UNIT OF STUDY #4 Time

Title: Time	Subject/Course: Math	Length: 2 weeks
Topic: Time and Elapsed Time	Grade: 4th	Designer: Carrie Holt Shaundra Flanery Tammie Nelson

UNIT GOALS AND EXPECTATIONS

IMPORTANT CONCEPTS: Time can be stated in multiple ways. Time can be calculated using clocks and schedules. Elapsed time can be determined by the use of a calendar. Problem solving strategies can be used to solve multistep problems. Grids may be used to locate ordered pairs	ESSENTIAL QUESTIONS: What tools and units are used to measure the attributes of time? Why is telling time important? How do you use the calendar in daily life? How do the different units of time (days, minutes, and weeks) relate to each other? How do I use a clock to tell time to the nearest quarter hour? How can I tell time using analog and digital clock faces? How do I determine how much time has past between each events? Why do have to follow a certain order when determining a location on a grid? When solving multistep word problems using charts, tables, and graphs how can you tell the information is sufficient?
STUDENT LEARNING EXPECTATIONS: G.10.4.1 Locate and identify points on a coordinate grid and name the ordered pair using common language and geometric vocabulary M.12.4.1 Recognize that 60 seconds equals 1 minutes M.13.4.1 Use a calendar to determine elapsed time from month to month M.13.4.3 Restate the time in multiple ways given an analog clock to the nearest 1 minute m.13.4.4 Determine elapsed time in contextual situations to five minute intervals with beginning time unknown NO.3.4.4a Solve simple multi-step problems using operations involving addition, subtraction using a variety of methods and tools NO.3.4.4b Solve simple multi-step problems using operations involving addition, subtraction, and multiplication using a variety of methods and tools.	
SPECIFIC DECLARATIVE KNOWLEDGE – What I know • Vocabulary Terms: Minute, A.M., P.M., Seconds, Elapsed Time, Century, Decade, Multistep Problem, Ordered pair, X-Axis, Y-Axis, X-Coordinate, Y-Coordinate • Recognize the parts of the clock.	SPECIFIC PROCEDURAL KNOWLEDGE – What I need to do • Demonstrate time using the Judy Clocks. • Read a calendar to determine elapsed time • Read schedules to determine elapsed time • Use an elapsed time timeline • Write time in multiple ways.

• Understand the difference between digital and analog clocks. • Recognize the connection between minutes, hours, days, and weeks. • Identify different strategies to solve multistep problems. • Identify coordinate pairs on a grid.	• Finding locations on a coordinate grid. • Use and display different strategies to answer multistep problems.

UNIT ASSESSMENTS (Include tasks related to Dimensions 3 and 4 and Bloom's Taxonomy)	
Time graphic organizer (Application) Open Response- Harcourt Vacation Calendars (Analyze) Open Response– Coordinate Grid (Synthesis) Open Response- Multistep Problem (Application) Elapsed Time Poem (Synthesis) Raft: Event Planner (Synthesis)	
Traditional Assessments: Vocabulary Quiz, TLI Quiz, Homework, Class work, Test	Other Evidence of Learning:

ACTIVITIES AND LEARNING EXPERIENCES	Resources
• *Daily prior knowledge will be assessed by using one of the following: KWL charts, brainstorming, anticipation guides, admit slips, think-pair-share and problems of the day. • Vocabulary charades	
• One Handed Clock Activity to assess prior knowledge • Introduce Reading clocks using time power point • Practice showing time to the minute on Judy Clocks • Graphic organizer to show time in multiple ways	Van de Walle, John Athens State University website
• Students will practice reading time using an interactive clock on the National Library of Virtual Manipulative website • Introduce elapsed time using Shel Silverstein poem "Snowball"	National Library of Virtual manipulative Website Silverstein, Shel
• Have students estimate how long it took for the snowball to melt. Place their responses on elapsed time line. (whole group)	
• Pairs: Students will write an elapsed time poem and construct and elapsed time line at the bottom of their poem.	
• Small groups: Magnetic elapsed time boards	Math Links
• Introduce calendar by open ended questioning	
• Harcourt intervention on elapsed time on a calendar	Harcourt Smartboard

• Instructor web on elapsed time on a calendar activity • RAFT Activity: Role: Event Planner Audience: Customers Format: Calendar Topic: Elapsed Time Scenario: Event planners at the party time planning company have to schedule the following events an assigned amount of days from each other to make sure they have all the needed materials for each event: Shawn's birthday party, Smith's wedding, LHS class reunion, Retirement party, Dance Recital Task: Students will create a calendar that follows the elapsed times given to plan a schedule of the events. (Pairs) • Vacation Open response • Teacher demonstration of a multistep problem • Small groups: Students will be given a word problem and money and would be asked to role play the solution to the problem. • Stan's Lunch multistep problem open response • Introduce it with <u>X Marks the Spot!</u> • Whole group: Treasure map activity. Students will place a sticker with their initials of where they think the treasure might be found on the grid map. (hallway) We will discuss ordered pairs based upon their chosen locations and then the treasure will be revealed. • Small group: Intervention practice problems • Molly's Living Room open response	Harcourt Released Item Penner, Lucille Harcourt Harcourt Benchmark Exam Book
Career Connections	
Event Planner, Geographers	