



East Stroudsburg Area School District Mathematics - Kindergarten



Description: The East Stroudsburg Area School District's Elementary Mathematics Planned Course reflects the Common Core Standards, Teachers of Mathematics *Principals and Standards for Mathematics Education*, the Pennsylvania State Standards for Mathematics Education and the Pennsylvania Department of Education Assessment Anchors and Eligible Content. It provides a research-based, sequential framework of content designed to maximize successful mastery of mathematics, use and application of the Standards for Mathematical Practices, as well as the Habits of Mind.

Standards for Mathematical Practices	Habits of Mind
<ol style="list-style-type: none">1. Make sense of problems and persevere in solving them.2. Reason abstractly and quantitatively.3. Construct viable arguments and critique the reasoning of others.4. Model with mathematics.5. Use appropriate tools strategically.6. Attend to precision.7. Look for and make use of structure.8. Look for and express regularity in repeated reasoning.	<ol style="list-style-type: none">1. Persisting2. Managing Impulsivity3. Listening to Others with Empathy and Understanding4. Thinking Flexibly5. Metacognition6. Striving for Accuracy and Precision7. Questioning and Posing Problems8. Applying Past Knowledge to New Situations9. Thinking and Communicating with Clarity and Precision10. Gathering Data through all Senses11. Creating, Imagining, and Innovating12. Responding with Wonderment and Awe13. Taking Responsible Risks14. Finding Humor

The Mathematics Curriculum is designed to address the needs of a diverse population of learners. The content builds upon student learning styles and provides for differentiated instruction. Each grade level includes opportunities for enrichment and remediation of concepts, as well as activities for English Language Learners.

Resources are provided to enhance mastery of mathematics vocabulary, basic skills, and problem solving strategies. Technology, communication arts, social studies, science, and children's literature are infused throughout the curriculum. As a result, learners will be offered opportunities to reason, communicate and connect mathematically in the real world.



East Stroudsburg Area School District Mathematics - Kindergarten



Kindergarten instructional time should focus on two critical areas:

- (1) Representing, relating, and operating on whole numbers, initially with sets of objects
- (2) Describing shapes and space. More learning time in Kindergarten should be devoted to number than to other topics.
 - (1) Students use numbers, including written numerals, to represent quantities and to solve quantitative problems, such as counting objects in a set; counting out a given number of objects; comparing sets or numerals; and modeling simple joining and separating situations with sets of objects, or eventually with equations such as $5 + 2 = 7$ and $7 - 2 = 5$. (Kindergarten students should see addition and subtraction equations, and student writing of equations in kindergarten is encouraged, but it is not required.) Students choose, combine, and apply effective strategies for answering quantitative questions, including quickly recognizing the cardinalities of small sets of objects, counting and producing sets of given sizes, counting the number of objects in combined sets, or counting the number of objects that remain in a set after some are taken away.
 - (2) Students describe their physical world using geometric ideas (e.g., shape, orientation, spatial relations) and vocabulary. They identify, name, and describe basic two-dimensional shapes, such as squares, triangles, circles, rectangles, and hexagons, presented in a variety of ways (e.g., with different sizes and orientations), as well as three-dimensional shapes such as cubes, cones, cylinders, and spheres. They use basic shapes and spatial reasoning to model objects in their environment and to construct more complex shapes.



East Stroudsburg Area School District Mathematics - Kindergarten



Grade K Overview

Counting and Cardinality

- Know number names and the count sequence.
- Count to tell the number of objects.
- Compare numbers.

Operations and Algebraic Thinking

- Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

Number and Operations in Base ten

- Work with numbers 11–19 to gain foundations for place value.

Measurement and Data

- Describe and compare measurable attributes.
- Classify objects and count the number of objects in categories.

Geometry

- Identify and describe shapes.
- Analyze, compare, create, and compose shapes.



East Stroudsburg Area School District Mathematics - Kindergarten



Scope & Sequence

- Unit 1: Numbers 0 To 10
 - Domain: Counting and Cardinality
 - Clusters:
 - Know number names and the count sequence
 - Count to tell the number of objects
 - Compare numbers
- Unit 2: Numbers 11 To 100
 - Domain: Counting and Cardinality
 - Clusters:
 - Know the number names and the count sequence
 - Count to tell the number of objects
- Unit 3: Understanding (+) and (-)
 - Domain: Operations and Algebraic Thinking
 - Clusters:
 - Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.
- Unit 4: Composing and Decomposing Numbers To Ten
 - Domain: Operations and Algebraic Thinking
 - Clusters:
 - Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.
- Unit 5: Composing and Decomposing Numbers 11 To 19
 - Domain: Numbers and Operations in Base Ten
 - Clusters:
 - Work with numbers 11-19 to gain foundations for place value.



