Business Math: Unit 1
Managing Your Money
Course Philosophy/Description

Business Mathematics is an elective Mathematics course of which students learn to use mathematics effectively as a tool in their personal and business lives. After students have completed this course, they will be able to apply mathematical concepts in various personal and business situations. All standards are aligned to New Jersey Student Learning Standards of Mathematics and the New Jersey Personal Financial Literacy Standards.

Students will review and apply mathematical concepts that they learned in four of the conceptual categories, namely Number and Quantity, Algebra, Functions, and Statistics and Probability. They will understand terminology relating to personal and business mathematics applications and apply basic math skills to the solution of both personal and business applications. They will use common mathematical formulas to solve a variety of personal and business mathematics as well as apply knowledge of computer and calculator use. Students will also learn strategies for critical thinking and problem solving both in finance and business ethics.
This ESL framework was designed to be used by bilingual, dual language, ESL and general education teachers. Bilingual and dual language programs use the home language and a second language for instruction. ESL teachers and general education or bilingual teachers may use this document to collaborate on unit and lesson planning to decide who will address certain components of the SLO and language objective. ESL teachers may use the appropriate leveled language objective to build lessons for ELLs which reflects what is covered in the general education program. In this way, whether it is a pull-out or push-in model, all teachers are working on the same Student Learning Objective connected to the Common Core standard. The design of language objectives is based on the alignment of the World-Class Instructional Design Assessment (WIDA) Consortium’s English Language Development (ELD) standards with the Common Core State Standards (CCSS). WIDA’s ELD standards advance academic language development across content areas ultimately leading to academic achievement for English learners. As English learners are progressing through the six developmental linguistic stages, this framework will assist all teachers who work with English learners to appropriately identify the language needed to meet the requirements of the content standard. At the same time, the language objectives recognize the cognitive demand required to complete educational tasks. Even though listening and reading (receptive) skills differ from speaking and writing (expressive) skills across proficiency levels the cognitive function should not be diminished. For example, an Entering Level One student only has the linguistic ability to respond in single words in English with significant support from their home language. However, they could complete a Venn diagram with single words which demonstrates that they understand how the elements compare and contrast with each other or they could respond with the support of their home language (L1) with assistance from a teacher, para-professional, peer or a technology program.

http://www.state.nj.us/education/modelcurriculum/ela/ELLOverview.pdf
<table>
<thead>
<tr>
<th>#</th>
<th><strong>Student Learning Objective</strong></th>
<th><strong>N.J.SLS – Math</strong></th>
<th><strong>NJ-Personal Financial Literacy Standards</strong></th>
<th><strong>Marking Period 1</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Students identify strategies to achieve the career that meets their personal and financial goals. Using personality testing, career decision making tools and understanding how an employees’ compensations and earning can be calculated in, students will identify careers that meet their financial goals.</td>
<td>N.Q.A.1</td>
<td>9.1.12.A.3</td>
<td>9.1.12.A.4</td>
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<td>N.Q.A.2</td>
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<td>N.Q.A.3</td>
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<td>A.REL.D.10</td>
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<td>F.LE.A.2</td>
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<td>F.LE.B.5</td>
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<td>A.REL.C.6</td>
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<td>F.BF.A.1</td>
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<td>F.LE.B.5</td>
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<td>A.REL.C.5</td>
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</tbody>
</table>
## Pacing Chart – Unit 1

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<table>
<thead>
<tr>
<th></th>
<th>Analyze sales tax, markups and markdowns to calculate the final cost of cash purchases.</th>
<th>A.CED.A.2</th>
<th>A.REI.D.10</th>
<th>A.REI.D.12</th>
<th><strong>9.1.12.B.8</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td><strong>A.CED.A.2</strong></td>
<td><strong>A.REI.D.10</strong></td>
<td><strong>A.REI.D.12</strong></td>
<td><strong>9.1.12.B.8</strong></td>
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</tbody>
</table>
Research about Teaching and Learning Mathematics

Structure teaching of mathematical concepts and skills around problems to be solved (Checkly, 1997; Wood & Sellars, 1996; Wood & Sellars, 1997)

Encourage students to work cooperatively with others (Johnson & Johnson, 1975; Davidson, 1990)

Use group problem-solving to stimulate students to apply their mathematical thinking skills (Artzt & Armour-Thomas, 1992)

Students interact in ways that support and challenge one another’s strategic thinking (Artzt, Armour-Thomas, & Curcio, 2008)

Activities structured in ways allowing students to explore, explain, extend, and evaluate their progress (National Research Council, 1999)

There are three critical components to effective mathematics instruction (Shellard & Moyer, 2002):

- Teaching for conceptual understanding
- Developing children’s procedural literacy
- Promoting strategic competence through meaningful problem-solving investigations

Teachers should be:

- Demonstrating acceptance and recognition of students’ divergent ideas.
- Challenging students to think deeply about the problems they are solving, extending thinking beyond the solutions and algorithms required to solve the problem
- Influencing learning by asking challenging and interesting questions to accelerate students’ innate inquisitiveness and foster them to examine concepts further.
- Projecting a positive attitude about mathematics and about students’ ability to “do” mathematics

Students should be:

- Actively engaging in “doing” mathematics
- Solving challenging problems
- Investigating meaningful real-world problems
- Making interdisciplinary connections
- Developing an understanding of mathematical knowledge required to “do” mathematics and connect the language of mathematical ideas with numerical representations
- Sharing mathematical ideas, discussing mathematics with one another, refining and critiquing each other’s ideas and understandings
- Communicating in pairs, small group, or whole group presentations
- Using multiple representations to communicate mathematical ideas
- Using connections between pictures, oral language, written symbols, manipulative models, and real-world situations
- Using technological resources and other 21st century skills to support and enhance mathematical understanding
Mathematics is not a stagnate field of textbook problems; rather, it is a dynamic way of constructing meaning about the world around us, generating knowledge and understanding about the real world every day. Students should be metaphorically rolling up their sleeves and “doing mathematics” themselves, not watching others do mathematics for them or in front of them. (Protheroe, 2007)

Balanced Mathematics Instructional Model

Balanced math consists of three different learning opportunities: guided math, shared math, and independent math. Ensuring a balance of all three approaches will build conceptual understanding, problem solving, computational fluency, and procedural fluency. Building conceptual understanding is the focal point of developing mathematical proficiency. Students should frequently work on rigorous tasks, talk about the math, explain their thinking, justify their answer or process, build models with graphs or charts or manipulatives, and use technology.

