

Course: *Math 1 & 2 SC*
Unit 3: *Time & Measurement*

Year of Implementation: 2023-2024

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Stage One - Desired Results

Link(s) to New Jersey Student Learning Standards for this course:

{provide all applicable links to standards here}

<https://www.state.nj.us/education/cccs/2020/>

- **Unit Standards:** *(keep each of the following headings in place)*
 - **Content Standards**
 - 1.MD.B.Tell and write time.
 - 3. Tell and write time in hours and half-hours using analog and digital clocks.
 - 2.MD.C. Work with time and money.
 - 7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
 - 1.MD.A. Measure lengths indirectly and by iterating length units.
 - 2. Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.
 - 2.MD.A. Measure and estimate lengths in standard units.
 - 1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
 - **21st Century Life & Career Standards**
 - 9.4.2.CT.3: Use a variety of types of thinking to solve problems (e.g., inductive, deductive)

- 9.4.5.CT.1: Identify and gather relevant data that will aid in the problem-solving process (e.g., 2.1.5.EH.4, 4-ESS3-1, 6.3.5.CivicsPD.2).
- 9.4.5.CT.2: Identify a problem and list the types of individuals and resources (e.g., school, community agencies, governmental, online) that can aid in solving the problem (e.g., 2.1.5.CHSS.1, 4-ESS3-1).
- 9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.
- 9.4.5.CT.4: Apply critical thinking and problem-solving strategies to different types of problems such as personal, academic, community and global (e.g., 6.1.5.CivicsCM.3).
<https://www.state.nj.us/education/cccs/2020/2020%20NJSLS-CLKS.pdf>
- **English Companion Standards**
 - List grade-level appropriate companion standards for History, Social Studies, Science and Technical Subjects (CTE/Arts) 9-12. English Companion Standards are required only in these subject/content areas. This section can be deleted for all other content areas.
 - Grade 9-10 Companion Standards:
<https://www.state.nj.us/education/cccs/2016/ela/CompanionG0910.pdf>
 - Grade 11-12 Companion Standards:
<https://www.state.nj.us/education/cccs/2016/ela/CompanionG1112.pdf>
- **Interdisciplinary Content Standards**
 - List any standards from other content areas that apply to this unit.
- **NJ Statutes:** NJ State law mandates the inclusion of the following topics in lesson design and instruction as aligned to elementary and secondary curriculum.

Amistad Law: N.J.S.A. 18A 52:16A-88 Every board of education shall incorporate the information regarding the contributions of African-Americans to our country in an appropriate place in the curriculum of elementary and secondary school students.

Holocaust Law: N.J.S.A. 18A:35-28 Every board of education shall include instruction on the Holocaust and genocides in an appropriate place in the curriculum of all elementary and secondary school pupils. The instruction shall further emphasize the personal responsibility that each citizen bears to fight racism and hatred whenever and wherever it happens.

LGBT and Disabilities Law: N.J.S.A. 18A:35-4.35 A board of education shall include instruction on the political, economic, and social contributions of persons with disabilities and lesbian, gay, bisexual, and transgender people, in

an appropriate place in the curriculum of middle school and high school students as part of the district's implementation of the New Jersey Student Learning Standards (N.J.S.A. 18A:35-4.36) A board of education shall have policies and procedures in place pertaining to the selection of instructional materials to implement the requirements of N.J.S.A. 18A:35-4.35.

Diversity and Inclusion ([N.J.S.A. 18A:35-4.36a](#)) A board of education shall incorporate instruction on diversity and inclusion in an appropriate place in the curriculum of students in grades kindergarten through 12 as part of the district's implementation of the New Jersey Student Learning Standards.

Asian American and Pacific Islanders (AAPI) [P.L.2021, c.410](#) Ensures that the contributions, history, and heritage of Asian Americans and Pacific Islanders (AAPI) are included in the New Jersey Student Learning Standards (NJSLS) for Social Studies in kindergarten through Grade 12 (P.L.2021, c.416)

For additional information, see

NJ Amistad Curriculum: <http://www.njamistadcurriculum.net/>

Diversity and Inclusion: <https://www.nj.gov/education/standards/dei/index.shtml>

- (Sample Activities/ Lessons): <https://www.nj.gov/education/standards/dei/samples/index.shtml>

Asian American and Pacific Islanders:

- [Asian American and Pacific Islander Heritage and History in the U.S.](#)

A Teacher's Guide from EDSITEment offering a collection of lessons and resources for K-12 social studies, literature and arts classrooms that center around the experiences, achievements and perspectives of Asian Americans and Pacific Islanders across U.S. history.

