

# Unit 6: Measurement: Length

Content Area: **Template**  
Course(s):  
Time Period: **Full Year**  
Length: **Full Year**  
Status: **Published**

## UNIT RATIONALE

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The purpose of this unit is for students to be able to understand length and measure the length of objects using both standard and metric units. Students will learn to estimate and add and subtract lengths.

## ESSENTIAL QUESTIONS

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### Module 18: Measurement: Length

1. How can we estimate the length of objects by partitioning the objects into inches, feet or yards?
2. How can we measure objects to the nearest inch, foot and yard?

### Module 19: Length in Centimeters and Meters

1. How can we use known lengths to estimate lengths of objects in centimeters?
2. How can we measure lengths of objects to the nearest centimeter and meter?

### Module 20: Relate Addition and Subtraction to Length

1. How can we solve addition and subtraction problems involving lengths of objects in inches and centimeters by using a number line diagram?
2. How do we find the difference in lengths between two objects with the same unit measure?

## STANDARDS

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### NEW JERSEY STUDENT LEARNING STANDARDS: CONTENT AREA

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#### New Jersey (NJSL)S) - Grade 2 - Mathematics (2020)

##### 2.MD.A

Measure and estimate lengths in standard units.

##### 2.MD.A.1

Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.

### 2.MD.A.2

Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.

### 2.MD.A.3

Estimate lengths using units of inches, feet, centimeters, and meters.

### 2.MD.A.4

Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.

### 2.MD.B.5

Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.

### 2.MD.B.6

Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.

### 2.MD.D.9

Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.

MA.2.MD.A	Measure and estimate lengths in standard units.
MA.2.MD.A.1	Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
MA.2.MD.A.2	Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.
MA.2.MD.A.3	Estimate lengths using units of inches, feet, centimeters, and meters.
MA.2.MD.A.4	Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.
MA.2.MD.B.5	Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.
MA.2.MD.B.6	Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2,..., and represent whole-number sums and differences within 100 on a number line diagram.
MA.2.MD.D.9	Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.

## **NEW JERSEY STUDENT LEARNING STANDARDS: CAREER READINESS, LIFE LITERACIES AND KEY SKILLS**

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TECH.9.4.2.CT.3 Use a variety of types of thinking to solve problems (e.g., inductive, deductive).

## **NEW JERSEY STUDENT LEARNING STANDARDS: COMPUTER SCIENCE AND DESIGN**

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## THINKING

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CS.K-2.8.1.2.AP.4

Break down a task into a sequence of steps.

## PRE-ASSESSMENTS

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**Module 18:** Length in Inches, Feet and Yards, Are you ready?, pg. 428

**Module 19:** Length in Centimeters and Meters, Are you ready?, pg. 470

**Module 20:** Relate Addition and Subtraction to Length, Are you ready?, pg. 490

## INSTRUCTIONAL PLAN

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### MODULE 18

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# Module 18: Length in Inches, Feet and Yards

### LESSON 18.1

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<b>Student Learning Intentions (SLI) WALT: (We are learning to...)</b>	Lesson 18.1 We are learning to estimate the lengths of objects by mentally partitioning the lengths into inches.
<b>Student Learning Strategies</b>	Students will estimate lengths using units of inches, feet centimeters and meters.
<b>Success Criteria</b>	I can use 1-inch tiles to estimate lengths.
<b>Formative Assessment (drives instructional decisions)</b>	<ul style="list-style-type: none"><li>- Turn and Talk questions, pgs. 430 -431</li><li>- Check for understanding, pg. 431</li><li>- On your own, pg.432</li></ul>
<b>Activities and Resources</b>	<p><b>Warm Up:</b> Activate Prior Knowledge pg. 429B and Spark your learning pg. 429D</p> <p><b>Mini Lesson:</b> Build Your Understanding, pg. 430</p> <p><b>Guided Practice:</b> Check Understanding, pg. 431</p>

	<p><b>Independent Practice:</b> On Your Own &amp; Exit Ticket pg. 432</p> <p><b>Resources:</b> Into Math Teacher Edition Module 18</p>
<p><b>Suggested Modifications</b></p>	<p><b>Small Group Options:</b> Plan for differentiated instruction pg. 429c</p> <p><b>Math Center Options:</b> On Track:  <ul style="list-style-type: none"> <li>- More practice/ homework 18.1</li> <li>- Interactive On My Own</li> <li>- Interactive Glossary: estimate, inch</li> <li>- Game: How Long?</li> <li>- Reader: Nature Walk</li> </ul> <p>Almost There: -Reteach 18.1  <ul style="list-style-type: none"> <li>- Interactive Reteach 18.1</li> </ul> <p>Ready for More:  <ul style="list-style-type: none"> <li>- Challenge 18.1</li> <li>- Interactive Challenge 18.1</li> </ul> </p></p></p>

MA.2.MD.A.3

Estimate lengths using units of inches, feet, centimeters, and meters.