When balanced math is used in the classroom it provides students opportunities to:

- solve problems
- make connections between math concepts and real-life situations
- communicate mathematical ideas (orally, visually and in writing)
- choose appropriate materials to solve problems
- reflect and monitor their own understanding of the math concepts
- practice strategies to build procedural and conceptual confidence

Teacher builds conceptual understanding by modeling through demonstration, explicit instruction, and think alouds, as well as guiding students as they practice math strategies and apply problem solving strategies. (whole group or small group instruction)

Teacher and students practice mathematics processes together through interactive activities, problem solving, and discussion. (whole group or small group instruction)

Students practice math strategies independently to build procedural and computational fluency. Teacher assesses learning and reteaches as necessary. (whole group instruction, small group instruction, or centers)
<table>
<thead>
<tr>
<th>Effective Pedagogical Routines/Instructional Strategies</th>
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<tbody>
<tr>
<td><strong>Collaborative Problem Solving</strong></td>
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<tr>
<td>Connect Previous Knowledge to New Learning</td>
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<tr>
<td>Making Thinking Visible</td>
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<tr>
<td>Develop and Demonstrate Mathematical Practices</td>
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<tr>
<td>Inquiry-Oriented and Exploratory Approach</td>
</tr>
<tr>
<td>Multiple Solution Paths and Strategies</td>
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<tr>
<td>Use of Multiple Representations</td>
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<tr>
<td>Explain the Rationale of your Math Work</td>
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<tr>
<td>Quick Writes</td>
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<tr>
<td>Pair/Trio Sharing</td>
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<td>Turn and Talk</td>
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<tr>
<td>Charting</td>
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<tr>
<td>Gallery Walks</td>
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<tr>
<td>Small Group and Whole Class Discussions</td>
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<tr>
<td>Student Modeling</td>
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<tr>
<td><strong>Analyze Student Work</strong></td>
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<tr>
<td>Identify Student’s Mathematical Understanding</td>
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<tr>
<td>Identify Student’s Mathematical Misunderstandings</td>
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<tr>
<td>Interviews</td>
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<tr>
<td>Role Playing</td>
</tr>
<tr>
<td>Diagrams, Charts, Tables, and Graphs</td>
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<tr>
<td>Anticipate Likely and Possible Student Responses</td>
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<td>Collect Different Student Approaches</td>
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<tr>
<td>Multiple Response Strategies</td>
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<tr>
<td>Asking Assessing and Advancing Questions</td>
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<td>Revoicing</td>
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<td>Marking</td>
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<td>Recapping</td>
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<td>Challenging</td>
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<tr>
<td>Pressing for Accuracy and Reasoning</td>
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<td>Maintain the Cognitive Demand</td>
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</table>
## Educational Technology

### Standards

|--------------------------------------------------------|

### Technology Operations and Concepts
- Create professional documents (e.g., newsletter, personalized learning plan, business letter or flyer) using advanced features of a word processing program.
- Select and use appropriate tools and digital resources to accomplish a variety of tasks and to solve problems.

### Digital Citizenship
- Model appropriate online behaviors related to cyber safety, cyber bullying, cyber security, and cyber ethics.

### Research and Information Literacy
- Gather and analyze findings to produce a possible solution for a content-related or real world problem using data collection technology.

### Design: Critical Thinking, Problem Solving, and Decision Making
- Design and create a product using the design process that addresses a real world problem with specific criteria and constraints.
Career Ready Practices

Career Ready Practices describe the career-ready skills that all educators in all content areas should seek to develop in their students. They are practices that have been linked to increase college, career, and life success. Career Ready Practices should be taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a program of study.

- **CRP1. Act as a responsible and contributing citizen and employee**
  Career-ready individuals understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good.

- **CRP2. Apply appropriate academic and technical skills.**
  Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive. They make connections between abstract concepts with real-world applications, and they make correct insights about when it is appropriate to apply the use of an academic skill in a workplace situation.

- **CRP4. Communicate clearly and effectively and with reason.**
  Career-ready individuals communicate thoughts, ideas, and action plans with clarity, whether using written, verbal, and/or visual methods. They communicate in the workplace with clarity and purpose to make maximum use of their own and others’ time. They are excellent writers; they master conventions, word choice, and organization, and use effective tone and presentation skills to articulate ideas. They are skilled at interacting with others; they are active listeners and speak clearly and with purpose. Career-ready individuals think about the audience for their communication and prepare accordingly to ensure the desired outcome.

- **CRP6. Demonstrate creativity and innovation.**
  Career-ready individuals regularly think of ideas that solve problems in new and different ways, and they contribute those ideas in a useful and productive manner to improve their organization. They can consider unconventional ideas and suggestions as solutions to issues, tasks or problems, and they discern which ideas and suggestions will add greatest value. They seek new methods, practices, and ideas from a variety of sources and seek to apply those ideas to their own workplace. They take action on their ideas and understand how to bring innovation to an organization.

