

Course: Math 3 & 4 SC
Unit 3: Budgeting

Year of Implementation: 2024-2025

Curriculum Team Members Andrew Fiorentino afiorentino@lrhsd.org, Ellen Rondinelli erondinelli@lrhsd.org

Stage One - Desired Results

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

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

- **Unit Standards:**

- **Content Standards**

- N-RN.B.Use properties of rational and irrational numbers.
 - 3: Explain why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational.
- 9.1.12.FP.2: Explain how an individual's financial values and goals may change across a lifetime and the adjustments to the personal financial plan that may be needed.
- 9.1.12.PB.3: Design a personal budget that will help you reach your long-term and short-term financial goals.
- 9.1.12.PB.4: Explain how you would revise your budget to accommodate changing circumstances.

- **21st Century Life & Career Standards**

- 9.4.12.CI.2: Identify career pathways that highlight personal talents, skills, and abilities
- 9.4.12.CT.1: Identify problem-solving strategies used in the development of an innovative product or practice.
- 9.4.12.CT.2: Explain the potential benefits of collaborating to enhance critical thinking and problem solving.
- 9.4.12.IML.1: Compare search browsers and recognize features that allow for filtering of information.
- 9.4.12.TL.2: Generate data using formula-based calculations in a spreadsheet and draw conclusions about the data.

- **Interdisciplinary Content Standards**

- 6.1.12.EconNE.6.a: Analyze the impact of money, investment, credit, savings, debt, and financial institutions on the development of the nation and the lives of individuals
- HSN-Q.A.1: Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays
- **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: <https://www.nj.gov/education/amistad/about/>

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 develop strategies to budget their income and expenses to live independently.

As aligned with LRHSD Long Term Learning Goal(s): <https://www.lrhdsd.org/Page/6163>

- Problem-Solving: apply and transfer autonomously and collaboratively mathematical concepts and problem-solving techniques to unfamiliar, varied and real-world situations
- Reasoning: reason abstractly and quantitatively by applying mathematical representations, symbols and estimation techniques when engaging in problem-solving
- Critical Thinking: construct and effectively communicate valid conclusions and critique the reasoning of others
- Tools: identify the correct tools to solve problems, if applicable
- Structure: use multiple representations, critical thinking skills, and prior knowledge to solve problems in new situations
- Patterns: analyze data and recognize patterns in a variety of situations

Enduring Understandings

Students will understand that. . .

EU 1

- managing finances effectively will lead to a more successful life.
- a detailed and realistic budget is part of a good financial plan.

Essential Questions

- How would our lives be affected without money?
- How much money do you need to earn to maintain your desired standard of living?

- How does mathematics play a role in financial planning?

<p><i>EU 2</i></p> <ul style="list-style-type: none"> math is essential for constructing and manipulating finances within their personal budget restraints. 	
<p><u>Knowledge</u> <i>Students will know . . .</i></p> <p><i>EU 1</i></p> <ul style="list-style-type: none"> the differences between income and expenses. (9.1.12.FP.2) the difference between needs and wants. (9.1.12.FP.2) <p><i>EU 2</i></p> <ul style="list-style-type: none"> the steps necessary to convert percents to decimals and vice versa. (N-RN.B.3) the number of weeks in a month and the number of weeks in a year (9.1.12.PB.4) 	<p><u>Skills</u> <i>Students will be able to . . .</i></p> <p><i>EU 1</i></p> <ul style="list-style-type: none"> create and balance a budget. (9.1.12.PB.3) research various brands for best price of desired item (9.1.12.PB.3) calculate the length of time needed to save money to make a cash purchase for a desired item (9.1.12.PB.4) <p><i>EU 2</i></p> <ul style="list-style-type: none"> compute the percentage of income spent on each budget item. (N-RN.B.3) calculate the length of time needed to save money to make a cash purchase for a desired item. (9.1.12.PB.3) calculate income based on various time increments. (9.1.12.PB.3)
<p>Stage Two - Assessment</p>	
<ul style="list-style-type: none"> 	
<ul style="list-style-type: none"> 	
<p>Stage Three - Instruction</p>	

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. 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*

- Introduce careers (A, EU1)
- Discuss hourly wages vs salaries (A, EU1)
- Discuss paychecks (A, EU1)
- Explain gross pay (A, EU1)
- Discuss deductions (A, EU1)
- Explain net pay (A, EU1)
- Explain income vs expenses (A, EU1)
- Model how to create a monthly budget (A,EU1)
- Demonstrate how to research for apartments online (A, EU1)
- Discuss options on ways to afford different apartments; living on their own vs with a roommate.(A, EU1)
- Introduce different types of bills that come along with an apartment (A, EU1)
- Discuss different modes of transportation (A, EU1)
- Demonstrate how to car shop online (A, EU1)
- Discuss savings accounts (A, EU1)
- Identify ways to save money (A, EU1)
- Explain the importance of a budget (A,M, EU1)
- Calculate gross pay (M, EU2)
- Calculate net pay (M, EU2)
- Research for apartments and input into a spreadsheet (T, EU1, EU2)
- Input all income and expenses into budget sheet (T, EU2)
- Shop for a car online (T, EU1)

Pacing Guide

{This chart will be identical in all of the units for this course.}

Unit #	Title of Unit	Approximate # of teaching days
1	Advanced Number Sense	30-45
2	Finances	30-45
3	Budgeting	30-45
4	Advanced Graphing and Equations	30-45

Instructional Materials

- Calculators
- Spreadsheets

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.