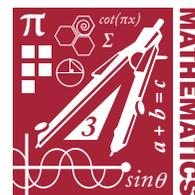


INSTANT MILLIONAIRE


MATHEMATICS
6
GRADE 6

This guide links the *Instant Millionaire* unit to the Texas Essential Knowledge and Skills (TEKS) for sixth graders. *Instant Millionaire* is a social studies and mathematics unit that allows students to study the mathematics of money and budgets, the economics of making money, and the social responsibility of having money. *Instant Millionaire* also gives students opportunities to practice skills in the other subject areas. For example, students will understand and interpret visual images, messages, and meanings, which the English Language Arts and Reading TEKS cover. The following document includes the applicable TEKS and the details of the *Instant Millionaire* unit. The asterisks indicate the TEKS that are testable on the State of Texas Assessments of Academic Readiness (STAAR). The final section of this document presents the applicable Texas College and Career Readiness Standards adopted by the Texas Higher Education Coordinating Board (THECB) on January 24, 2008.

Description of Unit

Students create and present a budget for a real school or class activity that requires a budget, estimating the costs and presenting their product graphically and tabularly. Then students will identify one dream/goal and conduct research using their identified resources and \$1 million to make a budget for completing this dream/goal. This project generates an understanding of the relationship between fractions, decimals, and percentages.

Goals

Students will meet these goals in their explorations:

- Develop the essential skills of logical thinking, creative problem solving, intellectual risk taking, and communicating
- Ask questions and explore theories
- Have opportunities to generate new ideas
- Understand the relevance of a budget and how one is created
- Become familiar with the concept of "selling" a project to an audience

Instant Millionaire (Grade 6)

Phase I. Learning Experiences

1. Introduce students to the concept of a budget. Share with them budgets for projects that are relevant to them. Helpful websites:
www.allowancemagic.com
www.younginvestor.com
<http://www.ext.nodak.edu/extnews/pipeline/d-parent.htm>
2. Select a real school or class activity for which there needs to be a budget. Inform students of the fixed amount of money that can be spent to achieve the goal and also any restrictions on spending the money. Divide students into small groups. Each small group develops a budget with estimated costs that has to be shown graphically and in a table, using Excel. There must be at least five budget categories (e.g., supplies, transportation, equipment).
3. Each group presents its budget with a rationale for the budget estimates. After students have shared their budget proposals, encourage them to look at multiple ways the goal can be achieved. Discuss these questions:
 - How long will it take to reach the goal? Come up with three different scenarios based on different lengths of time.
 - Where will the various components be purchased?
 - Where will the project be located? Depending on the answer to this question, who will benefit from it? Once finished, how will the project benefit the community?
4. Select the budget that the class likes best, and use that budget to carry out the project. At the end of the project, have students compare actual expenses to budgeted expenses and create a report that shows the differences.

Phase II. Independent Research

A. Research process

1. Selecting a topic. Each student should identify a dream. The dream can be as big as the student can imagine. The student may wish to start a business, start a non-profit organization, build a school, or complete a community service project. The budget for the dream project is \$1 million.
2. Asking guiding questions. Once students have selected their dream projects, each student should think of three to five guiding questions, such as:
 - What is the need or desire?
 - What are all the components that need to go into making the dream a reality?
 - How will you find out how much they cost?
 - How much do they cost?
 - What if you're over budget?

Texas Essential Knowledge and Skills

The unit may address the following TEKS:

English Language Arts and Reading:

- 6.1 Reads grade-level text with fluency and comprehension
- 6.2 Understands new vocabulary and uses it when reading and writing* (Testable on the Grade 6 Reading STAAR, Reporting Category 1)
- 6.3 Analyzes, makes inferences, and draws conclusions about theme and genre in different cultural, historical, and contemporary contexts and provides evidence from the text to support their understanding* (Testable on the Grade 6 Reading STAAR, Reporting Category 1, Reporting Category 2)
- 6.9 Analyzes, makes inferences, and draws conclusions about the author's purpose in cultural, historical, and contemporary contexts and provides evidence from the text to support their understanding* (Testable on the Grade 6 Reading STAAR, Reporting Category 1)
- 6.10 Analyzes, makes inferences, and draws conclusions about expository text and provides evidence from text to support their understanding* (Testable on the Grade 6 Reading STAAR, Reporting Category 3)
- 6.12 Understands how to glean and uses information in procedural texts and documents* (Testable on the Grade 6 Reading STAAR, Reporting Category 3)
- 6.13 Uses comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning* (Testable on the Grade 6 Reading STAAR, Reporting Category 2, Reporting Category 3)
- 6.14 Uses elements of the writing process (planning, drafting, revising, editing, and publishing) to compose text * (Testable on the Grade 7 Writing STAAR, Reporting Category 1, Reporting Category 2)
- 6.19 Understands the function of and use the conventions of academic language when speaking and writing* (Testable on the Grade 7 Writing STAAR, Reporting Category 3)
- 6.22 Asks open-ended research questions and develops a plan for answering them
- 6.26 Uses comprehension skills to listen attentively to others in formal and informal settings
- 6.27 Speaks clearly and to the point, using the conventions of language

