









Trimester	Unit Title	Recommended Instructional Days
3	Data	6 - 9 days
Domain: Data Literacy		
<p><i>Strand:</i></p> <p> 2.DL.A.1 Understand that people collect data to answer questions. Understand that data can vary.</p> <p> 2.DL.A.2 Identify what could count as data (e.g., visuals, sounds, numbers).</p> <p> 2.DL.B.4 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put together, take-apart, and compare problems for using information presented in a bar graph. </p>		
 Major Cluster	 Supporting Cluster	 Additional Cluster
 Climate Change Opportunity		
<i>Progress Indicator:</i> ♦ Tests ♦ Homework / Classwork ♦ Projects ♦ Formative assessments ♦ Summative assessments ♦ Performance assessments		
Mathematical Practices:		
<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 reason 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. 		

Recommended Activities, Investigations, Interdisciplinary Connections, and/or Student Experiences to Explore NJSLs-CLKS within Unit

Essential Questions:

- Lesson 17.1: How can people collect data to answer questions?
- Lesson 17.2: What visuals can you use to show data?
- Lesson 17.3: What are different ways you can show and represent data?
- Lesson 17.4: How can you use a bar graph to show data?
- Lesson 17.5: How can you make a bar graph to show data?
- Lesson 17.6: What is a picture graph? Can it show the same data as a bar graph?

Essential Understandings:

- Lesson 17.1: Use a tally chart to record data from a survey.
- Lesson 17.2: Use a picture graph to show data.
- Lesson 17.3: Make a picture graph to show data in a tally chart.
- Lesson 17.4: Use a bar graph to show data.
- Lesson 17.5: Make a bar graph to show data.
- Lesson 17.6: Use picture graphs and bar graphs to show the same data.

Vocabulary

- data
- survey
- picture graph
- key
- bar graph

Suggested Activity Description:

Waggle, On the Spot Videos, Tier 2 and 3 Intervention Resources, Vocabulary Activities, Grab and Go Differentiation Kit, Explore and Guided/Independent Practice related to the NJSLs, Essential Question Discussion and Check-In, Share and Show, Basic Skills Review, Manipulative Activity, Reteach Activity, Reading Strategies Activity, Making Connections, Multilingual Support, Performance Task, Enrich Activity, Exit Ticket

Interdisciplinary Connections:

Science:

(Lesson 17.1)

Materials: Photos of neighborhood birds

1. Make a list of four or five types of birds that live in the local area.

2. Have children tell what they know about these birds. What do these birds eat? Where do they build their nests? Do they stay in the neighborhood all year or do they migrate to other places?
3. Make a tally chart with children for a survey of children’s favorite bird from the list of choices. Discuss the results of the survey.

(Lesson 17.5)

1. Make a tally chart with the title Our Weather. Ask children to suggest terms to describe the weather where you live. Choices might include terms such as sunny, cloudy, rainy (or snowy). List 3 or 4 choices in the chart.
2. Each day, have a volunteer make a tally mark in the chart in the row that best describes the weather for the day.
3. After two weeks, have children use the data in the tally chart to make a picture graph or a bar graph.

Social Studies:

(Lesson 17.1)

1. List four or five places in the local community such as the fire station, the police station, the library, and a park. Discuss the importance and significance of each place.
2. Ask children if they have visited any of the locations that are on the list. For children who have been to any of the locations, you may wish to have them describe their experiences.
3. Make a tally chart with children for a survey of children’s choices of the place they would most like to visit from the list. Discuss the results of the survey.

(Lesson 17.5)

1. Have children list four different things that they can find on a playground. Write the answers on the board.
2. Ask children to vote for their favorite thing on the playground from the list as you read off the four names. As you survey the children, make a tally chart on the board to record the data.
3. Have children use the tally chart to make a bar graph.

Language Arts:

1. Wow! Fluffo Sure Can Eat - (From the Differentiated Centers Kits Grab and Go)



Climate Change: Students may draw a bar graph having a single-unit scale to represent a data set about a climate change related issue in their school, such as food waste, recycling, reusing, and/or reducing the consumption of goods.

Spot Light On: Define "include" with examples.

Social and Emotional Learning: <i>Competencies</i>	Social and Emotional Learning: <i>Sub-Competencies</i>
SEL Competencies: • Self- awareness	• Recognizing the importance of self-confidence in handling daily tasks and challenges.