East Stroudsburg Area School District Mathematics - Kindergarten



- Unit 6: Measurement
 - Domain: Measurement and Data
 - Clusters:
 - Describe and compare measureable attributes.
- Unit 7: Sort, Classify and Categorize
 - Domain: Measurement and Data
 - Clusters:
 - Classify objects and count the number of objects in each category,
- Unit 8: Shapes
 - Domain: Geometry
 - Clusters:
 - Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).
 - Analyze, compare, create and compose shapes.
- Appendix
 - Page 1 ISTE Standards
 - Page 2 Career Education and Work Standards
 - Page 3 Materials Reference/Resource List



East Stroudsburg Area School District Mathematics -Kindergarten



Unit Title/Skill Set: 1. Counting and Cardinality/Numbers 0 to 10	Course Time Prior to Keystone/PSSA: 45 days
Overview: This unit focuses on clusters: a. Knowing number names and the count sequence; b. Counting to tell the numbers of objects; c. Compare numbers	ELL Differentiation: Math & LA specific found at www.pdesas.org/module/sas/curriculumframework/elloverlay.aspx . Generic found at http://www.esasd.net/esl:enVisionMath /Common Core: ELL Strategy-Topic manuals Topics 1-4
Unit Essential Questions: How can numbers from 1 to 10 be counted, read, and written? How can numbers from 1 to 10 be compared and ordered?	Enrichment: Compass Learning Odyssey : https://www.thelearningodyssey.com/ ; Kid's College http://www.kclogin.com/main/go.php .Pearson SuccessNET https://www.pearsonsuccessnet.com enVisionMath Topic Manuals 1-4. Investigations in Number, Data and Space (1998); Mathematica Thinking in Kindergarten; Collecting, Counting and Measuring
PA & National Content Standard(s): <i>State found at www.pdesas.org/standard/standardsdownloads:</i> National Common Core Standards: K.CC.2, K.CC.3, K.CC.4, K.CC.4.a, K.CC.4.b, K.CC.4.c, K.CC.5, K.CC.6, K.CC.7 PA Common Core Standards: CC.2.1.K.A.1, CC.2.1.K.A.2, CC.2.1.K.A.3,	Remediation: Compass Learning Odyssey : https://www.thelearningodyssey.com/ ; Kid's College http://www.kclogin.com/main/go.php Pearson SuccessNET https://www.pearsonsuccessnet.com enVisionMath Topic Manuals 1-4. Investigations in Number, Data and Space (1998); Mathematical Thinking in Kindergarten; Collecting, counting and Measuring
Connecting to Common Core and Other Standards: <i>Common Core found at www.corestandards.org/: Click here to enter text.</i> <i>ISTE found at www.iste.org/standards/nets-for-students.aspx: See appendix</i> <i>Career Education and Work found at www.pacareerstandards.com/: See appendix</i>	IEP/GIEP: Refer to individual student's educational plan under specially designed instruction.



East Stroudsburg Area School District Mathematics -Kindergarten



Assessment Anchors & Eligible Content	Unit Concepts What students need to know	Unit Competencies What students need to be able to do (skills)	Content Vocabulary	Materials, Resources, & Instructional Activities	Assessments
2.1	<ul style="list-style-type: none"> Know number names and recite the count sequence. Write the count sequence. Count to tell the number of objects. Compare numbers 	<ul style="list-style-type: none"> Count forward beginning from a given number within the known sequence (instead of having to begin at 1) Write numbers from 0-10 in sequence. Represent a number of objects with a written numeral 0-10 (with zero representing a count of no objects). Understand the relationship between numbers and quantities; connect counting to cardinality. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. Understand that the last number said tells the number of objects counted. Understand that the number of objects is the same regardless of their arrangement or the order in which they are counted. Understand that each successive number name refers to a quantity that is one larger. Count to answer “how many?” questions about as many as 10 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration. Given a number from 1-10, count out that many objects Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group Compare two numbers between 1-10 represented as written numeral.. 	<ul style="list-style-type: none"> Cardinality Compare Count Greater than Less than More/most Fewer/fewest Same as Number Numeral Order Quantity Sequence Zero One Two Three Four Five Six Seven Eight Nine Ten Column Row Number line Forward Backward 	<ul style="list-style-type: none"> enVision Common Core-Topics 1-4; Including online digital resources Kindergarten Common Core Moodle page-see appendix Investigations in Number, Data and Space (1998): <i>*Mathematical Thinking in Kindergarten</i> <i>*Collecting, Counting Measuring</i> Number cards Counters Number line Connecting cubes Five Frame Mat-enVisions Teaching Tool Ten Frame Mat-envisions Teaching Tool 	<p>enVision Topic Test</p> <p>Teacher-created curriculum-based assessments</p> <p>Teacher Observation</p> <p>Student-generated projects</p> <p>District required standardized test (e.g., DIBELS, GMADE)</p>



East Stroudsburg Area School District Mathematics -Kindergarten



National Common Core Standards:

- K.CC.2** Count forward beginning from a given number within the known sequence (instead of beginning at 1).
- K.CC.3** Write numbers from 0-20. Represent a number of objects with a numeral 0-20(with 0 representing a count of no objects).
- K.CC.4** Understand the relationship between numbers and quantities; connect counting to cardinality.
- K.CC.4a** When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
- K.CC.4b** Understand that the last number said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
- K.CC.4c** Understand that each successive number name refers to a quantity that is one larger.
- K.CC.5** Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.
- K.CC.6** Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.
- K.CC.7** Compare two numbers between 1 and 10 presented as written numerals.