## LESSON 18.2

<p><b>Student Learning Intentions (SLI) WALT: (We are learning to...)</b></p>	<p>Lesson 18.2 We are learning to generate and use a paper ruler without and with numbers by using 1-inch tiles.</p>
<p><b>Student Learning Strategies</b></p>	<p>Students will make a ruler to use to measure length.</p>
<p><b>Success Criteria</b></p>	<p>I can use 1-inch tiles to make a ruler to measure objects.</p>
<p><b>Formative Assessment (drives instructional decisions)</b></p>	<ul style="list-style-type: none"> <li>- Turn and Talk questions, pgs. 435 &amp; 436</li> <li>- Check for understanding, pg. 436</li> <li>- On your own, pg.437</li> </ul>
<p><b>Activities and Resources</b></p>	<p><b>Warm Up:</b> Activate Prior Knowledge pg. 433B and Spark your Learning pg. 433D</p>

	<p><b>Mini Lesson:</b> Build Your Understanding, pgs. 434 &amp; 435</p> <p><b>Guided Practice:</b> Check Understanding, pg. 436</p> <p><b>Independent Practice:</b> On Your Own &amp; Exit Ticket, pg. 437</p> <p><b>Resources:</b> Into Math Teacher Edition Module 18</p>
<p><b>Suggested Modifications</b></p>	<p><b>Small Group Options:</b> Plan for differentiated instruction pg. 433c</p> <p><b>Math Center Options:</b> On Track:  <ul style="list-style-type: none"> <li>- More practice/ homework 18.2</li> <li>- Interactive On My Own</li> <li>- Interactive Glossary: ruler</li> <li>- Game: How Long?</li> </ul> Almost There: -Reteach 18.2  <ul style="list-style-type: none"> <li>- Interactive Reteach 18.2</li> </ul> Ready for More:  <ul style="list-style-type: none"> <li>- Challenge 18.2</li> <li>- Interactive Challenge 18.2</li> </ul> </p>

MA.2.MD.A.1

Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.

## LESSON 18.3

<p><b>Student Learning Intentions (SLI) WALT: (We are learning to...)</b></p>	<p>Lesson 18.3 We are learning to measure the lengths of objects to the nearest inch using an inch ruler.</p>
<p><b>Student Learning Strategies</b></p>	<p>Students will measure the length of an object to the nearest inch.</p>
<p><b>Success Criteria</b></p>	<p>I can use a ruler to measure the length of an object to the nearest inch.</p>
<p><b>Formative Assessment (drives instructional decisions)</b></p>	<ul style="list-style-type: none"> <li>- Turn and Talk questions, pgs. 440 - 441</li> <li>- Check for understanding, pg. 441</li> <li>- On your own, pg.442</li> </ul>

<p><b>Activities and Resources</b></p>	<p><b>Warm Up:</b> Activate Prior Knowledge pg. 439B and Spark your learning pg. 439D</p> <p><b>Mini Lesson:</b> Build Your Understanding, pgs. 440 &amp; 441</p> <p><b>Guided Practice:</b> Check Understanding, pg. 441</p> <p><b>Independent Practice:</b> On Your Own &amp; Exit Ticket pg. 442</p> <p><b>Resources:</b> Into Math Teacher Edition Module 18</p>
<p><b>Suggested Modifications</b></p>	<p><b>Small Group Options:</b> Plan for differentiated instruction pg. 439c</p> <p><b>Math Center Options:</b> On Track: - More practice/ homework 18.3 - Interactive Glossary: inch ruler</p> <p>Almost There: -Reteach 18.3 - Interactive Reteach 18.3</p> <p>Ready for More: - Challenge 18.3 - Interactive Challenge 18.3</p>

MA.2.MD.A.1

Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.