- **CRP7. Employ valid and reliable research strategies.**
  Career-ready individuals are discerning in accepting and using new information to make decisions, change practices or inform strategies. They use reliable research process to search for new information. They evaluate the validity of sources when considering the use and adoption of external information or practices in their workplace situation.
Career Ready Practices

- **CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.**
  Career-ready individuals readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem. They are aware of problems when they occur and take action quickly to address the problem; they thoughtfully investigate the root cause of the problem prior to introducing solutions. They carefully consider the options to solve the problem. Once a solution is agreed upon, they follow through to ensure the problem is solved, whether through their own actions or the actions of others.

- **CRP11. Use technology to enhance productivity.**
  Career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems. They are flexible and adaptive in acquiring new technology. They are proficient with ubiquitous technology applications. They understand the inherent risks—personal and organizational—of technology applications, and they take actions to prevent or mitigate these risks.

- **CRP12. Work productively in teams while using cultural global competence.**
  Career-ready individuals positively contribute to every team, whether formal or informal. They apply an awareness of cultural difference to avoid barriers to productive and positive interaction. They find ways to increase the engagement and contribution of all team members. They plan and facilitate effective team meetings.
WIDA Proficiency Levels

At the given level of English language proficiency, English language learners will process, understand, produce or use

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
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</table>
| 6- Reaching | - Specialized or technical language reflective of the content areas at grade level  
- A variety of sentence lengths of varying linguistic complexity in extended oral or written discourse as required by the specified grade level  
- Oral or written communication in English comparable to proficient English peers |
| 5- Bridging | - Specialized or technical language of the content areas  
- A variety of sentence lengths of varying linguistic complexity in extended oral or written discourse, including stories, essays or reports  
- Oral or written language approaching comparability to that of proficient English peers when presented with grade level material. |
| 4- Expanding | - Specific and some technical language of the content areas  
- A variety of sentence lengths of varying linguistic complexity in oral discourse or multiple, related sentences or paragraphs  
- Oral or written language with minimal phonological, syntactic or semantic errors that may impede the communication, but retain much of its meaning, when presented with oral or written connected discourse, with sensory, graphic or interactive support |
| 3- Developing | - General and some specific language of the content areas  
- Expanded sentences in oral interaction or written paragraphs  
- Oral or written language with phonological, syntactic or semantic errors that may impede the communication, but retain much of its meaning, when presented with oral or written, narrative or expository descriptions with sensory, graphic or interactive support |
| 2- Beginning | - General language related to the content area  
- Phrases or short sentences  
- Oral or written language with phonological, syntactic, or semantic errors that often impede of the communication when presented with one to multiple-step commands, directions, or a series of statements with sensory, graphic or interactive support |
| 1- Entering | - Pictorial or graphic representation of the language of the content areas  
- Words, phrases or chunks of language when presented with one-step commands directions, WH-, choice or yes/no questions, or statements with sensory, graphic or interactive support |
Language Development Supports For English Language Learners
To Increase Comprehension and Communication Skills

Environment

- Welcoming and stress-free
- Respectful of linguistic and cultural diversity
- Honors students’ background knowledge
- Sets clear and high expectations
- Includes routines and norms
- Is thinking-focused vs. answer-seeking
- Offers multiple modalities to engage in content learning and to demonstrate understanding
- Includes explicit instruction of specific language targets
- Provides participation techniques to include all learners
- Integrates learning centers and games in a meaningful way
- Provides opportunities to practice and refine receptive and productive skills in English as a new language
- Integrates meaning and purposeful tasks/activities that:
  - Are accessible by all students through multiple entry points
  - Are relevant to students’ lives and cultural experiences
  - Build on prior mathematical learning
  - Demonstrate high cognitive demand
  - Offer multiple strategies for solutions
  - Allow for a language learning experience in addition to content

<table>
<thead>
<tr>
<th>Sensory Supports*</th>
<th>Graphic Supports*</th>
<th>Interactive Supports*</th>
<th>Verbal and Textual Supports</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Real-life objects (realia) or concrete objects</td>
<td>- Graphs</td>
<td>- In a whole group</td>
<td>- Labeling</td>
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<tr>
<td>- Physical models</td>
<td>- Charts</td>
<td>- In a small group</td>
<td>- Students’ native language</td>
</tr>
<tr>
<td>- Manipulatives</td>
<td>- Timelines</td>
<td>- With a partner such as Turn-and-Talk</td>
<td>- Modeling</td>
</tr>
<tr>
<td>- Pictures &amp; photographs</td>
<td>- Number lines</td>
<td>- In pairs as a group (first, two pairs work independently, then they form a group of four)</td>
<td>- Repetitions</td>
</tr>
<tr>
<td>- Visual representations or models such as diagrams or drawings</td>
<td>- Graphic organizers</td>
<td>- In triads</td>
<td>- Paraphrasing</td>
</tr>
<tr>
<td>- Videos &amp; films</td>
<td>- Graphing paper</td>
<td>- Cooperative learning structures such as Think-Pair-Share</td>
<td>- Summarizing</td>
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<tr>
<td>- Newspapers or magazines</td>
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<td>- Interactive websites or software</td>
<td>- Guiding questions</td>
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<tr>
<td>- Gestures</td>
<td></td>
<td>- With a mentor or coach</td>
<td>- Clarifying questions</td>
</tr>
<tr>
<td>- Physical movements</td>
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<td>- Probing questions</td>
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<tr>
<td>- Music &amp; songs</td>
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<td>- Leveled questions such as What? When? Where? How? Why?</td>
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</tbody>
</table>

BUILDING EQUITY IN YOUR TEACHING PRACTICE

How do the essential questions highlight the connection between the big ideas of the unit and equity in your teaching practice?

**CONTENT INTEGRATION**
Teachers use examples and content from a variety of cultures & groups.

This unit / lesson is connected to other topics explored with students.

There are multiple viewpoints reflected in the content of this unit / lesson.

The materials and resources are reflective of the diverse identities and experiences of students.

The content affirms students, as well as exposes them to experiences other than their own.

**KNOWLEDGE CONSTRUCTION**
Teachers help students understand how knowledge is created and influenced by cultural assumptions, perspectives & biases.