PA Common Core Standards:

- CC.2.1.K.A.1** Know number names and write and recite the count sequence.
- CC.2.1.K.A.2** Apply one-to-one correspondence to count the number of objects.
- CC.2.1.K.A.3** Apply the concept of magnitude to compare numbers and quantities.



East Stroudsburg Area School District Mathematics - Kindergarten



Unit Title/Skill Set: Unit 2. Counting and Cardinality/Numbers 11 To 100	Course Time Prior to Keystone/PSSA: 22 days
Overview: This unit focuses on clusters: a. Know number names and the count sequence. b. Count to tell the number of objects.	ELL Differentiation: Math & LA specific found at 1. PDESAS: www.pdesas.org/module/sas/curriculum/framework/elloverlay.aspx . 2. ESASD: http://www.esasd.net/esl : 3. enVisionMath /Common Core: ELL Strategy-Topic manuals Topics 5 and 6
Unit Essential Questions: How can numbers to 20 be counted, read and written? How can numbers to 100 be counted using a hundred chart?	Enrichment: 1. Compass Learning Odyssey : https://www.thelearningodyssey.com 2. Kid's College http://www.kclogin.com/main/go.php 3. Pearson SuccessNET https://www.pearsonsuccessnet.com/snpapp/login/login.jsp 4. enVisionMath Topic Manuals 5 and 6 5. Investigations in Number, Data and Space (1998) <ul style="list-style-type: none">Counting Ourselves and Others
National and PA Standard(s): State found at www.pdesas.org/standard/standardsdownloads National Common Core Standards: K.CC.1, K.CC.2, K.CC.3, K.CC.4.b, K.CC.4.c, K.CC.5 PA Common Core Standards: CC.2.1.K.A.1, CC.2.1.K.A.2	Remediation 1. Compass Learning Odyssey : https://www.thelearningodyssey.com 2. Kid's College http://www.kclogin.com/main/go.php 3. Pearson SuccessNET https://www.pearsonsuccessnet.com/snpapp/login/login.jsp 4. enVisionMath Topic Manuals 5 and 6 5. Investigations in Number, Data and Space (1998) <ul style="list-style-type: none">Counting Ourselves and Others
Connecting to Common Core and Other Standards: <i>ISTE found at www.iste.org/standards/nets-for-students.aspx: See appendix</i> <i>Career Education and Work found at www.pacareerstandards.com/: See appendix</i>	IEP/GIEP: Refer to individual student's educational plan under specially designed instruction.



East Stroudsburg Area School District

Mathematics - Kindergarten



Assessment Anchors & Eligible Content	Unit Concepts What students need to know	Unit Competencies What students need to be able to do (skills)	Content Vocabulary	Materials, Resources, & Instructional Activities	Assessments
2.1	<ul style="list-style-type: none"> Know number names and recite the count sequence. Count to tell the number of objects. Write the count sequence. 	<ul style="list-style-type: none"> Count forward beginning from a given number within the known sequence (instead of having to begin at 1). Write numbers from 0-20 in sequence. Represent a number of objects with a written numeral 0-20 (with zero representing a count of no objects). Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of the arrangement or the order in which they were counted. Count to 100 by ones and by tens. Understand that each successive number name refers to a quantity that is one larger. Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects. 	<ul style="list-style-type: none"> Eleven Twelve Thirteen Fourteen Fifteen Sixteen Seventeen Eighteen Nineteen Twenty About Hundred chart Row Column Count by 10s 	<ul style="list-style-type: none"> enVision Common Core-Topics 5 and 6; Including online digital resources Kindergarten Common Core Moodle page-see appendix Investigations in Number, Data and Space (1998): <i>*Counting Ourselves and Others</i> Number cards Counters 	<ul style="list-style-type: none"> enVision Topic Test Teacher-created curriculum-based assessments Teacher Observation Student-generated projects District required standardized test (e.g., DIBELS, GMADE)



East Stroudsburg Area School District

Mathematics - Kindergarten



Assessment Anchors & Eligible Content	Unit Concepts What students need to know	Unit Competencies What students need to be able to do (skills)	Content Vocabulary	Materials, Resources, & Instructional Activities	Assessments
2.1				<ul style="list-style-type: none">• Connecting cubes• Number line• Double Ten Frame Mat-enVision Teaching Tool 9• Hundred chart-enVision Teaching Tool 18	(



East Stroudsburg Area School District Mathematics - Kindergarten



Common Core Standards:

K.CC.1 Count to 100 by ones and by tens.