## LESSON 18.4

<p><b>Student Learning Intentions (SLI) WALT: (We are learning to...)</b></p>	<p>Lesson 18.4 We are learning to measure the lengths of objects and use a line plot to display the measurement data.</p>
<p><b>Student Learning Strategies</b></p>	<p>Students will generate measurement data and show the measurements by making a line plot.</p>
<p><b>Success Criteria</b></p>	<p>I can measure the length of objects in inches and show the data on a line plot.</p>
<p><b>Formative Assessment (drives instructional</b></p>	<p>- Turn and Talk questions, pgs. 444 - 445</p>

decisions)	<ul style="list-style-type: none"> <li>- Check for understanding, pg. 446</li> <li>- On your own, pg.447</li> </ul>
Activities and Resources	<p><b>Warm Up:</b> Activate Prior Knowledge pg. 443B and Spark your Learning pg. 443D</p> <p><b>Mini Lesson:</b> Build Your Understanding, pg. 444</p> <p><b>Guided Practice:</b> Step It Out, pgs. 445 - 446</p> <p><b>Independent Practice:</b> On Your Own &amp; Exit Ticket pg. 447</p> <p><b>Resources:</b> Into Math Teacher Edition Module 18</p>
Suggested Modifications	<p><b>Small Group Options:</b> Plan for differentiated instruction-Pg. 443c</p> <p><b>Math Center Options:</b> On Track:  <ul style="list-style-type: none"> <li>- More practice/ homework 18.4</li> <li>- Interactive Glossary: line plot</li> <li>- Standards Practice: Generate measurement data and show the data on a line plot.</li> </ul> </p> <p>Almost There: -Reteach 18.4  <ul style="list-style-type: none"> <li>- Interactive Reteach 18.4</li> </ul> </p> <p>Ready for More:  <ul style="list-style-type: none"> <li>- Challenge 18.4</li> <li>- Interactive Challenge 18.4</li> </ul> </p>

MA.2.MD.D.9

Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.

## LESSON 18.5

Student Learning Intentions (SLI) WALT: (We are learning to...)	<p>Lesson 18.5</p> <p>We are learning to estimate the lengths of objects by mentally partitioning the lengths into feet.</p>
Student Learning Strategies	<p>Students will estimate lengths using feet.</p>
Success Criteria	<p>I can use 12 inch rulers to estimate the length of an object in feet.</p>

<b>Formative Assessment (drives instructional decisions)</b>	<ul style="list-style-type: none"> <li>- Turn and Talk questions, pgs. 450 &amp; 451</li> <li>- Check for understanding, pg. 451</li> <li>- On your own, pg.452</li> </ul>
<b>Activities and Resources</b>	<p><b>Warm Up:</b> Activate Prior Knowledge pg. 449B and Spark your Learning pg. 449D</p> <p><b>Mini Lesson:</b> Build Your Understanding, pg. 450</p> <p><b>Guided Practice:</b> Check Understanding, pg. 451</p> <p><b>Independent Practice:</b> On Your Own &amp; Exit Ticket pg. 452</p> <p><b>Resources:</b> Into Math Teacher Edition Module 18</p>
<b>Suggested Modifications</b>	<p><b>Small Group Options:</b> Plan for differentiated instruction pg. 449c</p> <p><b>Math Center Options:</b> On Track:  <ul style="list-style-type: none"> <li>- More practice/ homework 18.5</li> <li>- Interactive Glossary: foot</li> <li>- Fluency Starter: Addition Within 1,000</li> <li>- My Learning Summary</li> </ul> Almost There: -Reteach 18.5  <ul style="list-style-type: none"> <li>- Interactive Reteach 18.5</li> </ul> Ready for More:  <ul style="list-style-type: none"> <li>- Challenge 18.5</li> <li>- Interactive Challenge 18.5</li> </ul> </p>

MA.2.MD.A.3

Estimate lengths using units of inches, feet, centimeters, and meters.

## LESSON 18.6

<b>Student Learning Intentions (SLI) WALT: (We are learning to...)</b>	<p>Lesson 18.6</p> <p>We are learning to measure the lengths of objects in both inches and feet to explore the inverse relationship between size and number of units.</p>
<b>Student Learning Strategies</b>	<p>Students will be able to describe the inverse relationship between the size of a unit and the number of units needed to measure a given object.</p>