This unit / lesson provides context to the history of privilege and oppression.

This unit / lesson addresses power relationships.

This unit / lesson help students to develop research and critical thinking skills.

This curriculum creates windows and mirrors* for students.

**PREJUDICE REDUCTION**
Teachers implement lessons and activities to assert positive images of ethnic groups & improve intergroup relations.

This unit / lesson help students question and unpack biases & stereotypes.

This unit / lesson help students examine, research and question information and sources.

The curriculum encourage discussion and understanding about the groups of people being represented.

This unit / lesson challenges dominant perspectives.

**EQUITABLE PEDAGOGY**
The instruction has been modified to meet the needs of each student.

Students feel respected and their cultural identities are valued.

Additional supports have been provided for students to become successful and independent learners.

Opportunities are provided for student to reflect on their learning and provide feedback.

**EMPOWERING SCHOOL CULTURE**
Using the other four dimensions to create a safe and healthy educational environment for all.

There are opportunities for students to connect with the community.

My classroom is welcoming and supportive for all students?

I am aware of and sensitive to the needs of my students and their families.

There are effective parent communication systems established. Parents can talk to me about issues as they arise in my classroom.

## Culturally Relevant Pedagogy Examples

- **Call on Each Student:** Encourage each student to share his or her thoughts through call-and-response, keeping the class’s attention in the process.  
  **Example:** Foster confidence. Make the assessment process less intimidating by offering different ways to demonstrate skills and understanding. For example, avoid handing out quizzes that are purely multiple choice or fill-in-the-blank. Mix in problems that involve explaining the step necessary to get to the answer. Then give students time to monitor their performance and assess their own progress, helping them focus on growth.

- **Learn About Your Students:** Open communication should uncover your students’ learning styles. Distribute surveys and questionnaires, and hold class discussions.  
  **Example:** When students understand themselves it can prove beneficial to them in a real-life situation. The article below discusses the importance of developing a spending plan and actually following the plan for it to work.  

- **Bring in Guest Speakers:** Invite guest speakers who can add context to your lesson and speak from a specific culture’s general perspective.  
  **Example:** Invite guest speakers to engage and motivate students and share a sense of culture. Create your own career day, so that students can speak to people that are in careers they would like to enter.

- **Run Problem-Based Learning Scenarios:** Present relatable real-world problems for your students to solve, explicitly referencing cultures and communities when applicable.  
  **Example:** This allows you to bridge two cultural connections. First, include cultural links in the questions, whether they are explicit or students make it themselves. Second, allow students to apply different approaches to solve the question, using unique cultural perspectives.
## Differentiated Instruction

### Accommodate Based on Students Individual Needs: Strategies

<table>
<thead>
<tr>
<th>Time/General</th>
<th>Processing</th>
<th>Comprehension</th>
<th>Recall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extra time for assigned tasks</td>
<td>Extra Response time</td>
<td>Precise processes for balanced math instructional model</td>
<td>Teacher-made checklist</td>
</tr>
<tr>
<td>Adjust length of assignment</td>
<td>Have students verbalize steps</td>
<td>Short manageable tasks</td>
<td>Use visual graphic organizers</td>
</tr>
<tr>
<td>Timeline with due dates for reports and projects</td>
<td>Repeat, clarify or reword directions</td>
<td>Brief and concrete directions</td>
<td>Reference resources to promote independence</td>
</tr>
<tr>
<td>Communication system between home and school</td>
<td>Mini-breaks between tasks</td>
<td>Provide immediate feedback</td>
<td>Visual and verbal reminders</td>
</tr>
<tr>
<td>Provide lecture notes/outline</td>
<td>Provide a warning for transitions</td>
<td>Small group instruction</td>
<td>Graphic organizers</td>
</tr>
<tr>
<td></td>
<td>Partnering</td>
<td>Emphasize multi-sensory learning</td>
<td></td>
</tr>
</tbody>
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<thead>
<tr>
<th>Assistive Technology</th>
<th>Tests/Quizzes/Grading</th>
<th>Behavior/Attention</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer/whiteboard</td>
<td>Extended time</td>
<td>Consistent daily structured routine</td>
<td>Individual daily planner</td>
</tr>
<tr>
<td>Tape recorder</td>
<td>Study guides</td>
<td>Simple and clear classroom rules</td>
<td>Display a written agenda</td>
</tr>
<tr>
<td>Video Tape</td>
<td>Shortened tests</td>
<td>Frequent feedback</td>
<td>Note-taking assistance</td>
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<tr>
<td></td>
<td>Read directions aloud</td>
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<td>Color code materials</td>
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</table>

Recall
- Teacher-made checklist
- Use visual graphic organizers
- Reference resources to promote independence
- Visual and verbal reminders
- Graphic organizers

Organization
- Individual daily planner
- Display a written agenda
- Note-taking assistance
- Color code materials
Interdisciplinary Connections

*Model interdisciplinary thinking to expose students to other disciplines.*

**Social Studies and Personal finance**

**Looking for the Right Fit:**

- Students will act as a senior human resources manager at a Fortune 500 company. The company is growing quickly, and this month it has six positions newly open. First the student will need to research the positions to learn more. Then he/she will write a job description to post online. Finally, he/she will write a series of questions to ask during the interview process. Great employees are a company's best asset, and it is the student’s job to find them, so good luck!

**Federal Income Tax**

- Tax reform can be approached in a variety of ways. Some people worry that new tax plans may only help the rich and not the poor or the middle class. To understand proposed changes in tax plans, students must first understand our current tax plan. That is what they will discover in this project.

**Business and Personal Finance**

- The exercise starts by dividing your students into small groups and classroom into three stations. Each group has tokens totaling $1,000, which they must choose to spend at the stations. Each station has a unique category of cards you’ve pre-made, representing a distinct incentive. An economic incentive could be to get faster transportation to school for $150, whereas a social incentive could be to host a party for $200. A moral incentive could be to make a charity donation for $100. Once every group has spent $1,000, tally the purchases to see which station sold the most incentives.