K.CC.2 Count forward beginning from a given number within the known sequence (instead of beginning at 1).

K.CC.3 Write numbers from 0-20. Represent a number of objects with a numeral 0-20 (with 0 representing a count of no objects).

K.CC.4b Understand that the last number said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.

K.CC.4c Understand that each successive number name refers to a quantity that is one larger.

K.CC.5 Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.

PA Common Core Standards:

CC.2.1.K.A.1 Know number names and write and recite the count sequence.

CC.2.1.K.A.2 Apply one-to-one correspondence to count the number of objects.



East Stroudsburg Area School District

Mathematics - Kindergarten



Unit Title/Skill Set: Unit 3: Operations and Algebraic Thinking/Understanding (+) and (-)	Course Time Prior to Keystone/PSSA: 23 days
Overview: This unit focuses on clusters: a. Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	ELL Differentiation: Math & LA specific found at 1.PDESAS: www.pdesas.org/module/sas/curriculumframe/work/elloyerlay.aspx . 2.ESASD: http://www.esasd.net/esl : 3.enVisionMath /Common Core: ELL Strategy-Topic manuals Topics 7 and 8
Unit Essential Questions: How can you show addition as adding to/putting together? How can you show subtraction as taking from/taking apart? What types of situations involve addition/subtraction?	Enrichment: 1 Compass Learning Odyssey : https://www.thelearningodyssey.com 2.Kid's College http://www.kclogin.com/main/go.php 3.Pearson SuccessNET https://www.pearsonsuccessnet.com 4.enVisionMath Topic Manuals 7 and 8 5.Investigations in Number, Data and Space (1998) <ul style="list-style-type: none"> Counting Ourselves and Others How Many in All?
National and PA Standard(s): State found at www.pdesas.org/standard/standardsdownloads National Common Core Standards: K.OA.1, K.OA.2, K.OA.5 PA Common Core Standards: CC.2.2.K.A.1	Remediation: 1. Compass Learning Odyssey : https://www.thelearningodyssey.com 2.Kid's College http://www.kclogin.com/main/go.php 3.Pearson SuccessNET https://www.pearsonsuccessnet.com 4.enVisionMath Topic Manuals 7 and 8 5.Investigations in Number, Data and Space (1998) <ul style="list-style-type: none"> Counting Ourselves and Others How Many in All?
Connecting to Common Core and Other Standards: <i>ISTE found at www.iste.org/standards/nets-for-students.aspx: See appendix</i> <i>Career Education and Work found at www.pacareerstandards.com/: See appendix</i>	IEP/GIEP: Refer to individual student's educational plan under specially designed instruction.



East Stroudsburg Area School District

Mathematics - Kindergarten



Assessment Anchors & Eligible Content	Unit Concepts What students need to know	Unit Competencies What students need to be able to do (skills)	Content Vocabulary	Materials, Resources, & Instructional Activities	Assessments
2.2	<ul style="list-style-type: none"> Understand addition as putting together and adding to. Understand subtraction as taking apart and taking from. 	<ul style="list-style-type: none"> Represent addition with objects, fingers, mental images, drawings, sounds (e.g. claps), acting out situations, verbal explanations, expressions, or equations. Solve addition word problems, and add within 10, e.g., by using objects or drawings to represent the problem. Fluently add within 5. Represent subtraction with objects, fingers, mental images, drawings, sounds (e.g. claps), acting out situations, verbal explanations, expressions, or equations. Solve subtraction word problems, and add within 10, e.g., by using objects or drawings to represent the problem. Fluently subtract within 5. 	<ul style="list-style-type: none"> Number sentence or story Join Add Addend Addition Altogether In all Plus sign Equal Equal sign Sum Solve Equation Pair Subtract Subtraction Separate Decompose Difference Take away Minus sign Left 	<ul style="list-style-type: none"> enVision Common Core-Topics 7 and 8; Including online digital resources Kindergarten Common Core Moodle page-see appendix Investigations in Number, Data and Space (1998) <i>*Counting Ourselves and Others</i> <i>*How Many in All?</i> Number cards Counters Connecting cubes 	<ul style="list-style-type: none"> enVision Topic Test Teacher-created curriculum-based assessments Teacher Observation Student-generated projects District required standardized test (e.g., DIBELS, GMADE)



East Stroudsburg Area School District Mathematics - Kindergarten



National Common Core Standards:

K.OA.1 Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

K.OA.2 Solve addition and subtraction word problems, and add and subtract within number 10, e.g., by using objects or drawings to represent the problem.