**Grade 2 Mathematics
Unit 17: Data**

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<ul style="list-style-type: none"> • Social Awareness • Self- Management • Relationship Skills • Responsible Decision-Making 		<ul style="list-style-type: none"> • Demonstrate an awareness of the expectations for social interactions in a variety of ways. • Demonstrate an understanding of the need for mutual respect when viewpoints differ. • Identify and apply ways to persevere through alternative methods to achieve goals. • Utilize positive communication and social skills to interact effectively with others. • Develop, implement, and model effective problem solving and critical thinking skills. 	
Assessments (Formative) <i>To show evidence of meeting the standard/s, students will successfully engage within:</i>		Assessments (Summative) <i>To show evidence of meeting the standard/s, students will successfully complete:</i>	
Formative Assessments: • Teacher Observations • Exit Tickets • Quizzes • Self Assessments • Math Journals • Homework/Classwork • Teacher created assessments		Benchmarks & Summative Assessments: Chapter/Unit Assessments • Standardized Tests • Project-based Assessments	
Differentiated Student Access to Content: Teaching and Learning <u>Resources/Materials</u>			
Core Resources	Alternate Core Resources <i>IEP/504/At-Risk/ESL</i>	ELL Core Resources	Gifted & Talented Core Resources
Go Math Workbook, Interactive Student Edition, ST MATH 60 minutes a week, Waggle, Math on the Spot Videos, iReady, Khan Academy, Illustrative Mathematics, Learn360, TeacherTube, BrainPOP, Freckle, LearnZillion, MobyMax, Achieve the Core, Desmos, RTI	Reteaching worksheets, Skill building workbook, Math manipulatives, iTools, Leveled practice worksheets	Multilingual glossary, eGlossary, Multilingual Activities on ED, Vocabulary Cards, Success for English Learners worksheets, Leveled Strategies for English Learners, Linguistic Support	ST MATH special projects, Enrichment worksheets, Art of Problem Solving, Leveled assessments

Supplemental Resources			
<p>Technology:</p> <ul style="list-style-type: none"> • Chromebooks • Online math manipulatives <p>Other:</p> <ul style="list-style-type: none"> • Google Classroom, Google Meets, Schoology, Interactive Workbooks • Illustrative Mathematics • insidemathematics.org • National Library of Virtual Manipulatives 			
Differentiated Student Access to Content: Recommended <i>Strategies & Techniques</i>			
Core Resources	Alternate Core Resources <i>IEP/504/At-Risk/ESL</i>	ELL Core Resources	Gifted & Talented Core
Deliver instruction utilizing varied learning styles including audio, visual, and tactile/kinesthetic, provide individual instruction as needed, modify assessments and/or rubrics, repeat	Utilize a multi-sensory (VAKT) approach during instruction, provide alternate presentations of skills by varying the method (repetition, simple explanations, additional examples, modeling, etc.), modify test content and/or format, allow students to retake test for additional credit, provide additional times and preferential seating as needed, review, restate and repeat directions, provide study guides, and/or break assignments into segments of shorter tasks.	Extend time requirements, preferred seating, positive reinforcement, check often for understanding/review, oral/visual directions/prompts when necessary, supplemental materials including use of an online bilingual dictionary, and modified assessment and/or rubric.	Create an enhanced set of introductory activities, integrate active teaching/learning opportunities, incorporate authentic components, propose interest-based extension activities, and connect student to related

NJSLS CAREER READINESS, LIFE LITERACIES & KEY SKILLS	Disciplinary Concept(s): Technology Literacy	
	Core Ideas:	Digital tools have a purpose.
	Performance Expectation/s:	9.4.2.TL.6 Illustrate and communicate ideas and stories using multiple digital tools

	Career Readiness, Life Literacies, & Key Skills Practices
	<p>Act as a responsible and contributing community member and employee. Attend to financial well-being. Consider the environmental, social and economic impacts of decisions. Demonstrate creativity and innovation. Utilize critical thinking to make sense of problems and persevere in solving them. Model integrity, ethical leadership and effective management. Plan education and career paths aligned to personal goals. Use technology to enhance productivity, increase collaboration and communicate effectively. Work productively in teams while using cultural/global competence.</p>

New Jersey Legislative Statutes and Administrative Code (place an "X" before each law/statute if/when present within the curriculum map)								
Amistad Law: <i>N.J.S.A. 18A 52:16A-88</i>		Holocaust Law: <i>N.J.S.A. 18A:35-28</i>		LGBT and Disabilities Law: <i>N.J.S.A. 18A:35-4.35</i>	X	Diversity & Inclusion: <i>N.J.S.A. 18A:35-4.36a</i>	X	Standards in Action: <i>Climate Change</i>