Mathematics:

- 6.1 Uses mathematical processes to acquire and demonstrate mathematical understanding
- 6.3 Applies mathematical process standards to represent addition, subtraction, multiplication, and division while solving problems and justifying solutions
- 6.4 Applies mathematical process standards to develop an understanding of proportional relationships in problem situations

- 6.5 Applies mathematical process standards to solve problems involving proportional relationships
- 6.12 Applies mathematical process standards to use numerical or graphical representations to analyze problems
- 6.13 Applies mathematical process standards to use numerical or graphical representations to solve problems
- 6.14 Applies mathematical process standards to develop an economic way of thinking and problem solving useful in one's life as a knowledgeable consumer and investor

Science:

- 6.3 Uses critical thinking, scientific reasoning, and problem solving to make informed decisions and knows the contributions of relevant scientists* (Testable on the Grade 8 Science STAAR)
- 6.4 Knows how to use a variety of tools and safety equipment to conduct science inquiry* (Testable on the Grade 8 Science STAAR)

Social Studies:

- 6.5 Understands how geographic factors influence the economic development, political relationships, and policies of societies
- 6.8 Understands the factors of production in a society's economy
- 6.10 Understands categories of economic activities and the data used to measure a society's economic level
- 6.12 Understands various ways in which people organize governments
- 6.17 Understands relationships that exist among world cultures
- 6.18 Understands the relationship that exists between the arts and the societies in which they are produced
- 6.19 Understands the relationships among religion, philosophy, and culture
- 6.20 Understands the influences of science and technology on contemporary societies
- 6.21 Applies critical-thinking skills to organize and use information acquired through established research methodologies from a variety of valid sources, including electronic technology* (Testable on the Grade 8 Social Studies STAAR)
- 6.22 Communicates in written, oral, and visual forms* (Testable on the Grade 8 Social Studies STAAR)
- 6.23 Uses problem-solving and decision-making skills, working independently and with others, in a variety of settings

Texas College and Career Readiness Standards

This unit may address the following Texas College and Career Readiness Standards:

English Language Arts:

Instant Millionaire (Grade 6)

I.A.2	Generates ideas and gathers information relevant to the topic and purpose, keeping careful records of outside sources
I.A.3	Evaluates relevance, quality, sufficiency, and depth of preliminary ideas and information, organizes material generated, and formulate thesis
II.A.1	Uses effective reading strategies to determine a written work's purpose and intended audience
II.A.2	Uses text features and graphics to form an overview of informational texts and to determine where to locate information
II.A.5	Analyzes the presentation of information and the strength and quality of evidence used by the author, and judge the coherence and logic of the presentation and the credibility of an argument
II.A.8	Compares and analyzes how generic features are used across texts
II.A.9	Identifies and analyzes the audience, purpose, and message of an informational or persuasive text
II.A.11	Identifies, analyzes, and evaluates similarities and differences in how multiple texts present information, argue a position, or relate a theme
II.B.1	Identifies new words and concepts acquired through study of their relationships to other words and concepts
II.B.2	Applies knowledge of roots and affixes to infer the meanings of new words
II.B.3	Uses reference guides to confirm the meanings of new words or concepts
III.A.1	Understands how style and content of spoken language varies in different contexts and influences the listener's understanding
III.A.2	Adjusts presentation (delivery, vocabulary, length) to particular audiences and purposes
III.B.1	Participates actively and effectively in one-on-one oral communication situations
III.B.2	Participates actively and effectively in group discussions
III.B.3	Plans and delivers focused and coherent presentations that convey clear and distinct perspectives and demonstrate solid reasoning
IV.A.1	Analyzes and evaluates the effectiveness of a public presentation
IV.A.2	Interprets a speaker's message; identifies the position taken and the evidence in support of that position
IV.A.3	Uses a variety of strategies to enhance listening comprehension
IV.B.1	Listens critically and responds appropriately to presentations
IV.B.2	Listens actively and effectively in one-on-one communication situations
IV.B.3	Listens actively and effectively in group discussions
V.A.1	Formulates research questions
V.A.2	Explores a research topic
V.A.3	Refines research topic and devise a timeline for completing work
V.B.1	Gathers relevant sources
V.B.2	Evaluates the validity and reliability of sources
V.B.3	Synthesizes and organizes information effectively