K.OA.5 Fluently add and subtract within 5.

PA Common Core Standards:

CC.2.2.K.A.1 Extend the concepts of putting together and taking apart to add and subtract within 10.



East Stroudsburg Area School District Mathematics - Kindergarten



Unit Title/Skill Set: Unit 4:Operations and Algebraic Thinking/ Composing and Decomposing Numbers To Ten

Overview: This unit focuses on cluster:

- a. Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

Unit Essential Questions:

What are the different ways to make a number?

PA & National Content Standard(s): *State found at www.pdesas.org/standard/standardsdownloads*

National Common Core Standards: K.OA.3, K.OA.4

PA Common Core Standards: CC.2.2.K.A.1

Connecting to Common Core and Other Standards:

ISTE found at www.iste.org/standards/nets-for-students.aspx: See appendix

Career Education and Work found at www.pacareerstandards.com/: See appendix

Course Time Prior to Keystone/PSSA: 15 days

ELL Differentiation: Math & LA specific found at

1. PDESAS:www.pdesas.org/module/sas/curriculum/framework/elloverlay.aspx.
2. ESASD: <http://www.esasd.net/esl>:
3. enVisionMath /Common Core: ELL Strategy-Topic manuals Topic 9

Enrichment:

1. Compass Learning Odyssey:
<https://www.thelearningodyssey.com>
2. Kid's College <http://www.kclogin.com/main/go.php>
3. Pearson SuccessNET
<https://www.pearsonsuccessnet.com/snpapp/login/login.jsp>
4. enVisionMath Topic Manual 9
5. Investigations in Number, Data and Space (1998)
 - *How Many in All?*

Remediation:

1. Compass Learning Odyssey:
<https://www.thelearningodyssey.com>
2. Kid's College <http://www.kclogin.com/main/go.php>
3. Pearson SuccessNET
<https://www.pearsonsuccessnet.com/snpapp/login/login.jsp>
4. enVisionMath Topic Manual 9
5. Investigations in Number, Data and Space (1998)
 - *How Many in All?*

IEP/GIEP: Refer to individual student's educational plan under specially designed instruction.



East Stroudsburg Area School District Mathematics - Kindergarten



Assessment Anchors & Eligible Content	Unit Concepts What students need to know	Unit Competencies What students need to be able to do (skills)	Content Vocabulary	Materials, Resources, & Instructional Activities	Assessments
2.2	<ul style="list-style-type: none">Understand addition as putting together and adding to.Understand subtraction as taking apart and taking from.	<ul style="list-style-type: none">Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings.Record each decomposition by a drawing or equation (e.g., $5=2+3$ and $5=4+1$)For any given number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings.For any given number from 1 to 9, find the number that makes 10 when added to the given number and record the answer with a drawing or equation.	<ul style="list-style-type: none">WholePart	<ul style="list-style-type: none">enVision Common Core-Topic 9 Including: online digital resourcesKindergarten Common Core Moodle page-see appendixInvestigations in Number, Data and Space (1998) <i>*How Many in All?</i>CountersTwo-color countersTen Frame Mat- envision Teaching Tool 8	<ul style="list-style-type: none">enVision Topic TestTeacher-created curriculum-based assessmentsTeacher ObservationStudent-generated projectsDistrict required standardized test (e.g., DIBELS, GMADE)



East Stroudsburg Area School District Mathematics - Kindergarten



National Common Core Standards:

K.OA.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5=2+3$ and $5=4+1$).

K.OA.4 For any given number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.

PA Common Core Standards:

CC.2.2.K.A.1 Extend the concepts of putting together and taking apart to add and subtract within 10.



East Stroudsburg Area School District Kindergarten - Math



Unit Title/Skill Set: 5. Numbers and Operations in Base Ten/Composing and Decomposing Numbers 11 to 19

Course Time Prior to Keystone/PSSA: 20 Days

Overview: This unit focuses on cluster:

a. Work with numbers 11-19 to gain foundations for place value.

ELL Differentiation: Math & LA specific found at

1.PDESAS:www.pdesas.org/module/sas/curriculumframe/work/elloverlay.aspx.

2.ESASD: <http://www.esasd.net/esl>:

3.enVisionMath /Common Core: ELL Strategy-Topic manuals Topics 10 and 11

Unit Essential Questions:

How can you add 1 ten and some ones to make the numbers 11 to 19?

How can we break the numbers 11-19 into parts?