This opens the door to two reflection exercises. First, as a class, discuss how each group spent its money. Second, ask each student to write about why he or she wanted specific incentives.
Enrichment

What is the Purpose of Enrichment?

- The purpose of enrichment is to provide extended learning opportunities and challenges to students who have already mastered, or can quickly master, the basic curriculum. Enrichment gives the student more time to study concepts with greater depth, breadth, and complexity.
- Enrichment also provides opportunities for students to pursue learning in their own areas of interest and strengths.
- Enrichment keeps advanced students engaged and supports their accelerated academic needs.
- Enrichment provides the most appropriate answer to the question, “What do you do when the student already knows it?”

Enrichment is…

- Planned and purposeful
- Different, or differentiated, work – not just more work
- Responsive to students’ needs and situations
- A promotion of high-level thinking skills and making connections within content
- The ability to apply different or multiple strategies to the content
- The ability to synthesize concepts and make real world and cross-curricular connections
- Elevated contextual complexity
- Sometimes independent activities, sometimes direct instruction
- Inquiry based or open ended assignments and projects
- Using supplementary materials in addition to the normal range of resources
- Choices for students
- Tiered/Multi-level activities with flexible groups (may change daily or weekly)

Enrichment is not…

- Just for gifted students (some gifted students may need intervention in some areas just as some other students may need frequent enrichment)
- Worksheets that are more of the same (busywork)
- Random assignments, games, or puzzles not connected to the content areas or areas of student interest
- Extra homework
- A package that is the same for everyone
- Thinking skills taught in isolation
- Unstructured free time
Assessments

**Suggested Formative/Summative Classroom Assessments**
- Describe Learning Vertically
- Identify Key Building Blocks
- Make Connections (between and among key building blocks)
- Short/Extended Constructed Response Items
- Multiple-Choice Items (where multiple answer choices may be correct)
- Drag and Drop Items
- Use of Equation Editor
- Quizzes
- Journal Entries/Reflections/Quick-Writes
- Accountable talk
- Projects
- Portfolio
- Observation
- Graphic Organizers/Concept Mapping
- Presentations
- Role Playing
- Teacher-Student and Student-Student Conferencing
- Homework
New Jersey Student Learning Standards

N.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.

N.Q.A.2: Define appropriate quantities for the purpose of descriptive modeling.

N.Q.A.3: Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.

A.CED.A.1: Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear functions and quadratic functions, and simple rational and exponential functions.

A.CED.A.2: Create equations in two or more variables to represent relationships between quantities; Graph equations on coordinate axes with labels and scales.

A.CED.A.3: Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.

A.REL.B.4: Solve quadratic equations in one variable.
  A.REL.B.4a: Use the method of completing the square to transform any quadratic equation in $x$ into an equation of the form $(x - p)^2 = q$ that has the same solutions. Derive the quadratic formula from this form.

A.REL.B.4b: Solve quadratic equations by inspection (e.g., for $x^2 = 49$), taking square roots, completing the square, the quadratic formula and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as $a \pm bi$ for real numbers $a$ and $b$

A.REL.C.5: Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions.

A.REL.C.6: Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.

A.REL.D.10: Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). [Focus on linear equations.]
### New Jersey Student Learning Standards

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A.REI.D.12</strong>:</td>
<td>Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.</td>
</tr>
<tr>
<td><strong>A.SSE.A.2</strong>:</td>
<td>Use the structure of an expression to identify ways to rewrite it. <em>For example, see</em> (x^4 - y^4) <em>as</em> ((x^2)^2 - (y^2)^2), <em>thus recognizing it as a difference of squares that can be factored as</em> ((x^2 - y^2)(x^2 + y^2)).</td>
</tr>
<tr>
<td><strong>A.SSE.B.3</strong>:</td>
<td>Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.</td>
</tr>
<tr>
<td>A.SSE.B.3a:</td>
<td>Factor a quadratic expression to reveal the zeros of the function it defines.</td>
</tr>
<tr>
<td>A.SSE.B.3b:</td>
<td>Complete the square in a quadratic expression to reveal the maximum or minimum value of the function it defines.</td>
</tr>
<tr>
<td><strong>F.BF.A.1</strong>:</td>
<td>Write a function that describes a relationship between two quantities.</td>
</tr>
<tr>
<td>F.BF.A.1a:</td>
<td>Determine an explicit expression, a recursive process, or steps for calculation from a context</td>
</tr>
<tr>
<td>F.BF.A.1b:</td>
<td>Combine standard function types using arithmetic operations. <em>For example, build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model.</em></td>
</tr>
<tr>
<td><strong>F.IF.A.1</strong>:</td>
<td>Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If (f) is a function and (x) is an element of its domain, then (f(x)) denotes the output of (f) corresponding to the input (x). The graph of (f) is the graph of the equation (y = f(x)).</td>
</tr>
<tr>
<td><strong>F.IF.A.2</strong>:</td>
<td>Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.</td>
</tr>
<tr>
<td><strong>F.LE.A.1</strong>:</td>
<td>Distinguish between situations that can be modeled with linear functions and with exponential functions.</td>
</tr>
<tr>
<td><strong>F.LE.B.5</strong>:</td>
<td>Interpret the parameters in a linear or exponential function in terms of a context</td>
</tr>
<tr>
<td><strong>F.LE.A.2</strong>:</td>
<td>Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table).</td>
</tr>
</tbody>
</table>
### New Jersey Personal Financial Literacy Standards