Transfer Goal: Students will be able to independently use their learning to tell time in real world situations and find various types of measurements.

As aligned with LRHSD Long Term Learning Goal(s):

Problem-Solving: apply and transfer autonomously and collaboratively mathematical concepts and problem-solving techniques to unfamiliar, varied and real-world situations

Tools: identify the correct tools to solve problems, if applicable

Precision: determine an answer's appropriateness as a means of determining its validity, while using proper mathematical notation and units

Structure: use multiple representations, critical thinking skills, and prior knowledge to solve problems in new situations

Enduring Understandings

Students will understand that. . .

EU 1

- *situations in your professional and personal life involve the understanding and telling of time.*

EU 2

- *measurement is crucial to our daily lives.*

Essential Questions

EU 1 {no more than 5 EQ's per each EU}

- How can reading a clock affect daily living?
- How can understanding time affect daily living?

EU 2

- What can be measured?
- How does what we measure influence our lives?
- How do temperatures influence life decisions?

Knowledge

Students will know . . .

EU 1

- that time affects daily activities.

Skills

Students will be able to. . .

EU 1

- tell time.
- determine relationships between time and daily events.

EU 2

- measurement is used in temperature and length.

- add, subtract and calculate elapsed time.
- read and interpret a calendar.
- compare units of time.

EU 2

- match temperature and weather with appropriate clothing.
- measure with a ruler and tape measure.
- compare measurements.
- estimate lengths.

Stage Two - Assessment

Stage Three - Instruction

Learning Plan: Suggested Learning Activities to Include Differentiated Instruction and Interdisciplinary Connections: Each learning activity listed must be accompanied by a learning goal of A= Acquiring basic knowledge and skills, M= Making meaning and/or a T= Transfer. {place A, M and/or T along with the applicable EU number in parentheses after each statement} All knowledge and skills must be addressed in this section with a corresponding lesson/activity which teaches each concept. The following color codes are used to notate activities that correspond with interdisciplinary connections and 21st Century Life & Career Connections (which involves Technology Literacy): *Red = Interdisciplinary Connection; Purple = 21st Century Life & Career Connection*

For example:

- Demonstrate proper way to use a ruler. (M, T, EU2)
- Identify what is an inch on a ruler. (A, EU2)
- Explain how a ruler is 1 foot. (M, EU2)
- Measure the blocks on the floor of the classroom. (T, EU2)
- Identify how many feet are in a yard. (A,M, EU2)
- Use a yardstick to check the yard markers on the stadium field. (T, EU2)
- Demonstration of the proper dry and liquid measuring techniques (A, EU2)
- Measuring tool bingo (A, EU2)
- Gallon Guy worksheet and game (A, M, EU2)
- Measuring tools match game (M, EU2)
- While cooking, choose the proper measuring tools and equipment for tasks (T, EU2)
- Measuring dry, liquid, and solid ingredients accurately while preparing a recipe (T, EU2)
- Equipment vocabulary bingo (A,EU2)
- Equipment identification flashcards-student made-create cards with kitchen tool picture on one side and the usage and spelling on the other (M, EU2)
- Who Am I scavenger hunt to identify and locate various utensils, tools, and equipment (T, EU2)
- Read recipes and follow steps in sequence to prepare recipes (T, EU2)
- Read and follow cooking directions on package foods. (T, EU2)
- Demonstrate practical application of skills through various field trips, including but not limited to restaurants, retail/grocery stores, municipal services and the mall. (T, EU2)
- Identify an Analog Clock (M, EU1)
- Identify a Digital Clock (M, EU1)
- Discuss what each number represents on an Analog clock. (A, EU1)
- Discuss the hour and minute hands on the Analog clock. (A, EU1)
- Identify when to use AM or PM.(M, EU1)
- Identify when there is 1 hour until lunch. (T, EU1)
- Identify when there is 5 minutes left in class. (T, EU1)

Pacing Guide

Unit 3 will be taught intermittently throughout the year.

Instructional Materials

Analog Clock
Digital Clock
Rulers
Yardsticks
Measuring utensils
Timer
Various Manipulatives

Accommodations

Special Education: The curriculum will be modified as per the Individualized Education Plan (IEP). Students will be accommodated based on specific accommodations listed in the IEP.

Students with 504 Plans: Students will be accommodated based on specific accommodations listed in the 504 Plan.

English Language Learners: Students will be accommodated based on individual need and in consultation with the ELL teacher.

Students at Risk of School Failure: Students will be accommodated based on individual need and provided various structural supports through their school.

Gifted and Talented Students: Students will be challenged to enhance their knowledge and skills through acceleration and additional independent research on the subject matter.