Unit 4 (IReady) Length (Measurement, Addition and Subtraction, and Line Plots)

Content Area: **Mathematics**
Course(s): **Mathematics 2**
Time Period: **March**
Length: **43 Instructional Days**
Status: **Published**

Unit Overview

In unit 4, students will learn to:

- Use a ruler to measure the length of an object.
- Choose the correct tool for measuring an object.
- Measure the same object using different units.
- Estimate the length of an object.
- Compare lengths to tell which of two objects is longer and how much longer that object is.
- Add and subtract lengths to solve problems.
- Add and subtract lengths on a number line.
- Measure lengths and show data on a line plot.

Priority Standards

MATH.2.M.A	Measure and estimate lengths in standard units
MATH.2.M.B	Relate addition and subtraction to length
MATH.2.DL.B	Represent and interpret data

Learning Targets

- I can describe how the two measurements relate to the size of the unit chosen.
- I can estimate lengths using units of inches, feet, centimeters, and meters.
- I can generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object.
- I can measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
- I can measure the length of an object twice, using length units of different lengths for the two measurements.

- I can measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.
- I can 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.
- I can show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.
- I can use addition and subtraction within 100 to solve word problems involving lengths that are given in the same unit.

Essential Questions

- How can I use measurement in my daily life?
- How can I use number lines and data points to plot measurements?
- What careers use measurement often?
- Why is being able to measure objects a helpful skill?

Materials and Resources

- Additional Math Journal
- Base-10 blocks
- Data Math Games
- Digital Clock Template
- Geoboards
- Non-standard units of measurement
- Ready Math Program
- Student Judy Clocks
- Telling Time Math Games

Unit Assessments (Required)

- Lesson Quizzes
- Mid-Unit Assessment
- My Learning Path weekly progress
- Unit Assessment

Learning Plan (Skills and Activities)

IReady Unit 4 Length

(Measurement, Addition and Subtraction, and Line Plots)

Time Frame	Lesson	Standard(s)	Target
IReady Unit 4 (About 40 Days)	Lesson 20 (6 Days) Measure in Inches and Centimeters	Standard: 2.M.A ~ Measure and estimate lengths in standard units	Target: I can measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
	Lesson 21 (5 days) Measure in Feet and Meters	Standard: 2.M.A ~ Measure and estimate lengths in standard units	Target: I can measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
	Lesson 22 (5 days) Understand Measurement in Different Units	Standard: 2.M.A ~ Measure and estimate lengths in standard units	Target: I can measure the length of an object twice, using length units of different lengths for the two measurements. I can describe how the two measurements relate to the size of the unit chosen.
	Lesson 23 (5 days)	Standard:	Target: I can estimate lengths using units of

Estimate and Measure Length	2.M.A ~ Measure and estimate lengths in standard units	inches, feet, centimeters, and meters.
Lesson 24 (5 Days) Compare Lengths	Standard: 2.M.A ~ Measure and estimate lengths in standard units	Target: I can measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.
Lesson 25 (5 Days) Add and Subtract Lengths	Standard: 2.M.B ~ Relate addition and subtraction to length	Target: I can use addition and subtraction within 100 to solve word problems involving lengths that are given in the same unit.
Lesson 26 (5 Days) Add and Subtract on a Numberline	Standard: 2.M.B ~ Relate addition and subtraction to length	Target: I can 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 27 (5 Days) Read and Make Line Plots	Standard: 2.M.A ~ Measure and estimate lengths in standard units 2.DL.B. ~ Represent and interpret data	Target: I can generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. I can show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.

Interdisciplinary Connections

Connections to Reading: Apply comprehension startegies to solve word problems. Incorporate literature relating to the math skill in lesson, such as, books on time.

Connections to Writing: Students write descriptions of composite shapes they have made.

Connections to Science: Incoporate time in experiments/investigations.

Strategies for Multilingual Learners

- Communicating High Expectations for Each Student to Close the Achievement Gap
- Establishing & Maintaining Effective Relationships in a Student Centered Classroom
- Helping Students Engage in Cognitively Complex Tasks
- Helping Students Examine their Reasoning
- Helping Students Practice Strategies, Skills, & Processes
- Helping Students Process New Content
- Helping Students Revise Knowledge
- Identifying Critical Content from the Standards
- Organizing Students to Interact with Contact
- Previewing New Content
- Providing Feedback & Celebrating Success
- Reviewing Content
- Using Engagement Strategies
- Using Formative Assessment to Track Progress
- Using Questions to Help Students Elaborate on Content

21st Century Skills or Career Ready Practices

- CRP1. Act as a responsible and contributing citizen and employee.
- CRP10. Plan education and career paths aligned to personal goals.
- CRP11. Use technology to enhance productivity.
- CRP2. Apply appropriate academic and technical skills.

- CRP4. Communicate clearly and effectively and with reason.
- CRP6. Demonstrate creativity and innovation.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

WRK.9.1.2.CAP.1	Make a list of different types of jobs and describe the skills associated with each job.
TECH.9.4.2.CT.3	Use a variety of types of thinking to solve problems (e.g., inductive, deductive).
TECH.9.4.2.TL.3	Enter information into a spreadsheet and sort the information.
TECH.9.4.2.IML.1	Identify a simple search term to find information in a search engine or digital resource.
TECH.9.4.2.IML.2	Represent data in a visual format to tell a story about the data (e.g., 2.MD.D.10).
TECH.9.4.2.IML.4	Compare and contrast the way information is shared in a variety of contexts (e.g., social, academic, athletic) (e.g., 2.2.2.MSC.5, RL.2.9).

Strategies for Students in Need of Intervention

- Provide a list of keywords in word problems. For example: "In all, altogether means addition"
- Small Group Instruction based on strategy
- Small group instruction for Fact Fluency
- Small group instruction for word problems
- Extended pacing of lessons
- Hands on manipulatives
- Provide grid paper
- Reduce the amount of problems
- Small Group Instruction to extend concept for Enrichment
- Use of a number line
- Use of approaching level materials/assignments
- Use of hundreds chart
- Use of visual aids for vocabulary building

Strategies for Enrichment

- Small Group Instruction to extend concept for Enrichment

Technology Integration

Website Name	www.brainden.com
Math playground	www.adaptedmind.com
Brain Den	www.youtube.com
Fun brain	www.mathgametime.com
Reflex Math	www.reflexmath.com

- . 8.1.2.A.1 Identify the basic features of a digital device and explain its purpose.

- 8.1.2.A.4 Demonstrate developmentally appropriate navigation skills in virtual environments (i.e. games, museums).