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.1.12.A.1</td>
<td>Differentiate among the types of taxes and employee benefits.</td>
</tr>
<tr>
<td>9.1.12.A.2</td>
<td>Differentiate between taxable and nontaxable income.</td>
</tr>
<tr>
<td>9.1.12.A.3</td>
<td>Analyze the relationship between various careers and personal earning goals.</td>
</tr>
<tr>
<td>9.1.12.A.4</td>
<td>Identify a career goal and develop a plan and timetable for achieving it, including educational/training requirements, costs, and possible debt.</td>
</tr>
<tr>
<td>9.1.12.A.5</td>
<td>Analyze how the economic, social, and political conditions of a time period can affect the labor market.</td>
</tr>
<tr>
<td>9.1.12.A.7</td>
<td>Analyze and critique various sources of income and available resources (e.g., financial assets, property, and transfer payments) and how they may substitute for earned income.</td>
</tr>
<tr>
<td>9.1.12.A.9</td>
<td>Analyze how personal and cultural values impact spending and other financial decisions.</td>
</tr>
<tr>
<td>9.1.12.B.2</td>
<td>Compare strategies for saving and investing and the factors that influence how much should be saved or invested to meet financial goals.</td>
</tr>
<tr>
<td>9.1.12.B.8</td>
<td>Describe and calculate interest and fees that are applied to various forms of spending, debt, and saving.</td>
</tr>
<tr>
<td>9.1.12.D.5</td>
<td>Justify the use of savings and investment options to meet targeted goals.</td>
</tr>
<tr>
<td>9.1.12.D.9</td>
<td>Relate savings and investment results to achievement of financial goals.</td>
</tr>
<tr>
<td>9.1.12.D.10</td>
<td>Differentiate among various investment products and savings vehicles and how to use them most effectively.</td>
</tr>
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</table>
# Mathematical Practices

1. Make sense of problems and persevere in solving them.

2. Reason abstractly and quantitatively.

3. Construct viable arguments and critique the reasoning of others.

4. Model with mathematics.

5. Use appropriate tools strategically.

6. Attend to precision.

7. Look for and make use of structure.

8. Look for and express regularity in repeated reasoning.
### NJSLS:

### NJPFLS:

#### Unit Focus:
- Perform arithmetic operations on polynomials
- Interpret the structure of expressions
- Solve equations and inequalities in one variable
- Create equations that describe numbers or relationships
- Interpret functions that arise in applications in terms of the context
- Represent and solve equations and inequalities graphically
- Build a function that models a relationship between two quantities
- Construct & compare linear, quadratic, & exponential models
- Build new functions from existing functions
- Analyze functions using different representations
- Analyze various forms of compensation
- Prepare earning statements
- Prepare a budget sheet
- Perform bank reconciliation
- Analyze simple and compound interest rates
- Analyze cost of purchases
New Jersey Student Learning Standard(s):  
N.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.

N.Q.A.2: Define appropriate quantities for the purpose of descriptive modeling.

N.Q.A.3: Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.

9.1.12.A.3: Analyze the relationship between various careers and personal earning goals.

9.1.12.A.4: Identify a career goal and develop a plan and timetable for achieving it, including educational/training requirements, costs, and possible debt.

**Student Learning Objective 1:** Students identify strategies to achieve the career that meets their personal and financial goals. Using personality testing, career decision making tools and understanding how an employee’s compensations and earning can be calculated in, students will identify careers that meet their financial goals.

<table>
<thead>
<tr>
<th>MPs</th>
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<th>Essential Understandings/ Questions (Accountable Talk)</th>
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</table>
| MP 2 MP 7 MP 6 | Identify the personal issues to consider when choosing and planning a career.  
Research career opportunities that relate to their own personal decisions and goals.  
Compute periodic salary based on annual contracted salary.  
Express classified ad prices as piecewise functions.  
Compute weekly, semimonthly and biweekly earnings given annual salary. | Can students identify the personal issues to consider when choosing and planning a career?  
Are students able to explain how education and training affect career advancement?  
How do you compute pay period earnings for an hourly employee?  
How is an employee’s annual total earnings calculated?  
How can you differentiate between and employee who is paid hourly verses one that is paid on commission? | How Much Did We Sell?  
Calculate My Income  
Looking For The Right Fit |
Compute hourly pay and overtime pay given hourly rate.

Compute annual salaries based on annual percentage increase.

Compute pay based on percent commission

**New Jersey Student Learning Standard(s):**

**A.CED.A.2:** Create equations in two or more variables to represent relationships between quantities; Graph equations on coordinate axes with labels and scales.

**A.REI.D.10:** Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). [Focus on linear equations.]

**F.LE.A.2:** Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table).

**F.LE.B.5:** Interpret the parameters in a linear or exponential function in terms of a context.

**A.REI.C.6:** Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.

**F.BF.A.1:** Write a function that describes a relationship between two quantities.
  - **F.BF.A.1a:** Determine an explicit expression, a recursive process, or steps for calculation from a context
  - **F.BF.A.1b:** Combine standard function types using arithmetic operations. *For example, build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model.*
9.1.12.A.1: Differentiate among the types of taxes and employee benefits.


**Student Learning Objective 2:** Prepare statement of earnings after calculating net income given all federal, state, local, Social security, and Medicare rates, along with health insurance contribution, and other deductions