<b>Success Criteria</b>	I can measure objects to the nearest inch and the nearest foot, and describe how measuring in feet is different from measuring in inches.
<b>Formative Assessment (drives instructional decisions)</b>	<ul style="list-style-type: none"> <li>- Turn and Talk questions, pgs. 454 &amp; 455</li> <li>- Check for understanding, pg. 455</li> <li>- On your own, pg.456</li> </ul>
<b>Activities and Resources</b>	<p><b>Warm Up:</b> Activate Prior Knowledge pg. 453B and Spark your Learning pg. 453D</p> <p><b>Mini Lesson:</b> Build Your Understanding, pg. 454</p> <p><b>Guided Practice:</b> Check Understanding, pg. 455</p> <p><b>Independent Practice:</b> On Your Own &amp; Exit Ticket pg. 456</p> <p><b>Resources:</b> Into Math Teacher Edition Module 18</p>
<b>Suggested Modifications</b>	<p><b>Small Group Options:</b> Plan for differentiated instruction pg. 453c</p> <p><b>Math Center Options:</b> On Track: - More practice/ homework 18.6</p> <p>Almost There: -Reteach 18.6 - Interactive Reteach 18.6</p> <p>Ready for More: - Challenge 18.6 - Interactive Challenge 18.6</p>

MA.2.MD.A.2

Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.

## LESSON 18.7

<b>Student Learning Intentions (SLI) WALT: (We are learning to...)</b>	Lesson 18.7 We are learning to estimate the lengths of objects by mentally partitioning the lengths in 3-foot sections (yards).
<b>Student Learning Strategies</b>	Students will be able to estimate lengths using yards

<b>Success Criteria</b>	I can estimate and measure length to the nearest yard.
<b>Formative Assessment (drives instructional decisions)</b>	<ul style="list-style-type: none"> <li>- Turn and Talk questions, pgs. 458 &amp; 459</li> <li>- Check for understanding, pg. 460</li> <li>- On your own, pg.461</li> </ul>
<b>Activities and Resources</b>	<p><b>Warm Up:</b> Activate Prior Knowledge pg. 457B and Spark your Learning pg. 457D</p> <p><b>Mini Lesson:</b> Build Your Understanding, pgs. 458 &amp; 459</p> <p><b>Guided Practice:</b> Check Understanding, pg. 460</p> <p><b>Independent Practice:</b> On Your Own &amp; Exit Ticket pgs. 461 &amp; 462</p> <p><b>Resources:</b> Into Math Teacher Edition Module 18</p>
<b>Suggested Modifications</b>	<p><b>Small Group Options:</b> Plan for differentiated instruction pg. 457c</p> <p><b>Math Center Options:</b> On Track:  <ul style="list-style-type: none"> <li>- More practice/ homework 18.7</li> <li>- Interactive Glossary: yardstick, yard</li> </ul> Almost There: -Reteach 18.7  <ul style="list-style-type: none"> <li>- Interactive Reteach 18.7</li> </ul> Ready for More:  <ul style="list-style-type: none"> <li>- Challenge 18.7</li> <li>- Interactive Challenge 18.7</li> </ul> </p>

MA.2.MD.A.1

Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.

## LESSON 18.8

<b>Student Learning Intentions (SLI) WALT: (We are learning to...)</b>	Lesson 18.8 We are learning to select appropriate tools for measuring different lengths.
<b>Student Learning Strategies</b>	Students will be able to select and use appropriate

	tools to measure in inches, feet and yards.
<b>Success Criteria</b>	I can decide which measuring tool to use to measure lengths of different objects .
<b>Formative Assessment (drives instructional decisions)</b>	<ul style="list-style-type: none"> <li>- Turn and Talk questions, pg. 464</li> <li>- Check for understanding, pg. 464</li> <li>- On your own, pg. 465</li> </ul>
<b>Activities and Resources</b>	<p><b>Warm Up:</b> Activate Prior Knowledge pg. 463B and Spark your Learning pg. 463D</p> <p><b>Mini Lesson:</b> Step It Out, pgs. 463 &amp; 464</p> <p><b>Guided Practice:</b> Check Understanding, pg. 464</p> <p><b>Independent Practice:</b> On Your Own &amp; Exit Ticket pg. 465 &amp; 466</p> <p><b>Resources:</b> Into Math Teacher Edition Module 18</p>
<b>Suggested Modifications</b>	<p><b>Small Group Options:</b> Plan for differentiated instruction pg. 463c</p> <p><b>Math Center Options:</b> On Track:  <ul style="list-style-type: none"> <li>- More practice/ homework 18.8</li> <li>- Additional Practice 18.8</li> <li>- Interactive Glossary: measuring tape</li> <li>- Reader: Nature Walk</li> </ul> </p> <p>Almost There: -Reteach 18.8  <ul style="list-style-type: none"> <li>- Interactive Reteach 18.8</li> </ul> </p> <p>Ready for More:  <ul style="list-style-type: none"> <li>- Challenge 18.8</li> <li>- Interactive Challenge 18.8</li> </ul> </p>

MA.2.MD.A.1

Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.

