, 3, 5            ME U9 Test            Informal Teacher Observations</p> <p>—</p> <p>A-F.3.1.1 (through .3)            ME U 11 Quiz 1, 2            ME U11 (modified) Test            4Sights</p>	<p>ME U9 (Fractions)            ME U 11 (Decimal Numbers)            Supplementary Teacher Resource Books or websites</p> <p>—</p> <p>ME U9            Supplementary Teacher Resource Books or websites</p> <p>—</p> <p>ME U 11 (Decimal Numbers)            Lessons 1-5            Supplementary Teacher Resource Books or websites</p>

		Differentiated Instruction Cards Math Center Challenges Games  <u>Independent Practice:</u> Student activity book (SAB) Homework Checks for understanding (TOD) First in Math web practice Differentiated Instruction Cards		
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# CAMP HILL SCHOOL DISTRICT

## Fourth Grade: **Math Standards for Algebraic Concepts**

**DOMAIN (MATH CONTENT):**

Operations and Algebraic Thinking

**STANDARDS FOR MATHEMATICAL PRACTICE:**

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| Make sense of problems and persevere in solving them. | Construct viable arguments and critique the reasoning of others. |
| Use appropriate tools strategically.                  | Look for and make use of structure.                              |
| Reason abstractly and quantitatively.                 | Model with mathematics.  |
| Attend to precision.                                  | Look for and make sense of regularity in repeated reasoning.     |

Essential Questions	CC Focus for Instruction	Planned Learning Experiences/ Instructional Strategies	Assessments	Resources
<p>How does using models of different problem types help us to represent and solve them?</p> <p>_____</p> <p>What strategies or concepts help to find factors or multiples of numbers?</p> <p>_____</p> <p>How do we use relationships between numbers or geometric shapes to describe, generate and extend patterns?</p> <p>_____</p>	<p>1. Represent and solve problems involving the four operations.</p> <p>_____</p> <p>2. Develop and/or apply number theory concepts to find factors and multiples.</p> <p>_____</p> <p>3. Generate and analyze patterns using one rule.</p> <p>_____</p>	<p><u>Direct Instruction:</u>            Smartboard activity            Teacher Modeling            Think-aloud            Literature links via trade books            Videos (Brain-pop, U-Tube, Discovery Ed.)            Vocabulary            Graphic Organizers</p> <p><u>Guided Practice:</u>            Whole class practice            Small group with teacher            Quick Practice            Daily Routine            Work with manipulatives            Student Journal            Literature links via trade books            Differentiated Instruction Cards            Videos (Brain-pop, U-Tube, Discovery Ed., Mega-math)            Graphic Organizers</p> <p><u>Collaborative Practice:</u>            Partner work            Pair-share            Small group            Math talk/student leaders            Student activity book            Project            Student Journal            Differentiated Instruction Cards            Math Center Challenges</p>	<p>MO4.B-0.1.1.1 (through .4)            ME U1 Quiz 1, 2            ME U1 Test, Performance Task            ME U3 Test, Performance Task            4Sight Test            Informal Teacher Observations</p> <p>_____</p> <p>MO4.B-0.1.1.1 (through .4)            B-O.2.1.1            ME U1 Quiz 1, 2            ME U1 Test            Informal Teacher Observations</p> <p>MO4.B-0.3.1.1 (through .3)            ME U8 Quiz 1            ME U8            Informal Teacher Observations</p>	<p>ME U1 (Mult/Div.)            ME U 3 (Add/Subtr.)            ME U5 Lesson 10 (Multi-step probs.)            Supplementary Teacher Resource Books or websites</p> <p>_____</p> <p>ME U1            ME U5            Supplementary Teacher Resource Books or websites</p> <p>_____</p> <p>ME Unit 8 (lessons 1-3)            Supplementary Teacher Resource Books or websites</p>

		Games <u>Independent Practice:</u> Student activity book (SAB) Homework Checks for understanding (TOD) First in Math web practice Differentiated Instruction Cards		
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		<p>Student Journal Differentiated Instruction Cards Math Center Challenges Games</p> <p><u>Independent Practice:</u> Student activity book (SAB) Homework Checks for understanding (TOD) First in Math web practice Differentiated Instruction Cards</p>		
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# CAMP HILL SCHOOL DISTRICT

## Fourth Grade: **Math Standards for Measurement, Data and Probability**

**DOMAIN (MATH CONTENT):**

Measurement and Data

**STANDARDS FOR MATHEMATICAL PRACTICE:**

Make sense of problems and persevere in solving them.

