Unit 2: Work with Time and Money

Content Area: **Math**
Course(s): **Sample Course**
Time Period: **DecJan**
Length: **approx. 7 weeks / 2nd Grade**
Status: **Published**

Title Section

Department of Curriculum and Instruction

Belleville Public Schools

Curriculum Guide

Mathematics: Grade 2

Unit 2: Work with Time and Money

Belleville Board of Education

102 Passaic Avenue

Belleville, NJ 07109

Prepared by: Jaclyn Corino, Morgan Chapman, Jenny Reis

Dr. Richard Tomko, Ph.D., M.J., Superintendent of Schools

Dr. Giovanni Cusmano, Director of Elementary Education K -8

Mr. George Droste, Director of Secondary Education

Board Approved: August 30, 2017

Unit Overview

This unit is about working with time and money.

- Students will learn how to solve problems with coins, solve problems with dollar bills and coins that model 100 cents, solve problems with dollar bills, reason about values of coins and dollar bills, and find different ways to make the same total amount.
- Students will learn to tell time to the nearest five minutes.
- Students will say the time in different ways.
- Students will tell time and use reasoning to state if the event is happening in the a.m. or p.m.

NJSLS

Below are the New Jersey Student Learning Standards associated with the student learning objectives in Unit 2.

MA.2.MD.C.7	Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
MA.2.MD.C.8	Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately.
MA.2.OA.A.1	Use addition and subtraction within 100 to solve one- and two-step word problems

	involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
MA.2.NBT.A.2	Count within 1000; skip-count by 5s, 10s, and 100s.

Exit Skills

By the end of Unit 2, 2nd grade Math Students should be able to:

- Work with time and money
- Solve problems with coins
- Solve problems with dollar bills and coins that model 100 cents
- Solve problems with dollar bills
- Reason about values of coins and dollar bills, and find different ways to make the same total value
- Tell time to the nearest five minutes
- Say the time in differernt ways
- Tell time and use reasoning to state if the event is happening in the a.m. or p.m.

Enduring Understanding

Enduring Understanding-Unit 2

1. Each kind of coin has a specific value unrelated to its physical size.

2. Money is measurable and the value of coins can be quantified using cent amounts.

3. Money is measurable and can be quantified using dollar and cent amounts. Each kind of bill has a specific value. You can count to fine the total value of a group of dollar bills.

4. Each kind of bill has a a specific value, and the value of the bills can be used to solve problems about money. Word problems about money can often be solved by adding and subtracting.

5. Good math thinkers know how to think about words and numbers to solve problems.

6. Time can be told to the nearest 5 minutes. Time can be expressed using different units that are related to each other.

7. Time can be described before and after the hour in different ways.

8. Certain time periods can be described using the abbreviations a.m. or p.m.

Essential Questions

Essential Question:

How can you solve problems about counting money or telling time to the nearest 5 minutes?

Learning Objectives

Learning Objectives-Unit 2

1. Solve problems with coins.

2 Solve problems with dollar bills and coins that model 100 cents.

3. Solve problems with dollar bills.

4. Reason about values of coins and dollar bills, and find different ways to make the same total value.

5. Tell time to the nearest five minutes.

6. Say the time in different ways.

7. Tell time and use reasoning to state if the event is happening in the a.m. or p.m.

Interdisciplinary Connections

Math and Science Project (STEM)

- The science thee for this project is Money Matters, and it involves classifying materials.
- Discuss with students the different materials used to make coins and bills.
- Ask students to describe different types of coins and bills. Then, discuss the similarities and differences amond them.
- Extension-Choose 2 items from the classroom and set a price (in cents) for each item. Then, ask students to show a way to pay for each item using coins.

LA.K-12.NJSLSA.R	Reading
LA.K-12.NJSLSA.W	Writing
SCI.K-2-ETS1	Engineering Design
TECH.8.1.2	Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.

Alignment to 21st Century Skills & Technology

Key SUBJECTS AND 21st CENTURY THEMES

Mastery of key subjects and 21st century themes is essential for all students in the 21stcentury.