## MODULE 19

# Module 19: Length in Centimeters and Meters

## LESSON 19.1

<b>Student Learning Intentions (SLI) WALT: (We are learning to...)</b>	Lesson 19.1 We are learning to estimate lengths of objects in centimeters by comparing them to known lengths.
<b>Student Learning Strategies</b>	Students will be able to estimate lengths using units of centimeters.
<b>Success Criteria</b>	I can use an object with a known length to estimate the length of another object.
<b>Formative Assessment (drives instructional decisions)</b>	<ul style="list-style-type: none"><li>- Turn and Talk questions, pg. 472</li><li>- Check for understanding, pg. 473</li><li>- On your own, pg.474</li></ul>
<b>Activities and Resources</b>	<p><b>Warm Up:</b> Activate Prior Knowledge pg. 471B and Spark your learning pg. 471D</p> <p><b>Mini Lesson:</b> Build Understanding, pg. 472</p> <p><b>Guided Practice:</b> Check Understanding, pg. 473</p> <p><b>Independent Practice:</b> On Your Own &amp; Exit Ticket pg. 474</p> <p><b>Resources:</b> Into Math Teacher Edition Module 19</p>
<b>Suggested Modifications</b>	<p><b>Small Group Options:</b> Plan for differentiated instruction pg. 471c</p> <p><b>Math Center Options:</b> On Track: <ul style="list-style-type: none"><li>- More practice/ homework 19.1</li><li>- Fluency Builder: Addition Level 6</li><li>- Interactive Glossary: centimeter</li><li>- Game: How Long?</li></ul></p> <p>Almost There: -Reteach 19.1 <ul style="list-style-type: none"><li>- Interactive Reteach 19.1</li></ul></p> <p>Ready for More: <ul style="list-style-type: none"><li>- Challenge 19.1</li><li>- Interactive Challenge 19.1</li></ul></p>

## LESSON 19.2

<b>Student Learning Intentions (SLI) WALT: (We are learning to...)</b>	Lesson 19.2 We are learning to measure lengths of objects to the nearest centimeter using a centimeter ruler
<b>Student Learning Strategies</b>	Students will be able to measure the length of an object to the nearest centimeter.
<b>Success Criteria</b>	I can measure length to the nearest centimeter using a centimeter ruler.
<b>Formative Assessment (drives instructional decisions)</b>	<ul style="list-style-type: none"><li>- Turn and Talk questions, pgs. 476 &amp; 477</li><li>- Check for understanding, pg. 477</li><li>- On your own, pg. 478</li></ul>
<b>Activities and Resources</b>	<p><b>Warm Up:</b> Activate Prior Knowledge pg. 475B and Spark your Learning pg. 475D</p> <p><b>Mini Lesson:</b> Build Understanding, pg. 476</p> <p><b>Guided Practice:</b> Check Understanding, pg. 477</p> <p><b>Independent Practice:</b> On Your Own &amp; Exit Ticket pg. 478</p> <p><b>Resources:</b> Into Math Teacher Edition Module 19</p>
<b>Suggested Modifications</b>	<p><b>Small Group Options:</b> Plan for differentiated instruction pg. 475c</p> <p><b>Math Center Options:</b> On Track: <ul style="list-style-type: none"><li>- More practice/ homework 19.2.</li><li>- Interactive Glossary: centimeter ruler</li><li>- My Learning Summary</li><li>- Standards Practice: Measure the length of an object</li></ul></p> <p>Almost There: -Reteach 19.2 <ul style="list-style-type: none"><li>- Interactive Reteach 19.2</li></ul></p> <p>Ready for More: <ul style="list-style-type: none"><li>- Challenge 19.2</li><li>- Interactive Challenge 19.2</li></ul></p>

yardsticks, meter sticks, and measuring tapes.