Enrichment:

1. Compass Learning Odyssey :

<https://www.thelearningodyssey.com>

2.Kid's College <http://www.kclogin.com/main/go.php>

3.Pearson SuccessNET

<https://www.pearsonsuccessnet.com/snpapp/login/login.jsp>

4.enVisionMath Topic Manuals 10 and 11

5.Investigations in Number, Data and Space (1998)

- *How Many in All?*

PA & National Content Standard(s): State found at www.pdesas.org/standard/standardsdownloads

National Common Core Standard: K.NBT. 1

PA Common Core Standard: CC.2.1.K.B.1

Remediation:

1. Compass Learning Odyssey :

<https://www.thelearningodyssey.com>

2.Kid's College <http://www.kclogin.com/main/go.php>

3.Pearson SuccessNET

<https://www.pearsonsuccessnet.com/snpapp/login/login.jsp>

4.enVisionMath Topic Manuals 10 and 11

5.Investigations in Number, Data and Space (1998)

- *How Many in All?*

Connecting to Common Core and Other Standards:

ISTE found at www.iste.org/standards/nets-for-students.aspx: See appendix

Career Education and Work found at www.pacareerstandards.com/: See appendix

IEP/GIEP: Refer to individual student's educational plan under specially designed instruction.



East Stroudsburg Area School District

Kindergarten - Math



Assessment Anchors & Eligible Content	Unit Concepts What students need to know	Unit Competencies What students need to be able to do (skills)	Content Vocabulary	Materials, Resources, & Instructional Activities	Assessments
2.1	<ul style="list-style-type: none">• Work with numbers 11-19 to gain foundations for place value.• Use place value to compose and decompose numbers within 19.	<ul style="list-style-type: none">• Compose numbers from 11 to 19 into ten ones and some further ones; e.g., by using objects or drawings.• Record each composition by a drawing or equation (e.g., $18=10+8$).• Understand that 11-19 numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.• Decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings.• Record each composition by a drawing or equation.	<ul style="list-style-type: none">• Compose• Decompose• Equation• Ones• Tens• Place Value• Double Ten-Frame• Set	<ul style="list-style-type: none">• enVision Common Core-Topics 10 and 11 Including: online digital resources• Kindergarten Common Core Moodle page-see appendix• Investigations in Number, Data and Space (1998) <i>*How Many in All?</i>• Two-color counters• Ten Frame – enVision Teaching Tool 8• Double Ten Frame Mat-Teaching Tool 9	<p>envision Topic Test</p> <p>Teacher-created curriculum-based assessments</p> <p>Teacher Observation</p> <p>Student-generated projects</p> <p>District required standardized test (e.g., DIBELS, GMADE)</p>



East Stroudsburg Area School District Kindergarten - Math



National Common Core Standards:

K.NBT.1 Compose and decompose numbers from 11-19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18=10+8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

PA Common Core Standards:

CC.2.1.K.B.1 Use place value to compose and decompose numbers within 19.



East Stroudsburg Area School District Mathematics - Kindergarten



Unit Title/Skill Set: Unit 6: Measurement and Data/ Measurement

Course Time Prior to Keystone/PSSA: 14 Days

Overview: This unit focuses on cluster:

- a. Describe and compare measurable attributes.

ELL Differentiation: Math & LA specific found at

- 1.PDESAS:www.pdesas.org/module/sas/curriculumframe/work/elloverlay.aspx.
- 2.ESASD: <http://www.esasd.net/esl>:
- 3.enVisionMath /Common Core: ELL Strategy-Topic manuals Topic 12

Unit Essential Questions:

- How can objects be compared and ordered by length, height, and weight?
How can you tell if a container holds the same, more or less?
How can you tell if an area is larger or smaller?

Enrichment:

1. Compass Learning Odyssey :
<https://www.thelearningodyssey.com>
- 2.Kid's College <http://www.kclogin.com/main/go.php>
- 3.Pearson SuccessNET
<https://www.pearsonsuccessnet.com/snpapp/login/login.jsp>
- 4.enVisionMath Topic Manual 12
- 5.Investigations in Number, Data and Space (1998)
 - Collecting, Counting and Measuring

PA & National Content Standard(s): State found at www.pdesas.org/standard/standardsdownloads

National Common Core Standards: K.MD.1, K.MD.2

PA Common Core Standard: CC.2.4.K.A.1

Remediation:

1. Compass Learning Odyssey :
<https://www.thelearningodyssey.com>
- 2.Kid's College <http://www.kclogin.com/main/go.php>
- 3.Pearson SuccessNET
<https://www.pearsonsuccessnet.com/snpapp/login/login.jsp>
- 4.enVisionMath Topic Manual 12
- 5.Investigations in Number, Data and Space (1998)
 - Collecting, Counting and Measuring

Connecting to Common Core and Other Standards:

*ISTE found at www.iste.org/standards/nets-for-students.aspx: See appendix
Career Education and Work found at www.pacareerstandards.com/: See appendix*

IEP/GIEP: Refer to individual student's educational plan under specially designed instruction.