Key subjects include:

- English, reading or language arts
- World languages
- Arts
- Mathematics
- Economics
- Science
- Geography
- History
- Government and Civics

21st Century/Interdisciplinary Themes

- Civic Literacy
- Financial, Economic, Business and Entrepreneurial Literacy
- Global Awareness

21st Century Skills

- Communication and Collaboration
- Creativity and Innovation
- Critical thinking and Problem Solving
- ICT (Information, Communications and Technology) Literacy
- Information Literacy
- Life and Career Skills
- Media Literacy

Technology Infusion

What technology can be used in this unit to enhance learning?

Differentiation

- NJDOE: Instructional Supports and Scaffolds for Success in Implementing the Common Core State

Standards http://www.state.nj.us/education/modelcurriculum/success/math/k2/

- enVision math 2.0 Technology Center, Homework and Practice, On-Level and Advanced Activity Centers, and Math Diagnosis and Intervention System 2.0

Special Education

- printed copy of board work/notes provided
- additional time for skill mastery
- assistive technology
- behavior management plan
- Center-Based Instruction
- check work frequently for understanding
- computer or electronic device utilizes
- extended time on tests/ quizzes
- have student repeat directions to check for understanding
- highlighted text visual presentation
- modified assignment format
- modified test content
- modified test format
- modified test length
- multiple test sessions
- multi-sensory presentation
- preferential seating
- preview of content, concepts, and vocabulary
- reduced/shortened reading assignments
- Reduced/shortened written assignments
- secure attention before giving instruction/directions
- shortened assignments
- student working with an assigned partner
- teacher initiated weekly assignment sheet
- Use open book, study guides, test prototypes

ELL

- teaching key aspects of a topic. Eliminate nonessential information
- using videos, illustrations, pictures, and drawings to explain or clarif
- allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slide shows, videos, etc.) to demonstrate student's learning;

- allowing students to correct errors (looking for understanding)
- allowing the use of note cards or open-book during testing
- decreasing the amount of workpresented or required
- having peers take notes or providing a copy of the teacher's notes
- modifying tests to reflect selected objectives
- providing study guides
- reducing or omitting lengthy outside reading assignments
- reducing the number of answer choices on a multiple choice test
- tutoring by peers
- using computer word processing spell check and grammar check features
- using true/false, matching, or fill in the blank tests in lieu of essay tests

Intervention Strategies

- allowing students to correct errors (looking for understanding)
- teaching key aspects of a topic. Eliminate nonessential information
- allowing products (projects, timelines, demonstrations, models, drawings, dioramas, poster boards, charts, graphs, slide shows, videos, etc.) to demonstrate student's learning
- allowing students to select from given choices
- allowing the use of note cards or open-book during testing
- collaborating (general education teacher and specialist) to modify vocabulary, omit or modify items to reflect objectives for the student, eliminate sections of the test, and determine how the grade will be determined prior to giving the test.
- decreasing the amount of workpresented or required
- having peers take notes or providing a copy of the teacher's notes
- marking students' correct and acceptable work, not the mistakes
- modifying tests to reflect selected objectives
- providing study guides
- reducing or omitting lengthy outside reading assignments
- reducing the number of answer choices on a multiple choice test
- tutoring by peers
- using authentic assessments with real-life problem-solving
- using true/false, matching, or fill in the blank tests in lieu of essay tests
- using videos, illustrations, pictures, and drawings to explain or clarify

Evidence of Student Learning-CFU's

Please list ways educators may effectively check for understanding in this secion.

- Admit Tickets
- Anticipation Guide

- Common benchmarks
- Compare & Contrast
- Create a Multimedia Poster
- Define
- Describe
- Evaluate
- Evaluation rubrics
- Exit Tickets
- Explaining
- Fist- to-Five or Thumb-Ometer
- Illustration
- Journals
- KWL Chart
- Newspaper Headline
- Outline
- Question Stems
- Quickwrite
- Quizzes
- Red Light, Green Light
- Self- assessments
- Socratic Seminar
- Study Guide
- Teacher Observation Checklist
- Think, Pair, Share
- Think, Write, Pair, Share
- Top 10 List
- Unit tests

Primary Resources

enVision math 2.0 Teacher's Guide, Digital Resources, Intervention Activities & State of New Jersey Department of Education; New Jersey Model Curriculum

Ancillary Resources

Please list ALL other resources available to strengthen your lesson.