## LESSON 19.3

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<b>Student Learning Intentions (SLI) WALT: (We are learning to...)</b>	Lesson 19.3 We are learning to estimate the lengths of objects in meters.
<b>Student Learning Strategies</b>	Students will be able to estimate lengths using meters.
<b>Success Criteria</b>	I can estimate the length of an object in meters.
<b>Formative Assessment (drives instructional decisions)</b>	<ul style="list-style-type: none"><li>- Turn and Talk questions, pgs. 480 &amp; 481</li><li>- Check for understanding, pg. 481</li><li>- On your own, pg.482</li></ul>
<b>Activities and Resources</b>	<p><b>Warm Up:</b> Activate Prior Knowledge pg. 479B and Spark your learning pg. 479D</p> <p><b>Mini Lesson:</b> Build Understanding, pg. 480</p> <p><b>Guided Practice:</b> Check Understanding, pg. 481</p> <p><b>Independent Practice:</b> On Your Own &amp; Exit Ticket pg. 482</p> <p><b>Resources:</b> Into Math Teacher Edition Module 19</p>
<b>Suggested Modifications</b>	<p><b>Small Group Options:</b> Plan for differentiated instruction pg. 479c</p> <p><b>Math Center Options:</b> On Track:<ul style="list-style-type: none"><li>- More practice/ homework 19.3</li><li>- Fluency Builder: Addition and Subtraction Level 1</li><li>- Interactive Glossary: meter, meter stick</li><li>- Standards Practice: Estimate Lengths</li></ul></p> <p>Almost There: -Reteach 19.3 - Interactive Reteach 19.3</p> <p>Ready for More:<ul style="list-style-type: none"><li>- Challenge 19.3</li><li>- Interactive Challenge 19.3</li></ul></p>

**LESSON 19.4**

<b>Student Learning Intentions (SLI) WALT: (We are learning to...)</b>	Lesson 19.4 We are learning to measure the lengths of objects in both centimeters and meters to explore the inverse relationship between size and number of units
<b>Student Learning Strategies</b>	Students will be able to describe the inverse relationship between the size of a unit and the number of units needed to measure a given object.
<b>Success Criteria</b>	I can measure an object in meters and centimeters, and describe how measuring in meters is different from measuring in centimeters.
<b>Formative Assessment (drives instructional decisions)</b>	<ul style="list-style-type: none"> <li>- Turn and Talk questions, pgs. 484 &amp; 485</li> <li>- Check for understanding, pg. 485</li> <li>- On your own, pg. 486</li> </ul>
<b>Activities and Resources</b>	<p><b>Warm Up:</b> Activate Prior Knowledge pg. 483B and Spark your learning pg. 483D</p> <p><b>Mini Lesson:</b> Build Understanding, pgs. 484</p> <p><b>Guided Practice:</b> Check Understanding, pg. 485</p> <p><b>Independent Practice:</b> On Your Own &amp; Exit Ticket pg. 486</p> <p><b>Resources:</b> Into Math Teacher Edition Module 19</p>
<b>Suggested Modifications</b>	<p><b>Small Group Options:</b> Plan for differentiated instruction pg. 483c</p> <p><b>Math Center Options:</b> On Track:  <ul style="list-style-type: none"> <li>- More practice/ homework 19.4</li> <li>- Fluency Builder: Subtraction Level 5</li> <li>- Standards Practice: Describe the relationship between the size of a unit and number of units</li> </ul> </p> <p>Almost There: -Reteach 19.4  <ul style="list-style-type: none"> <li>- Interactive Reteach 19.4</li> </ul> </p> <p>Ready for More:</p>

- Challenge 19.4
- Interactive Challenge 19.4

MA.2.MD.A.2

Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.

## MODULE 20

# Module 20: Relate Addition and Subtraction to Length

## LESSON 20.1

<p><b>Student Learning Intentions (SLI) WALT: (We are learning to...)</b></p>	<p>Lesson 20.1 We are learning to explore the relationship between inch units on an inch ruler or a yardstick and units on a number line and use the inch ruler or a yardstick to solve addition and subtraction problems.</p>
<p><b>Student Learning Strategies</b></p>	<p>Students will be able to represent whole numbers as lengths on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2 ... and represent whole-number sums and differences within 100 on a number line diagram.</p>
<p><b>Success Criteria</b></p>	<p>I can solve two-digit addition and subtraction problems using an inch ruler or a yardstick as a number line.</p>
<p><b>Formative Assessment (drives instructional decisions)</b></p>	<ul style="list-style-type: none"> <li>- Turn and Talk questions, pg. 492</li> <li>- Check for understanding, pg. 493</li> <li>- On your own, pg. 494</li> </ul>
<p><b>Activities and Resources</b></p>	<p><b>Warm Up:</b> Activate Prior Knowledge pg. 491B and Spark your learning pg. 491D</p> <p><b>Mini Lesson:</b> Build Understanding, pgs. 492</p> <p><b>Guided Practice:</b> Check Understanding, pg. 493</p> <p><b>Independent Practice:</b> On Your Own &amp; Exit Ticket pg. 494</p>

	<b>Resources:</b> Into Math Teacher Edition Module 20
<b>Suggested Modifications</b>	<p><b>Small Group Options:</b> Plan for differentiated instruction pg. 491c</p> <p><b>Math Center Options:</b> On Track: - More practice/ homework 20.1 - Interactive Glossary: inches</p> <p>Almost There: -Reteach 20.1 - Interactive Reteach 20.1</p> <p>Ready for More: - Challenge 20.1 - Interactive Challenge 20.1</p>

MA.2.MD.B.6

Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.

