Trimester	Unit Title	Recommended Instructional Days			
3	Data	8 - 10 Days			
	Domain				
Strand:					
2.MD.D.10- Represent and interpret data. 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 using information presented in a bar graph.					
Major Cluster Supporting Cluster	O Additional Cluster				
Progress Indicator: ◊ Tests ◊ Homework / Classwork	♦ Projects ♦ Formative assessments ♦ Summative assessments				
	Mathematical Practices:				
 Make sense of problems and persevere in solving them. Reason abstractly and quantitatively. Construct viable arguments and critique the reason of others. Model with mathematics. Use appropriate tools strategically. Attend to precision. Look for and make use of structure. 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 10.1- How do you use a tally chart to record Lesson 10.2- How do you use a picture graph to sho Lesson 10.3- How do you make a picture graph to s	ow data?				

Lesson 10.4- How is a bar graph used to show data?

Lesson 10.5- How do you make a bar graph to show data?

Lesson 10.6- How does making a bar graph help when solving problems about data?

Essential Understandings:

Lesson 10.1- Collect data in a survey and record that data in a tally chart.

Lesson 10.2- Interpret data in picture graphs and use that information to solve problems.

Lesson 10.3- Make picture graphs to represent data.

Lesson 10.4- Interpret data in bar graphs and use that information to solve problems.

Lesson 10.5- Make a bar graph to represent data.

Lesson 10.6- Solve problems involving data by using the Make a Graph strategy.

Vocabulary

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

Suggested Activity Description:

Personal Math Trainer, Tutorial Videos, Vocabulary Game, Reading Grab and Go Activity, Explore and Guided/Independent Practice related to the NJSLS, Evaluation Online Activity, Essential Question Discussion and Check –In, Basic Skills Review, Manipulative Activity, Reteach Activity, Reading Strategies Activity, Success for English Learners Activity, Performance Task

Interdisciplinary Connections:

STEM Activity: In Chapter 10, children extend their understanding of data, by creating pictures and bar graphs. These same topics are often used in the development of various science concepts and process skills, such as determining the number of students who chose a particular fruit as their favorite. Help children make the connection between math and science through the S.T.E.M. activities and activity worksheets found at Think Central.

In Chapter 10, children connect math and science with the S.T.E.M. Activity Plant Start-Ups and the accompanying worksheets (pages 109 and 110). Through this S.T.E.M. Activity, students will connect to the GO Math! Chapter 10 concepts and skills with various types of plants, including comparing the heights of different types of plants. It is recommended that this S.T.E.M. Activity be used after lesson 10.6.

Science:

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

2. 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. Each day, have a volunteer make a tally mark in the chart in the row that best describes the weather for the day. After two weeks, have children use the data in the tally chart to make a picture graph or a bar graph.

Social Studies:

- 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. 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. 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.
- 2. Have children list four different things that they can find on a playground. Write the answers on the board. 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. Have children use the tally chart to make a bar graph.

Language Arts:

- 1. Vocabulary Builder pg. 651 **Visualize It** Review the meaning of the term tally mark. Have children look at the tally marks shown for 7 in the graphic organizer at the top of the page. Review with children that after four tally marks are made, the next tally mark is made as a diagonal mark over those four tally marks. **Understand Vocabulary** Tell children that there are many different numbers they can write to make each sentence true. Before children complete the sentences, you may want to ask them to tell, in their own words, what the terms more than and fewer than mean.
- 2. Wow! Fluffo Sure Can Eat -(From the Grab and Go Differentiated Center Kit)
- 3. What Do You Like? -(From the Grab and Go Differentiated Center Kit)

Spot Light On: Keep all religious holidays in mind when creating your schedule not just holidays school is closed for

Social and Emotional Learning: Competencies	Social and Emotional Learning: Sub-Competencies			
SEL Competencies: • Self- awareness • Social Awareness • Self- Management • Relationship Skills • Responsible Decision-Making	 Recognizing the importance of self-confidence in handling daily tasks and challenges. 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) To show evidence of meeting the standard/s, students will successfully engage within:	Assessments (Summative) To show evidence of meeting the standard/s, students will successfully complete:			
Formative Assessments: • Teacher Observations • Exit Tickets • Quizzes • Self Assessments • Math Journals • Homework/Classwork • Teacher created assessments	Benchmarks & Summative Assessments: Chapter/Unit Assessments • Standardized Tests • District Assessments • Project-based Assessments			

Differentiated Student Access to Content: Teaching and Learning <u>Resources/Materials</u>

Core Resources	Alternate Core Resources IEP/504/At-Risk/ESL	ELL Core Resources	Gifted & Talented Core Resources		
Go Math Workbook, IXL,ST MATH 60 minutes a week, Personal Math Trainer, Math on the Spot Videos, My HRW, Khan Academy, Illustrative Mathematics, Learn360, TeacherTube, BrainPOP, Freckle, LearnZillion, MobyMax, ST Math, Edulastic, Achieve the Core, Desmos	Reteaching worksheets, Skill building workbook, Math manipulatives, Leveled practice worksheets	Dictionary for native language, Video tutorial in native language, Success for English Learners worksheets, Leveled Strategies for English Learners, Linguistic Support			

Supplemental Resources

Technology:

• Chromebooks • Online math manipulatives

Other:

• Google Classroom, Google Meets, Schoology, Interactive Workbooks • Illustrative Mathematics • insidemathematics.org • National Library of Virtual Manipulatives

Differentiated Student Access to Content: Recommended <u>Strategies & Techniques</u>							
Core Resources	Alternate Core Resources IEP/504/At-Risk/ESL	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				

	Disciplinary Concept(s): Information and Media Literacy				
NJSLS CAREER READINESS, LIFE LITERACIES & KEY SKILLS	Core Ideas: Digital tools and media resources provide access to vast stores of that can be searched.				
	Performance Expectation/s:	9.4.2.IML.2 Represent data in a visual format to tell a story about the data			
	Career Readiness, Life Literacies, & Key Skills Practices				
	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.				

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Use tee	ducation and career paths aligned to personal goals. Chnology to enhance productivity, increase collaboration and communicate effectively. Productively in teams while using cultural/global competence.
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New Jersey Legislative Statutes and Administrative Code (place an "X" before each law/statute if/when present within the curriculum map)									
Amistad Law: N.J.S.A. 18A 52:16A-88		Holocaust Law: <i>N.J.S.A. 18A:35-28</i>		LGBT and Disabilities Law: N.J.S.A. 18A:35-4.35	X	Diversity & Inclusion: N.J.S.A. 18A:35-4.36a		Standards in Action: <i>Climate Change</i>	