

		D25-L1
Developing Math Skills	Core Competency:D25	Level 1, Introductory
Perform mathematical calculations		
Time to complete: 120 minutes		
Objectives	Upon completion of this lesson students will be able to:	
	1. Accurately solve basic math calculations	
	2. Accurately solve time calculations	

Cross Competencies	C18 Follow directions G41 Apply critical thinking skills G53 Exhibit work ethics and behaviors essential to success G59 Prepare a short and long-term personal budget
Core Standards	Career and Vocational/Technical Education: Content Standards 2 and 3 Workplace Competencies: Content Standards 2, 3 and 4

Materials in Lesson Plan		Other Supplies Required	Supplemental Resources
<ul style="list-style-type: none"> D25L1HO1 Financial Terms D25L1HO2 Calculating Gross Wages D25L1ACT1 Money Bingo D25L1WS1 Jake's Wages D25L1SWS1 Jake's Wages Answer Key D25L1PP1 Calculating Time and Gross Wages D25L1PP2 Making Change D25L1WQ1 Wage and Time Calculator D25L1WQ2 Basic Math Skills 		<ul style="list-style-type: none"> Money manipulatives Flip chart paper or access to board Bingo cards Access to computers for students Ability to present Power Point presentations http://playspent.org/ 	<ul style="list-style-type: none"> www.thatquiz.com www.calculatorsoup.com Financial Literacy http://hsfpp.nefe.org phone (303) 224-3511 <i>Foundations in Personal Finance</i> by Dave Ramsey. Lampo Press. ISBN 978-0-9816839-1-1.
MCA	Portfolio Project	Guest Speakers	Program of Work
		Math Teacher Bank representative Consumer credit counseling	
Civic Engagement	Indian Education for All	Career Pathways	Competitive Events
			Life Math Skills

Suggested Instructional Approach		Notes
Introduction	Basic math skills are essential for student's independence and perhaps success in the workplace. Students are more likely to practice a math skill that they see as having a practical application to their lives. The math activities in this lesson are practical and review basic skills in calculating money and time.	
Preparation	<ul style="list-style-type: none"> • Make copies of student handouts. • If you will be doing supplemental activities, make copies or arrange for the resource as needed. 	

<ol style="list-style-type: none"> Write the following problem on the board, overhead or interactive board: <ul style="list-style-type: none"> Sara has a part time job at a local restaurant and earns \$7.50 per hour. Sara uses the money from her job to make a payment on a used car she bought. Her monthly payment is \$186.00. Her schedule is: <ul style="list-style-type: none"> ➤ Monday 4:15 to 6:00 ➤ Wednesday 5:30 to 7:00 ➤ Friday 4:15 to 7:00 ➤ Saturday 8:15 to 4:15 Will Sara earn enough this week to make her payment? Divide students into partners and have each pair solve the problem. Ask students to write their work on the board or on a piece of flipchart paper. After all students have completed their solution have students share their results. Ask students to explain their thinking and if answers aren't correct look for the places where students were looking to do the right thing but had an ineffective solution method. Present to students D25L1HO1 Financial Terms. Help them develop and understanding of terms and definitions. Have students play D25L1ACT1 Money Bingo. Use D25L1HO1 Financial Terms, you will need to create bingo cards, 4 samples are made for you. Explain to students that calculating elapsed time can be difficult. Since time is not base 10, our usual rules for adding or subtracting and carrying and borrowing can't be used. Present D25L1PP1 Calculating Time Worked and Gross Wages After the Power Point, go back to the problem from the anticipatory set and have student partners use the system from the Power Point to solve the problem. (You may wish to pass out D25L1HO2 Calculating Gross Wages to students to help with the activity) Distribute D25L1WS1 Jake's Wages to students. Using calculators and D25L1HO2 Calculating Gross Wages have students work alone or in pairs to complete the worksheet. 	Notes
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<p>11. Distribute <u>D25L1WQ1 Wage and Time Calculator</u> to students. Assist students in using the program to check their calculations</p> <p>12. Distribute <u>D25L1WQ2 Basic Math Skills</u>. Supervise students as they complete skills. If students struggle with math skills, they may want to visit www.mathtutor.com in a second tab to help with solutions.</p> <p>13. Present <u>D25L1PP2 Making Change</u> to students</p> <p>14. Provide students with scenarios and manipulatives (replica bills and coins) to practice counting change</p> <p><u>Closing</u></p> <ol style="list-style-type: none"> 1. Discuss with students the importance of math skills on the job 2. Create a list of resources for students who feel they need to improve their math skills. 3. Have student play online game http://playspent.org/. This activity challenges students to live for 30 days on minimum wage. 	
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Assessment	Completion of math worksheets	
Supplemental Activities	<ul style="list-style-type: none"> • Help Prepare students to compete at the MCA Spring Conference in the Life Math Skills Competition • Invite employers in to discuss math needed for employment in their businesses • Visit a local post-secondary school and learn about their math placement and math programs • Play SALE – A Consumer Math Game, available from Educational Learning Games (ELgames.com) • Provide grade level appropriate mathematics resource materials for students who are deficient in mathematical proficiency. • Have students brainstorm the uses of mathematics in everyday life, i.e., budgets, figuring sales prices, calculating net pay, figuring miles per gallon of gas, estimating rolls of wall paper needed to paper a wall. Help students realize how many times a day they use basic mathematical skills. • Have students brainstorm occupations that use mathematical skills and the employment outlook and educational requirements for these occupations. • Have students record in their journals the number of times they used math and the ways they used math for a specific period (day, week, etc.). 	