East Stroudsburg Area School District

Mathematics - Kindergarten



Assessment Anchors & Eligible Content	Unit Concepts What students need to know	Unit Competencies What students need to be able to do (skills)	Content Vocabulary	Materials, Resources, & Instructional Activities	Assessments
2.4	<ul style="list-style-type: none"> Describe and compare measurable attributes. 	<ul style="list-style-type: none"> Describe measurable attributes of objects such as length, height or weight. Describe several measurable attributes of a single object using content vocabulary. Directly compare two objects with a measurable attribute in common, to see which objects has "more of"/"less of" the attribute, and describe the difference. (ex.: Directly compare the heights of two children and describe one child as taller/shorter.) Compare capacities and decide which holds more or holds less. Compare the size of two areas and decide which area is larger or smaller. 	<ul style="list-style-type: none"> Attribute Compare Measure Length Longer/longest As long as Shorter/shortest Height Taller/Tallest As tall as Weight Lighter Weighs less Heavier Weighs more About the same Balance scale Holds more Holds less Full Empty Area 	<ul style="list-style-type: none"> enVision Common Core-Topic 12 Including: online digital resources Kindergarten Common Core Moodle page-see appendix Investigations in Number, Data and Space (1998) <i>*Collecting, Counting and Measuring</i> Connecting cubes Balance scale Measuring cup Comparing Capacities-Teaching Tool 26 	<ul style="list-style-type: none"> enVision Topic Test Teacher-created curriculum-based assessments Teacher Observation Student-generated projects District required standardized test (e.g., DIBELS, GMADE)



East Stroudsburg Area School District Mathematics - Kindergarten



National Common Core Standards:

K.MD.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.

K.MD.2 Directly compare two objects with a measurable attribute in common, to see which object has “more of”/”less of” the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.

PA Common Core Standard:

CC.2.4.K.A.1 Describe and compare attributes of length, area, weight, and capacity of everyday objects.



East Stroudsburg Area School District Mathematics - Kindergarten



Unit Title/Skill Set: Unit 7: Measurement and Data/ Sort, Classify and Categorize	Course Time Prior to Keystone/PSSA: 9 days
Overview: This unit focuses on cluster: a. Classify objects and count the number of objects in each category.	ELL Differentiation: Math & LA specific found at 1. PDESAS: www.pdesas.org/module/sas/curriculum/framework/elloverlay.aspx . 2. ESASD: http://www.esasd.net/esl : 3. enVisionMath /Common Core: ELL Strategy-Topic manuals Topic 13
Unit Essential Questions: What are the different ways objects can be grouped? What are the different ways objects can be classified?	Enrichment: 1. Compass Learning Odyssey : https://www.thelearningodyssey.com 2. Kid's College http://www.kclogin.com/main/go.php 3. Pearson SuccessNET https://www.pearsonsuccessnet.com/snpapp/login/login.jsp 4. enVisionMath Topic Manual 13 5. Investigations in Number, Data and Space (1998) <ul style="list-style-type: none">• <i>Making Shapes and Building Blocks</i>
PA & National Content Standard(s): <i>State found at www.pdesas.org/standard/standardsdownloads</i> National Common Core Standards: K.MD.3 PA Common Core Standards: CC.2.4.K.A.4	Remediation: 1. Compass Learning Odyssey : https://www.thelearningodyssey.com 2. Kid's College http://www.kclogin.com/main/go.php 3. Pearson SuccessNET https://www.pearsonsuccessnet.com/snpapp/login/login.jsp 4. enVisionMath Topic Manual 13 5. Investigations in Number, Data and Space (1998) <ul style="list-style-type: none">• <i>Making Shapes and Building Blocks</i>
Connecting to Common Core and Other Standards: <i>ISTE found at www.iste.org/standards/nets-for-students.aspx: See appendix</i> <i>Career Education and Work found at www.pacareerstandards.com/: See appendix</i>	IEP/GIEP: Refer to individual student's educational plan under specially designed instruction.



East Stroudsburg Area School District

Mathematics - Kindergarten



Assessment Anchors & Eligible Content	Unit Concepts What students need to know	Unit Competencies What students need to be able to do (skills)	Content Vocabulary	Materials, Resources, & Instructional Activities	Assessments
2.4	<ul style="list-style-type: none"> Classify objects and count the number of objects in each category. 	<ul style="list-style-type: none"> Classify objects into given categories. Count the number of objects in each category. Sort the categories by count. 	<ul style="list-style-type: none"> Category Sort Same/Alike Different Does not belong Sorting rule 	<ul style="list-style-type: none"> enVision Common Core-Topic 13 Including: online digital resources Kindergarten Common Core Moodle page-see appendix Investigations in Number, Data and Space (1998) <i>*Making Shapes and Building Blocks</i> Counters Color tiles Shapes Buttons Sort More Teaching Tool 4 	<ul style="list-style-type: none"> enVision Topic Test Teacher-created curriculum-based assessments Teacher Observation Student-generated projects District required standardized test (e.g., DIBELS, GMADE)



East Stroudsburg Area School District Mathematics - Kindergarten



National Common Core Standards:

K.MD.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

PA Common Core Standards:

CC.2.4.K.A.4 Classify objects and count the number of objects in each category.



