Consumer Math: Improving Your Household While Managing a Budget

Stage 1 Desired Results

ESTABLISHED GOALS:

Competencies:

- ***Students will demonstrate the ability to solve arithmetic and algebraic problems by utilizing effective strategies and applying properties of operations.***
- ***Students will demonstrate the ability to analyze causal relationships in an economic system by explaining the roles of buyers/sellers, innovation, and entrepreneurship in a market economy.***

Content Standards:

- BE.C.1. Apply basic mathematical operations to solve problems.
- BE. C. 2. Solve problems involving whole numbers, decimals, fractions, percent, ratios, averages, and proportions.
- BE.C.5. Use common international standards of measurement when solving problems.
- BE. E1. Assess opportunity costs and trade-offs involved in making choices about how to use scarce economic resources.
- BE.PF.3. Develop and evaluate a spending/savings plan.
- BE.PF.4. Evaluate savings and investment options to meet short- and long-term goals.
- BE.PF.8. Analyze choices available to consumers for protection against risk and financial loss.

STANDARDS DERVIED FROM:

National Business Education Association (NBEA) Standards

Transfer

*Students will be able to independently use their learning to **do consumer math, banking, and budgeting.***

Meaning

ENDURING UNDERSTANDINGS

Students will understand that…

- solving mathematical problems will allow students to know what they have to save and spend when planning household improvements.
- opportunity costs are relative when determining costs and when it is best to purchase items.
- the rules of supply and demand are related to costs and availability.

ESSENTIAL QUESTIONS

- How do I know which improvements will increase the value of my home?
- What personal goals should be considered when planning an investment strategy

Acquisition

Students will know…

- the vocabulary and math skills for renting a home.
- the vocabulary and make skills for owning a home.
- how to use formulas to compute a down payment.
- know the advantages and disadvantages of renting and owning.
- that utilities (gas, electric, telephone water, cable, etc) need to be calculated for both renting and owning a home.
- formulas are needed to determine homeowners and renters insurance.
- that household items are expensive, so sale items are beneficial for a budget.
- about plans that offer to be paid in full by a certain amount of days with no interest.
- that perimeter and area are useful mathematical formulas to know for planning home improvement projects; furniture placement, painting walls, wallpaper, covering a floor, molding, carpeting, insulations, additions, and seeding and fencing a lawn.

Students will be skilled at…

- using mathematical foundations to apply basic math skills to determine the cost of rent and all of the attributes that are affiliated with the renting process. Example: utilities, cable, phone, internet, water, insurance, etc.
- using mathematical foundations to apply basic math skills to determine the cost of owning a home and all of the attributes that are affiliated with the home owning process. Example: Insurance, down payment, utilities, cable, phone, internet, water, etc.
- using common international standards of measurement when solving problems to determine perimeter and area when improving your home.
- developing and evaluating a spending and savings plan when computing plans that offer to be paid in full by a certain amount of days with no interest.
- evaluating savings and investment options to meet short and long term goals by calculating benefits and costs of home improvement projects.

	vocabulary: landlord, rent, lease, annual, down payment, financed, mortgage, principal, interest, fixed rate mortgage, term, utilities, meters, cubic feetm average, home insurance, budget, expenses, balancing a budget	• analyzing choices available to consumers for protection against risk and financial loss when applying mathematical operations to determine home owner and renters insurance.
Content Area Literacy Standards		***21st Century Skills***
• 1.OA.1 Use		• *solve problems* • *assess and evaluate information* • *use systems thinking* • *reason effectively* • *make judgments and decisions* • *access technology efficiently*

Stage 2 - Evidence

Evaluative Criteria	***Assessment Evidence***
	PERFORMANCE TASK(S): Students will read word problems , demonstrate the ability to understand the word problem, do calculations and discuss identified issues.
	OTHER EVIDENCE:

Stage 3 – Learning Plan

Summary of Key Learning Events and Instruction

Language Arts Integration	***Mathematics Integration***
• 1.OA.1 Use	• 1.OA.1 Use

Technology Integration	***District Materials***
• 1.OA.1 Use	**AGS Publishing,** **Consumer Economics, Circle Pines, Minnesota 2003, Kathleen M. Harmeyer, M.S.**