

COURSE: 12-1-1 Math Year 2
GRADE LEVEL: 9 – 10

MAIN/GENERAL TOPIC:	SUB-TOPIC:	ESSENTIAL QUESTIONS:	WHAT THE STUDENTS WILL KNOW OR BE ABLE TO DO:	SKILLS:	WHEN STUDENT DOES IT:	ASSESSMENTS:
BASIC OPERATIONS	<ul style="list-style-type: none"> Addition Subtraction Multiplication Division Fractions 	<ul style="list-style-type: none"> How is math relevant to me? How do mathematical operations relate to each other? 	<ul style="list-style-type: none"> Identify the set of whole numbers Add, subtract, multiply and divide whole numbers Add, subtract, multiply and divide fractions 	<ul style="list-style-type: none"> Understand and apply regrouping Understand lattice multiplication Basic operations with fractions Use calculator 	September	<ul style="list-style-type: none"> Teacher generated tests and worksheets
BASEBALL STATISTICS	<ul style="list-style-type: none"> Batting averages Slugging percentages Fractions as percents Baserunning averages Fielding percentage Earned run average Won-Lost percentage Games back 	<ul style="list-style-type: none"> How do we organize data so that it is useful? How can predictions be made based on data? What is a percentage? 	<ul style="list-style-type: none"> Rename fractions as decimals and percents Determine slugging percentages and baserunning averages Find a player's fielding percentage Compute the ERA of a pitcher Find and use the won-lost percentage to determine league standings 	<ul style="list-style-type: none"> Renaming Changing fractions to percents Finding averages 	October / November	<ul style="list-style-type: none"> Teacher generated tests and worksheets Unit Project
TRAVELING	<ul style="list-style-type: none"> Odometer reading Gas mileage Gasoline expenses Car rental rates Using a map Gas consumption 	<ul style="list-style-type: none"> How do we calculate gas mileage? How can we calculate mileage from a map? 	<ul style="list-style-type: none"> Compute mileage with the aid of an odometer Compute the cost of a rental car Use a map to compute mileage Multiply with a conversion factor to convert currency Compute costs of hotel stays and cruises 	<ul style="list-style-type: none"> Basic addition, subtraction and multiplication Reading a map 	December	<ul style="list-style-type: none"> Teacher generated tests and worksheets Unit Project

	<ul style="list-style-type: none"> • Hotel rates • Currency conversion • Cruise rates 					
WATCHING THE CLOCK	<ul style="list-style-type: none"> • Elapsed time • Television schedules • Parking meters • Bus schedules • Parking lot rates 	<ul style="list-style-type: none"> • How do we tell time on an analog clock? • Why is information put into table form? 	<ul style="list-style-type: none"> • Tell time, using clocks with face and digital clocks • Find elapsed time • Use time skills to interpret television programming schedules • Compute fees for parking meters • Use a schedule of times to calculate elapsed time 	<ul style="list-style-type: none"> • Basic addition, subtraction and multiplication • Telling time • Reading a table • Reading a schedule 	January	<ul style="list-style-type: none"> • Teacher generated tests and worksheets • Unit Project
USING PERCENT	<ul style="list-style-type: none"> • Sales tax • Discount • Personal spending • Personal savings • Using circle graphs 	<ul style="list-style-type: none"> • What kinds of questions can and cannot be answered by a graph? • How are common fractions, decimals and percents alike and different? 	<ul style="list-style-type: none"> • Compute the discount, given the original price • Compute the sales tax and the price plus sales tax • Find the percent of spending • Make a circle graph to display budgets 	<ul style="list-style-type: none"> • Basic addition, subtraction and multiplication • Find current sales tax • Calculate percents • Circle Graphs 	February	<ul style="list-style-type: none"> • Teacher generated tests and worksheets • Unit Project
WORKING WITH INTEREST	<ul style="list-style-type: none"> • Simple interest • Compound interest • Borrowing money • Credit 	<ul style="list-style-type: none"> • How does interest affect you? • Why is credit important? 	<ul style="list-style-type: none"> • Compute simple and compound interest • Use a table to compute payments • Use the addition and subtraction methods to compute loan payments 	<ul style="list-style-type: none"> • Basic multiplication addition and subtraction • Reading a table • Define interest 	March	<ul style="list-style-type: none"> • Teacher generated tests and worksheets • Unit Project
INSURANCE	<ul style="list-style-type: none"> • Health insurance • Homeowners insurance • Fire insurance • Auto insurance • Life insurance 	<ul style="list-style-type: none"> • What is insurance? • Why is insurance important? 	<ul style="list-style-type: none"> • Use a chart to determine cost of health insurance • Identify the types of life insurance • Use replacement cost and location multiplier to find the cost of homeowners insurance • Use a rate chart to determine premiums • Compute automobile insurance costs with the aid of a table 	<ul style="list-style-type: none"> • Reading a chart • Basic addition, subtraction and multiplication skills • Reading a table 	April	<ul style="list-style-type: none"> • Teacher generated tests and worksheets • Unit Project

LAWN CARE	<ul style="list-style-type: none"> • Enclosing your yard • Measuring • Using a scale drawing • Area • Fertilizing your yard • Volume • Concrete 	<ul style="list-style-type: none"> • How is geometry part of everyday life? • What are the various forms of measurement and how can they be applied in daily life? 	<ul style="list-style-type: none"> • Find perimeter and area • Calculate cost for hedging and fencing • Measure to the nearest sixteenth of an inch • Measure to the nearest tenth of a centimeter • Use a ruler to interpret scale drawings • Find volume of rectangular prisms • Calculate cost, using volume and cubic yards 	<ul style="list-style-type: none"> • Basic addition, subtraction and multiplication skills • Basic geometry • Perimeter, area and volume formulas • Basic measurement 	May	<ul style="list-style-type: none"> • Teacher generated tests and worksheets • Unit Project
USING ENERGY	<ul style="list-style-type: none"> • Kilowatt-Hours • Time-of-Use rates • Gas/Oil • Temperature 	<ul style="list-style-type: none"> • How is energy measured? • How do we convert different units of measurement? 	<ul style="list-style-type: none"> • Read a meter dial • Convert from hours of use to kilowatt-hours • Find the amount of savings with different wattage bulbs • Convert gas readings to hundreds of cubic feet • Convert from Celsius to Fahrenheit, and Fahrenheit to Celsius 	<ul style="list-style-type: none"> • Basic addition, subtraction and multiplication skills • Read meter dials • Conversion formulas 	June	<ul style="list-style-type: none"> • Teacher generated tests and worksheets • Unit Project