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</thead>
<tbody>
<tr>
<td>MP 1</td>
<td>Calculate payroll deductions.</td>
<td>Why is the concept of net pay important to personal financial planning?</td>
<td>The IRS and My Paycheck</td>
</tr>
<tr>
<td>MP 3</td>
<td>Compute federal income taxes using a tax table and tax schedule.</td>
<td>Where does taxpayer dollars go?</td>
<td>My Net Income</td>
</tr>
<tr>
<td>MP 5</td>
<td>Construct income tax graphs using compound equations.</td>
<td>How is tax collected?</td>
<td>Taxes</td>
</tr>
<tr>
<td>MP 7</td>
<td>Calculate flat state taxes.</td>
<td>How so taxes impact productivity and growth?</td>
<td></td>
</tr>
<tr>
<td>MP 5</td>
<td>Calculate graduated state taxes.</td>
<td>What are a government’s major revenue categories and their respective proportions of local, state, and federal budgets?</td>
<td></td>
</tr>
<tr>
<td>MP 7</td>
<td>Calculate social security tax.</td>
<td>What factors determine how much federal tax you owe?</td>
<td></td>
</tr>
<tr>
<td>MP 7</td>
<td>Calculate Medicare tax.</td>
<td>What is the difference between a flat tax and a graduated tax?</td>
<td></td>
</tr>
<tr>
<td>MP 7</td>
<td>Calculate pay period health insurance.</td>
<td>How do you determine the value of your net benefits?</td>
<td></td>
</tr>
<tr>
<td>MP 7</td>
<td>Analyze total deductions in the statement of earnings.</td>
<td>How do you calculate the percentage of gross pay that you take home?</td>
<td></td>
</tr>
<tr>
<td>MP 7</td>
<td>Interpret and use information on a pay stub, W-2 form, and 1099 form.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
New Jersey Student Learning Standard(s):

**F.LE.A.2:** Construct linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two input-output pairs (include reading these from a table).

**F.LE.B.5:** Interpret the parameters in a linear or exponential function in terms of a context.

**F.BF.A.1:** Write a function that describes a relationship between two quantities.

- **F.BF.A.1a:** Determine an explicit expression, a recursive process, or steps for calculation from a context.

- **F.BF.A.1b:** Combine standard function types using arithmetic operations. For example, build a function that models the temperature of a cooling body by adding a constant function to a decaying exponential, and relate these functions to the model.

**9.1.12.A.5:** Analyze how the economic, social, and political conditions of a time period can affect the labor market.

**9.1.12.A.7:** Analyze and critique various sources of income and available resources (e.g., financial assets, property, and transfer payments) and how they may substitute for earned income.

**9.1.12.A.9:** Analyze how personal and cultural values impact spending and other financial decisions.

**9.1.12.B.6:** Design and utilize a simulated budget to monitor progress of financial plans.

**Student Learning Objective 3:** Understand the components of a budget to create and calculate an individualized budget based on income.

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</thead>
<tbody>
<tr>
<td>MP 1</td>
<td>A budget is a monthly financial plan that divides your income into categories. It uses your monthly income as a cap on your spending and then determines how you allocate your money to savings goals and expenses within that limit. Calculate average monthly expenditures.</td>
<td>Why is it important to track monthly expenses? What are the steps in creating a budget? How do fixed and variable costs differ? How does budgeting help consumers balance income, spending, and savings goals?</td>
<td>Create a Personal Budget</td>
</tr>
<tr>
<td>MP 3</td>
<td></td>
<td></td>
<td>Creating Budget</td>
</tr>
<tr>
<td>MP 5</td>
<td></td>
<td></td>
<td>Expense Tracking</td>
</tr>
<tr>
<td>MP 7</td>
<td></td>
<td></td>
<td>My Expenditures and Budget</td>
</tr>
</tbody>
</table>
Prepare a budget.
Calculate the percent of income spent on expenses.
Calculate total expense.
Calculate the percent of income spent on expenses.

| How will developing effective spending habits affect your financial future? |

**New Jersey Student Learning Standard(s):**

A.CED.A.3: Represent constraints by equations or inequalities, and by systems of equations and/or inequalities, and interpret solutions as viable or nonviable options in a modeling context. *For example, represent inequalities describing nutritional and cost constraints on combinations of different foods.*

A.REI.C.6: Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.

A.REI.C.5: Prove that, given a system of two equations in two variables, replacing one equation by the sum of that equation and a multiple of the other produces a system with the same solutions.


9.1.12.D.10: Differentiate among various investment products and savings vehicles and how to use them most effectively.

**Student Learning Objective 4:** Perform bank reconciliation after creating and maintaining a check register.

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</thead>
<tbody>
<tr>
<td>MP 2</td>
<td>Accurately complete checking deposit slip.</td>
<td>Why are financial services offered by banks important to business and individuals?</td>
<td>Banking and My Money</td>
</tr>
<tr>
<td>MP 6</td>
<td></td>
<td></td>
<td>Bank Reconciliation</td>
</tr>
</tbody>
</table>
| MP 7 | Complete withdrawal slips.  
Prepare deposit slips and find account balances.  
Fill out check registers.  
Accurately write out a check.  
Read a monthly checking account statement.  
Reconcile a monthly checking account.  
Use on-line banking (optional).  
Differentiate between a passbook and a statement savings account. | Why is it important for consumers to open and maintain a checking account?  
What does it mean to “take personal responsibility” for something?  
Why might someone want to make a purchase with a credit card rather than paying cash?  
Why is it important to do bank reconciliation? | |

**New Jersey Student Learning Standard(s):**

**A.REI.B.4:** Solve quadratic equations in one variable.

**A.CED.A.1:** Create equations and inequalities in one variable and use them to solve problems. Include equations arising from linear functions and quadratic functions, and simple rational and exponential functions.

**APR.A.1:** Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.

**A.SSE.A.2:** Use the structure of an expression to identify ways to rewrite it. *For example, see* \( x^4 - y^4 \) *as* \((x^2)^2 - (y^2)^2\), *thus recognizing it as a difference of squares that can be factored as* \((x^2 - y^2)(x^2 + y^2)\).*

**A.SSE.B.3:** Choose and produce an equivalent form of an expression to reveal and explain properties of the quantity represented by the expression.
F.IF.A.1: Understand that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range. If \( f \) is a function and \( x \) is an element of its domain, then \( f(x) \) denotes the output of \( f \) corresponding to the input \( x \). The graph of \( f \) is the graph of the equation \( y = f(x) \).

F.IF.A.2: Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.

F.LE.A.1: Distinguish between situations that can be modeled with linear functions and with exponential functions.

F.BF.A.1: Write a function that describes a relationship between two quantities.