- V.B.4 Uses source material ethically
- V.C.1 Designs and presents an effective product

Mathematics:

- I.A.1 Compares real numbers
- I.B.1 Performs computations with real and complex numbers
- IV.A.1 Selects or uses the appropriate type of unit for the attribute being measured
- IV.D.1 Computes and uses measures of center and spread to describe data
- IV.D.2 Applies probabilistic measures to practical situations to make an informed decision.
- VI.C.2 Analyzes data sets using graphs and summary statistics
- VI.C.3 Analyzes relationships between paired data using spreadsheets, graphing calculators, or statistical software
- VI.C.4 Recognizes reliability of statistical results
- VIII.A.1 Analyzes given information
- VIII.A.2 Formulates a plan or strategy
- VIII.A.3 Determines a solution
- VIII.A.4 Justifies the solution
- VIII.A.5 Evaluates the problem solving process
- VIII.B.1 Develops and evaluates convincing arguments
- VIII.B.2 Uses various types of reasoning
- VIII.C.1 Formulates a solution to a real-world situation based on the solution to a mathematic problem
- VIII.C.2 Uses a function to model a real-world situation
- VIII.C.3 Evaluates the problem-solving process
- IX.A.1 Uses mathematical symbols, terminology, and notation to represent given and unknown information in a problem
- IX.A.2 Uses mathematical language to represent and communicate the mathematical concepts in a problem
- IX.A.3 Uses mathematics as a language for reasoning, problem solving, making connections, and generalizing
- IX.B.1 Models and interprets mathematical ideas and concepts, using multiple representations
- IX.B.2 Summarizes and interprets mathematical information provided orally, visually, or in written form within the given context
- IX.C.1 Communicates mathematical ideas, reasoning, and their implications, using symbols, diagrams, graphs, and words
- IX.C.2 Creates and uses representations to organize, record, and communicate mathematical ideas
- IX.C.3 Explains, displays, or justifies mathematical ideas and arguments using precise mathematical language in written or oral communications
- X.A.1 Connects and uses multiple strands of mathematics in situations and problems
- X.A.2 Connects mathematics to the study of other disciplines

- X.B.1 Uses multiple representations to demonstrate links between mathematical and real-world situations
- X.B.2 Understands and uses appropriate mathematical models in the natural, physical, and social sciences

Science:

- I.A.4 Relies on reproducible observations of empirical evidence when constructing, analyzing, and evaluating explanations of natural events and processes
- I.B.1 Designs and conducts scientific investigations in which hypotheses are formulated and tested.
- I.C.1 Collaborates on joint projects
- I.E.1 Uses several modes of expression to describe or characterize natural patterns and phenomena These modes of expression include narrative, numerical, graphical, pictorial, symbolic, and kinesthetic
- I.E.2 Uses essential vocabulary of the discipline being studied
- II.A.1 Understands the real number system and its properties
- II.A.3 Understands ratios, proportions, percentages, and decimal fractions, and translate from any form to another
- II.A.5 Simplifies algebraic expressions
- II.A.6 Estimates results to evaluate whether a calculated result is reasonable
- II.A.7 Uses calculators, spreadsheets, computers, etc. in data analysis
- II.B.1 Carries out formal operations, using standard algebraic symbols and formulae
- II.B.2 Represents natural events, processes, and relationships with algebraic expressions and algorithms
- II.F.1 Selects appropriate Standard International (SI) units and prefixes to express measurements for real-world problems
- III.B.2 Sets up apparatuses, carry out procedures, and collect specified data from a given set of appropriate instructions
- III.B.3 Recognizes scientific and technical vocabulary in the field of study and use this vocabulary to enhance clarity of communication
- III.B.4 Lists, uses and gives examples of specific strategies before, during, and after reading to improve comprehension
- III.C.1 Prepares and represents scientific/technical information in appropriate formats for various audiences
- III.D.1 Uses search engines, databases, and other digital electronic tools effectively to locate information
- III.D.2 Evaluates quality, accuracy, completeness, reliability, and currency of information from any source
- V.C.1 Recognizes patterns of change
- V.E.1 Uses models to make predictions

