Strand	Measurement and Data	
<u>Concept</u>		<u>Learning Targets</u>
A. Utilize clocks and schedules	calendars to outline/graph a variety of	 Utilize assorted clocks to determine current time Use calendars to record upcoming events, activities, and meetings Locate month, day, date, and year using personal calendars

Alignments:

CCSS: 2.MD.7; 3.MD.7 Performance: 1.8, 1.10, 3.3 Knowledge: (MA) 2

NETS: 5b DOK: 2

Instructional Strategies

Through guided practice students will:

- Use clocks and calendars to determine date and time
- Participate in Clock Bingo
- Develop and manage daily/vocational schedules
- Use interactive whiteboard to demonstrate and practice telling time

Assessments/Evaluations

- Application of daily calendars and analogue clocks
- Developed schedules

Sample Assessment Questions

• Using an analogue clock, demonstrate what time you go to lunch

Instructional Resources/Tools

- Clock bingo
- Calendars
- Sample schedules
- Interactive whiteboard

Math Common Core State Standards

- Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
- Tell and write time to the nearest minute and measure time intervals in minutes
- Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram

- Vocational Work Skills
- Independent Living Skills

Strand	Measurement and Data	
	Concept	<u>Learning Targets</u>
B. Demonstrate the u	Concept	Identify, determine, and review value of coins and bills up to a specified amount Add same coins and bills to sums equal to or less than a specified amount Choose appropriate bills to cover a purchase Choose correct change for purchased items Practice the steps in counting money Identify techniques for making change when employed or purchasing item Identify prices as they appear on tags, stickers, and labels Explore how prices are marked in a variety of stores Consider and discuss quality when choosing economical purchases Select most economical/best quality item to purchase Discuss sale items and money to be saved Discuss and compare items at competing stores

Alignments:

CCSS: 2.MD.8 Performance: 1.1 Knowledge: (MA) 1

NETS: 5b DOK: 2

Instructional Strategies

- Demonstrate and model counting and figuring correct change and money amounts
- Money BINGO
- Classroom store/role play purchases
- Shopping projects (cutting out ads and adding totals for purchases)

Assessments/Evaluations

- Presentations of shopping projects
- Observations of performance during money BINGO
- Purchases made during classroom store
- Calculating/making change from purchases made during classroom store

Sample Assessment Questions

• If a notebook cost \$.75 and you gave the cashier \$1.00, how much change would you get back?

Instructional Resources/Tools

- Money BINGO game
- Cash register and/or money tray
- Items for classroom store

Math Common Core State Standards

• Solve word problems involving dollar bills, quarters, dimes, nickels, pennies using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?

Cross Curricular Connections

Vocational Work Skills

Strand Operations and Algebraic Thinking	d Operations and Algebraic Thinking	
<u>Concept</u>	Learning Targets	
C. Review and practice the four mathematical operations $(=,-,x,/)$ at their level	Utilize counting methods and vocational activities to complete the four mathematical operations	

Alignments

CCSS: K.OA.1,2; 2.OA.1-4; 3.OA.1-4

Performance: 3.2-3.4 Knowledge: (MA) 1,4,5

NETS: 5b DOK: 2

Instructional Strategies

Through guided practice and small group instruction students will:

- solve problems involving:
 - addition
 - subtraction
 - multiplication
 - division problems
- determine which operation(s) to use to solve word problems

Assessments/Evaluations

- Teacher created worksheets
- Math games such as:
 - board
 - card
 - internet

Sample Assessment Questions

• Ms. Kelly has 8 cookies to give to her class. She has 4 students. How many cookies can Ms. Kelly give each student?

Instructional Resources/Tools

- Internet/interactive whiteboard and websites for math games
- Card games
- Board games
- Sample word problems
- Worksheets

Math Common Core State Standards

- Represent addition and subtraction with objects, fingers, mental images, drawings1, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations
- Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem
- 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
- Fluently add and subtract within 20 using mental strategies

- Vocational Work Skills
- Independent Living Skills

Strand Measurement and Data	
<u>Concept</u>	<u>Learning Targets</u>
D. Identify and utilize basic measuring skills (linear and capacity)	 Demonstrate knowledge of measuring to the nearest inch, 1/2in, ½in, 1/8in, 1/6in (based on student ability) Demonstrate knowledge of measuring to the nearest foot, yard and/or meters Demonstrate knowledge of measuring ¼ cup, ½ cup and 1/8cup Demonstrate knowledge of measuring ¼ teaspoon, 1/8 teaspoon, ½ teaspoon and 1 teaspoon Demonstrate knowledge of measuring ½ tablespoon and tablespoon Calculate perimeter Calculate area
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Alignments