East Stroudsburg Area School District Mathematics - Kindergarten



Unit Title/Skill Set: Unit 8: Geometry/Shapes

Overview: This unit focuses on clusters:

- Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).
- Analyze, compare, create, and compose shapes.

Unit Essential Questions:

How can shapes be named and described?

How can shapes be named, described, compared and composed?

What words can be used to describe the position and location of shapes?

PA & National Content Standard(s): State found at www.pdesas.org/standard/standardsdownloads

National Common Core Standards: K.G.1, K.G.2, K.G.3, K.G.4, K.G.5, K.G.6

PA Common Core Standards: CC.2.3.K.A.1, CC. 2.3.K.A.2

Connecting to Common Core and Other Standards:

ISTE found at www.iste.org/standards/nets-for-students.aspx: See appendix

Career Education and Work found at www.pacareerstandards.com/: See appendix

Course Time Prior to Keystone/PSSA: 26 Days

ELL Differentiation: Math & LA specific found at

- PDESAS: www.pdesas.org/module/sas/curriculumframe/work/elloverlay.aspx.
- ESASD: <http://www.esasd.net/esl>:
- enVisionMath /Common Core: ELL Strategy-Topic manuals Topics 14, 15 and 16

Enrichment:

- Compass Learning Odyssey :
<https://www.thelearningodyssey.com>
- Kid's College <http://www.kclogin.com/main/go.php>
- Pearson SuccessNET
<https://www.pearsonsuccessnet.com/snpapp/login/login.jsp>
- enVisionMath Topic Manuals 14, 15 and 16
- Investigations in Number, Data and Space (1998)
 - Making Shapes and Building Blocks*

Remediation:

- Compass Learning Odyssey :
<https://www.thelearningodyssey.com>
- Kid's College <http://www.kclogin.com/main/go.php>
- Pearson SuccessNET
<https://www.pearsonsuccessnet.com/snpapp/login/login.jsp>
- enVisionMath Topic Manuals 14, 15 and 16
- Investigations in Number, Data and Space (1998)
 - Making Shapes and Building Blocks*

IEP/GIEP: Refer to individual student's educational plan under specially designed instruction.



East Stroudsburg Area School District

Mathematics - Kindergarten



Assessment Anchors & Eligible Content	Unit Concepts What students need to know	Unit Competencies What students need to be able to do (skills)	Content Vocabulary	Materials, Resources, & Instructional Activities	Assessments
2.3	<ul style="list-style-type: none"> Identify and describe shapes (squares, circles, triangle, rectangles, hexagons, cubes, cones, cylinders and spheres). Analyze, compare, create, and compose shapes. 	<ul style="list-style-type: none"> Describe objects in the environment using names of shapes. Describe the relative positions of objects using terms such as above, below, beside, in front of, behind, and next to. Correctly name shapes regardless of their orientations or overall size. Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid"). Analyze and compare two-and three-dimensional shapes, in different sizes and orientations, using informational language to describe their similarities, difference, parts (e.g., number of sides and vertices/"corner") and other attributes (e.g, having sides of equal length.) Model shapes in the world by building shapes from components (e.g., sticks and clay balls). Model shapes in the world by drawing shapes. Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?" 	<ul style="list-style-type: none"> Compare Compose Similar Circle Cone Cube Cylinder Hexagon Rectangle Sphere Square Triangle Shape Two-dimensional shape Three-dimensional shape Position word Left right Side Corner Flat surface 	<ul style="list-style-type: none"> enVision Common Core-Topics 14, 15 and 16 Including: online digital resources Kindergarten Common Core Moodle page-see appendix Investigations in Number, Data and Space (1998) <i>*Making Shapes and Building Blocks</i> Shapes Attribute Blocks Pattern Blocks Geometric solids 	<ul style="list-style-type: none"> enVision Topic Test Teacher-created curriculum-based assessments Teacher Observation Student-generated projects District required standardized test (e.g., DIBELS, GMADE)



East Stroudsburg Area School District Mathematics - Kindergarten



National Common Core Standards:

K.G.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.

K.G.2 Correctly name shapes regardless of their orientation or overall size.

K.G.3 Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).

K.G.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”) and other attributes (e.g., having sides of equal length).

K.G.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.

K.G.6 Compose simple shapes to form larger shapes, for example, “Can you join these two triangles with full sides touching to make a rectangle?”

PA Common Core Standards:

CC.2.3.K.A.1 Identify and describe two –and three –dimensional shapes.

CC.2.3.K.A.2 Analyze, compare, create, and compose two- and three- dimensional shapes.