## LESSON 20.2

<b>Student Learning Intentions (SLI) WALT: (We are learning to...)</b>	<p>Lesson 20.2 We are learning to solve addition and subtraction problems involving the lengths of objects in inches by using a visual mode.</p>
<b>Student Learning Strategies</b>	<p>Students will be able to solve addition and subtraction word problems about length that are given in the same units by using diagrams or drawings and represent whole-number sums and differences on a number line.</p>
<b>Success Criteria</b>	<p>I can use a number line to represent and solve addition and subtraction problems about length in inches.</p>
<b>Formative Assessment (drives instructional decisions)</b>	<ul style="list-style-type: none"> <li>- Turn and Talk questions, pg. 496</li> <li>- Check for understanding, pg. 497</li> <li>- On your own, pg. 498</li> </ul>
<b>Activities and Resources</b>	<p><b>Warm Up:</b> Activate Prior Knowledge pg. 495B and Spark your learning pg. 495D</p>

	<p><b>Mini Lesson:</b> Build Understanding, pg. 496</p> <p><b>Guided Practice:</b> Check Understanding, pg. 497</p> <p><b>Independent Practice:</b> On Your Own &amp; Exit Ticket pg. 498</p> <p><b>Resources:</b> Into Math Teacher Edition Module 20</p>
<p><b>Suggested Modifications</b></p>	<p><b>Small Group Options:</b> Plan for differentiated instruction pg. 495c</p> <p><b>Math Center Options:</b> On Track: - More practice/ homework 20.2 - Poggles MX: Addition and Subtraction, Level 65</p> <p>Almost There: -Reteach 20.2 - Interactive Reteach 20.2</p> <p>Ready for More: - Challenge 20.2 - Interactive Challenge 20.2</p>

MA.2.MD.B.5

Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.

MA.2.MD.B.6

Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2,..., and represent whole-number sums and differences within 100 on a number line diagram.

### LESSON 20.3

<p><b>Student Learning Intentions (SLI) WALT: (We are learning to...)</b></p>	<p>Lesson 20.3 We are learning to explore the relationship between units on a centimeter ruler or a meter stick to solve addition and subtraction problems.</p>
<p><b>Student Learning Strategies</b></p>	<p>Students will be able to represent whole numbers as lengths on a number line; use a centimeter ruler or meter stick as a number line; represent whole - number sums and differences on a number line.</p>
<p><b>Success Criteria</b></p>	<p>I can solve two - digit addition and subtraction problems using a centimeter ruler or a meter stick as a number line.</p>

<b>Formative Assessment (drives instructional decisions)</b>	<ul style="list-style-type: none"> <li>- Turn and Talk questions, pg. 500</li> <li>- Check for understanding, pg. 501</li> <li>- On your own, pg. 502</li> </ul>
<b>Activities and Resources</b>	<p><b>Warm Up:</b> Activate Prior Knowledge pg. 499B and Spark your Learning pg. 499D</p> <p><b>Mini Lesson:</b> Build Understanding, pg. 500</p> <p><b>Guided Practice:</b> Check Understanding, pg. 501</p> <p><b>Independent Practice:</b> On Your Own &amp; Exit Ticket pg. 502</p> <p><b>Resources:</b> Into Math Teacher Edition Module 20</p>
<b>Suggested Modifications</b>	<p><b>Small Group Options:</b> Plan for differentiated instruction pg. 499c</p> <p><b>Math Center Options:</b> On Track:  <ul style="list-style-type: none"> <li>- More practice/ homework 20.3</li> <li>- Interactive Glossary: centimeter</li> <li>- My Learning Summary</li> </ul> Almost There: -Reteach 20.3  <ul style="list-style-type: none"> <li>- Interactive Reteach 20.3</li> </ul> Ready for More:  <ul style="list-style-type: none"> <li>- Challenge 20.3</li> <li>- Interactive Challenge 20.3</li> </ul> </p>

MA.2.MD.B.6

Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2,..., and represent whole-number sums and differences within 100 on a number line diagram.