Use appropriate tools strategically.

Reason abstractly and quantitatively.

Attend to precision.

Construct viable arguments and critique the reasoning of others.

Look for and make use of structure.

Model with mathematics.

Look for and make sense of regularity in repeated reasoning.

Essential Questions	CC Focus for Instruction	Planned Learning Experiences/ Instructional Strategies	Assessments	Resources
<p>How do I use multiplication to convert measurements?</p> <p>How can I solve problems involving measurement tools?</p>	<p>1. Solve problems involving measurement and conversions from a larger unit to a smaller unit.</p>	<p><u>Direct Instruction:</u>                      Smartboard activity                      Teacher Modeling                      Think-aloud                      Literature links via trade books                      Videos (Brain-pop, U-Tube, Discovery Ed.)                      Vocabulary                      Graphic Organizers</p>	<p>MO4.D-M.1.1.1 (through .4)                      ME U6 Quiz 1                      ME U6 Test                      ME U12 Quiz 1                      ME U12 Test                      Teacher created Quiz (Elapsed time)                      ME U2 Quiz 2 (Area/Per)                      4Sights                      Informal Teacher Observations</p>	<p>ME Unit 6 (Metric measurement)                      ME U12 (Customary)                      ME U7 (Lesson 10 Time)                      ME U2 (Lesson 4 Area/Per.)                      Supplementary Teacher Resource Books or websites</p>
<p>How do I show data in different types of displays?</p>	<p>2. Translate information from one type of data display to another.</p>	<p><u>Guided Practice:</u>                      Whole class practice                      Small group with teacher                      Quick Practice                      Daily Routine                      Work with manipulatives                      Student Journal                      Literature links via trade books                      Differentiated Instruction Cards                      Videos (Brain-pop, U-Tube, Discovery Ed., Mega-math)                      Graphic Organizers</p>	<p>MO4.D-M2.1.3                      ME U1 Quiz 1 &amp; 2                      ME U1 Test                      ME U9 Quiz 1, Test                      ME U8 Quiz 2, Test                      4Sights                      Informal Teacher Observations</p>	<p>ME U1 (Lesson 5 &amp; 6)                      ME U9 (Lesson 5 &amp; 6)                      ME U8 (Lesson 5 &amp; 6)                      ME U9 (Lesson 16)                      Supplementary Teacher Resource Books or websites</p>
<p>How is data from a line plot used to solve problems?</p>	<p>3. Represent and interpret data involving fractions using information provided in a line plot.</p>	<p><u>Collaborative Practice:</u>                      Partner work                      Pair-share                      Small group                      Math talk/student leaders                      Student activity book                      Project                      Student Journal                      Differentiated Instruction Cards                      Math Center Challenges                      Games</p>	<p>MO4.D-M.2.1.1 &amp; .2                      ME U9 Test                      Informal Teacher Observations</p>	<p>ME U9 (Lesson 16)                      Supplementary Teacher Resource Books or websites</p>

<p>How do measurement and properties of angles help to solve problems?</p>	<p>4. Measure angles and use properties of adjacent angles to solve problems.</p>	<p><u>Independent Practice:</u> Student activity book (SAB) Homework Checks for understanding (TOD) First in Math web practice Differentiated Instruction Cards</p>	<p>MO4.D-M.3.1.1 Teacher Created Quiz Informal Teacher Observations</p>	<p>ME U4 (Lesson 1) Supplementary Worksheets Supplementary Teacher Resource Books or websites</p>
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