Social Studies:

Instant Millionaire (Grade 6)

I.A.2	Analyzes the interaction between human communities and the environment
I.A.3	Analyzes how physical and cultural processes have shaped human communities over time
I.F.1	Use a variety of research and analytical tools to explore questions or issues thoroughly and fairly
IV.A.1	Identifies and analyzes the main idea(s) and point(s) of view in sources
IV.A.2	Situates an informational source in its appropriate contexts
IV.A.3	Evaluates sources from multiple perspectives
IV.A.4	Understands the differences between a primary and secondary source and uses each appropriately to conduct research and construct arguments
IV.A.5	Reads narrative texts critically
IV.A.6	Reads research data critically
IV.B.1	Uses established research methodologies
IV.B.3	Gathers, organizes, and displays the results of data and research
IV.B.4	Identifies and collects sources
IV.C.1	Understands/interprets presentations critically
IV.D.1	Constructs a thesis that is supported by evidence
V.A.1	Uses appropriate oral communication techniques depending on the context or nature of the interaction
V.A.2	Uses conventions of standard written English
V.B.1	Attributes ideas and information to source materials and authors

Cross-Disciplinary Standards:

I.A.1	Engages in scholarly inquiry and dialogue
I.A.2	Accepts constructive criticism and revises personal views when valid evidence warrants
I.B.3	Gathers evidence to support arguments, findings, or lines of reasoning
I.B.4	Supports or modifies claims based on the results of an inquiry
I.C.1	Analyzes a situation to identify a problem to be solved
I.C.2	Develops and applies multiple strategies to solving a problem
I.C.3	Collects evidence and data systematically and directly relate to solving a problem
I.D.1	Self-monitors learning needs and seeks assistance when needed
I.D.2	Uses study habits necessary to manage academic pursuits and requirements
I.D.3	Strives for accuracy and precision
I.D.4	Perseveres to complete and master tasks
I.E.1	Works independently
I.E.2	Works collaboratively
I.F.1	Attributes ideas and information to source materials and people
I.F.2	Evaluates sources for quality of content, validity, credibility, and relevance
I.F.3	Includes the ideas of others and the complexities of the debate, issue, or problem
I.F.4	Understands and adheres to ethical codes of conduct

- II.A.1 Uses effective prereading strategies
- II.A.2 Uses a variety of strategies to understand the meanings of new words
- II.A.3 Identifies the intended purpose and audience of the text
- II.A.4 Identifies the key information and supporting details
- II.A.5 Analyzes textual information critically
- II.A.6 Annotates, summarizes, paraphrases, and outlines texts when appropriate
- II.A.7 Adapts reading strategies according to structure of texts
- II.A.8 Connects reading to historical and current events and personal interest
- II.B.1 Writes clearly and coherently, using standard writing conventions
- II.B.2 Writes in a variety of forms for various audiences and purposes
- II.C.1 Understands which topics or questions are to be investigated
- II.C.2 Explores a research topic
- II.C.3 Refines research topic based on preliminary research and devise a timeline for completing work
- II.C.4 Evaluates the validity and reliability of source
- II.C.5 Synthesizes and organizes information effectively
- II.C.6 Designs and presents an effective product
- II.C.7 Integrates source material
- II.C.8 Presents final product
- II.D.1 Identifies patterns or departures from patterns among data
- II.D.2 Uses statistical and probabilistic skills necessary for planning an investigation, and collecting, analyzing, and interpreting data
- II.D.3 Presents analyzed data and communicate findings in a variety of formats
- II.E.1 Uses technology to gather information
- II.E.2 Uses technology to organize, manage, and analyze information
- II.E.3 Uses technology to communicate and display findings in a clear and coherent manner
- II.E.4 Uses technology appropriately