## LESSON 20.4

<b>Student Learning Intentions (SLI) WALT: (We are learning to...)</b>	<p>Lesson 20.4</p> <p>We are learning to solve addition and subtraction problems involving the lengths of objects in centimeters by using a number line diagram.</p>
<b>Student Learning Strategies</b>	<p>Students will be able to solve addition and subtraction word problems about length that are given in the same units by using drawings and</p>

	equations and represent whole-number sums and differences on a number line.
<b>Success Criteria</b>	I can use a number line to represent and solve addition and subtraction problems about length in centimeters.
<b>Formative Assessment (drives instructional decisions)</b>	<ul style="list-style-type: none"> <li>- Turn and Talk questions, pg. 504</li> <li>- Check for understanding, pg. 505</li> <li>- On your own, pg. 506</li> </ul>
<b>Activities and Resources</b>	<p><b>Warm Up:</b> Activate Prior Knowledge pg. 503B and Spark your learning pg. 503D</p> <p><b>Mini Lesson:</b> Build Understanding, pg. 504</p> <p><b>Guided Practice:</b> Check Understanding, pg. 505</p> <p><b>Independent Practice:</b> On Your Own &amp; Exit Ticket pg. 506</p> <p><b>Resources:</b> Into Math Teacher Edition Module 20</p>
<b>Suggested Modifications</b>	<p><b>Small Group Options:</b> Plan for differentiated instruction pg. 503c</p> <p><b>Math Center Options:</b> On Track:  <ul style="list-style-type: none"> <li>- More practice/ homework 20.4</li> <li>- Poggles MX: Addition and Subtraction, Level 65</li> <li>- Standards Practice: Use Addition and Subtraction to Solve Word Problems Involving Lengths</li> <li>- Standards Practice: Represent Sums and Differences on a Number Line Diagram</li> </ul> </p> <p>Almost There: -Reteach 20.4  <ul style="list-style-type: none"> <li>- Interactive Reteach 20.4</li> </ul> </p> <p>Ready for More:  <ul style="list-style-type: none"> <li>- Challenge 20.4</li> <li>- Interactive Challenge 20.4</li> </ul> </p>

MA.2.MD.B.5

Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.

MA.2.MD.B.6

Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2,..., and represent whole-number sums and differences within 100 on a number line diagram.

## LESSON 20.5

<b>Student Learning Intentions (SLI) WALT: (We are learning to...)</b>	Lesson 20.5 We are learning to measure and then find the difference in centimeter lengths of two objects.
<b>Student Learning Strategies</b>	Students will be able to determine how much longer one object is than another and express differences in length in terms of a standard unit.
<b>Success Criteria</b>	I can measure and then find the difference in the lengths of two objects.
<b>Formative Assessment (drives instructional decisions)</b>	<ul style="list-style-type: none"><li>- Turn and Talk questions, pgs. 507</li><li>- Check for understanding, pg. 508</li><li>- On your own, pg. 509</li></ul>
<b>Activities and Resources</b>	<p><b>Warm Up:</b> Activate Prior Knowledge pg. 507B and Spark your learning pg. 507D</p> <p><b>Mini Lesson:</b> Step It Out, pgs. 507 &amp; 508</p> <p><b>Guided Practice:</b> Check Understanding, pg. 508</p> <p><b>Independent Practice:</b> On Your Own &amp; Exit Ticket pg. 509</p> <p><b>Resources:</b> Into Math Teacher Edition Module 20</p>
<b>Suggested Modifications</b>	<p><b>Small Group Options:</b> Plan for differentiated instruction-Pg. 507c</p> <p><b>Math Center Options:</b> On Track: <ul style="list-style-type: none"><li>- More practice/ homework 20.5</li><li>- My Learning Summary</li><li>- Additional Practice 20.5</li><li>- Standards Practice: Measure to Determine How Much Longer One Object Is Than Another</li></ul></p> <p>Almost There: -Reteach 20.5 <ul style="list-style-type: none"><li>- Interactive Reteach 20.5</li></ul></p> <p>Ready for More: <ul style="list-style-type: none"><li>- Challenge 20.5</li></ul></p>

MA.2.MD.A.4

Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.

## **REFLECTIONS**

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**INTERDISCIPLINARY CONNECTIONS: NEW JERSEY STUDENT LEARNING STANDARDS  
FOR ELA, SOCIAL STUDIES, SCIENCE AND/OR MATHEMATICS**

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