9.1.12.B.2 Compare strategies for saving and investing and the factors that influence how much should be saved or invested to meet financial goals.

9.1.12.B.8 Describe and calculate interest and fees that are applied to various forms of spending, debt, and saving.

9.1.12.D.5: Justify the use of savings and investment options to meet targeted goals.


**Student Learning Objective 5:** Analyze simple and compound interest rates for saving accounts and calculate their earnings and balances. Calculate earnings for \( t=2 \) and expand the analysis for longer periods of investments.

<table>
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</thead>
<tbody>
<tr>
<td>MP 4</td>
<td>Differentiate between simple and compounded interest.</td>
<td>Is saving important to our financial well-being?</td>
<td>Interest Rates and My Goal</td>
</tr>
<tr>
<td>MP 6</td>
<td>Differentiate between types of compounding calculate simple interest on a savings account.</td>
<td>How can I identify the benefit of saving accounts?</td>
<td>Compounded Interest and Annuities</td>
</tr>
<tr>
<td></td>
<td>Apply tables of compound interest with a savings account on various time periods.</td>
<td>Why might you deposit money into a CD rather than a saving account?</td>
<td>Savings and Retirement Funds</td>
</tr>
<tr>
<td></td>
<td></td>
<td>How can you use annuities to create a financial plan for the future?</td>
<td>Savings and Interest</td>
</tr>
</tbody>
</table>
Calculate the interest earned on money market and CD accounts, early withdrawal penalties, and the effective rate if interest.

Calculate present and future values of ordinary annuities.

New Jersey Student Learning Standard(s):
N.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.

N.Q.A.2: Define appropriate quantities for the purpose of descriptive modeling.

N.Q.A.3: Choose a level of accuracy appropriate to limitations on measurement when reporting quantities.

A.CED.A.2: Create equations in two or more variables to represent relationships between quantities; Graph equations on coordinate axes with labels and scales.

A.REI.D.10: Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line). [Focus on linear equations.]

A.REI.D.12: Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.

9.1.12.B.2: Compare strategies for saving and investing and the factors that influence how much should be saved or invested to meet financial goals.

Student Learning Objective 6: Analyze sales tax, markups and markdowns to calculate the final cost of cash purchases.
<table>
<thead>
<tr>
<th>MP 1</th>
<th>MP 2</th>
<th>MP 4</th>
<th>MP 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculate markup and markdowns.</td>
<td>Calculate sales tax and final cost.</td>
<td>Compare unit prices of various commodities and make decisions to decrease cost.</td>
<td>Calculate cash discount and cash price.</td>
</tr>
<tr>
<td>Calculate cost and selling price when markup is based on selling price.</td>
<td>Calculate the rate of markup based on cost.</td>
<td>Calculate markdown and selling price.</td>
<td></td>
</tr>
</tbody>
</table>

(Accountable Talk)

How can I find the cheapest price for goods and services?  
Why do you think merchants put goods on sale?  
What are some ways merchants mark sale prices on goods?  
Why would a business offer cash discount to its customers?  
How do retailers use markups and markdowns to determine selling price?  
Eureka Markups and Markdowns  
Markups and Markdowns  
How Much Does It Cost?
### Unit 1 Vocabulary

- Account Statement
- Annual Expenses
- Annual Interest Rate
- Annuity
- Annuity Due
- Automated Teller Machine
- Balance
- Bank statement
- Budget
- Budget Sheet
- Calculate
- Candidate
- Check
- Check Register
- Checking Account
- Claim
- Commission
- Commission Rate
- Community
- Comparison Shopping
- Compound Interest
- Compound Interest Table
- Compute
- Coupons
- Daily Compounding
- Deposit
- Direct Deposit
- Double Time
- Emergency Fund
- Exemption
- Expenditures
- Expense Summary
- Federal Income Tax
- Fixed
- Fixed Expenses
- Graduated Commission
- Graduated Income Tax
- Gross Income
- Group Insurance
- Hourly Rate
- Incentive
- Income
- Interest
- Living Expenses
- Markdown
- Markdown Rate
- Medical
- Medicare
- Net Pay
- Online Banking
- Ordinary Annuity
- Overtime Pay
- Percent
- Personal Identification Number
- Piecework
- Principal
- Rate
- Rebates
- Reconcile
- Recordkeeping
- Require
- Salary
- Sale Price
- Sales Receipt
- Sales Tax
- Saving account
- Service
- Service charge
- Simple Interest
- Social Security
- Straight Commission
- Straight Time Pay
- Total Purchase Price
- Unit Pricing
- Weekly Time Card
- Withdrawal
- Withholding Allowance
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<td><a href="https://www.hsfpp.org/resources.aspx">https://www.hsfpp.org/resources.aspx</a></td>
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<tr>
<td>Field Trip Ideas</td>
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<td><strong>MUSEUM OF AMERICAN FINANCE</strong> (New York) – For more than 20 years, educators from around the country have been bringing students to the Museum to help them understand how finance impacts their daily lives. The Museum offers discounted admission for pre-booked groups of eight or more, as well as a variety of classes for students in middle school through college.</td>
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<td><a href="http://www.moaf.org/index">http://www.moaf.org/index</a></td>
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<td><strong>MUSEUM of MATHEMATICS</strong> (New York) Mathematics illuminates the patterns that abound in our world. The National Museum of Mathematics strives to enhance public understanding and perception of mathematics. Its dynamic exhibits and programs stimulate inquiry, spark curiosity, and reveal the wonders of mathematics. The Museum’s activities lead a broad and diverse audience to understand the evolving, creative, human, and aesthetic nature of mathematics.</td>
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<td><a href="http://www.momath.org">www.momath.org</a></td>
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<td><a href="https://www.newyorkfed.org/aboutthefed/visiting.html">https://www.newyorkfed.org/aboutthefed/visiting.html</a></td>
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