CCSS: K.MD.1-3; 1.MD.1,2; 2.MD.1-6; 3.MD.2-5a,b; 3.MD.6,7a-d; 3.MD.8

Performance: 1.8, 1.10, 3.1-3.7

Knowledge: (MA) 1,6

NETS: N/A DOK: 2

Instructional Strategies

- Model proper measuring techniques
- Small group/individual instruction utilizing a variety of measuring skills

Assessments/Evaluations

- Observations of measuring skills utilizing recipes or "how to" projects
- Teacher created quiz

Sample Assessment Questions

• Find the perimeter of the table top specified by teacher

Instructional Resources/Tools

- Rulers/measuring sticks
- Measuring cups/spoons

Math Common Core State Standards

- Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object
- Directly compare two objects with a measurable attribute in common, to see which object has "more of" 'less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter
- Classify objects into given categories; count the numbers of objects in each category and sort the categories by count
- Order three objects by length; compare the lengths of two objects indirectly by using a third object
- 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
- Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes
- Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen
- Estimate lengths using units of inches, feet, centimeters, and meters
- Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit
- Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using
- drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem
- 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

- Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).6 Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem
- Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets
- Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units whole numbers, halves, or quarters
- Recognize area as an attribute of plane figures and understand concepts of area measurement
 - a. A square with side length 1 unit, called "a unit square," is said to have "one square unit" of area, and can be used to measure area
 - b. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units
- Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).
- Relate area to the operations of multiplication and addition
 - a. Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths
 - b. Multiply side lengths to find areas of rectangles with whole number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning
 - c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and b + c is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning
 - d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems
- Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters

- Independent Living Skills
- Vocational Work Skills

Strand	High School - Modeling	
<u>Concept</u>		Learning Targets
E. Identify concepts o	f budget, income and expenses	 Estimate monthly expenses Construct monthly personal budget for a given income

Alignments

CCSS: HSM

Performance: 1.10, 3.5 Knowledge: (MA) 1

NETS: N/A DOK: 2

Instructional Strategies

Teacher will provide guided instruction and model how to:

- identify and list monthly income and expenses
- record payment of expenses for one month

Assessments/Evaluations

- Observations
- Teacher created quizzes
- Budget worksheet

Sample Assessment Questions

• If your monthly net income is \$850.00 and your rent is \$400.00 and utilities are \$80.00, how much will you have left over for other expenses?

Instructional Resources/Tools

- Budget worksheet
- Sample paychecks
- Sample invoices/bills/receipts

Math Common Core State Standards

• N/A

- Personal Finance
- Career Connections

Strand High School - Modeling	High School - Modeling	
<u>Concept</u>	<u>Learning Targets</u>	
F. Compare, contrast and demonstrate the use of a variety of bank accounts	 Demonstrate knowledge of opening a checking and savings account Demonstrate the ability to: write checks correctly make deposits, withdrawals, and record savings transactions 	

Alignments: CCSS: HSM

Performance: 1.6, 1.10 Knowledge: (MA) 1

NETS: N/A DOK: 2

Instructional Strategies

Teacher will provide guided practice and model the following:

- Discuss and provide examples of a variety of bank accounts
- List and discuss pros and cons of different banks when deciding which bank to use
- Simulate opening a checking and savings account
- Practice completing necessary paperwork with correct information
- Practice writing checks
- Practice keeping a check register
- Practice keeping a savings account register

Assessments/Evaluations

- Observations of guided practice
- Check register balances
- Savings account register balances
- Teacher created quizzes/test

Sample Assessment Questions

- On 4/1/__, you have a checking account balance of \$234.98. On 4/2/__, you write two checks as follows:
 - 1. Wal-Mart for \$45.28
 - 2. Ameren U.E. for \$23.30

What is your new checking account balance after writing the two checks?

Instructional Resources/Tools

- Checkbook register
- Savings account register
- Receipts
- Invoices/bills

Math Common Core State Standards

• N/A

Cross Curricular Connections

Personal Finance