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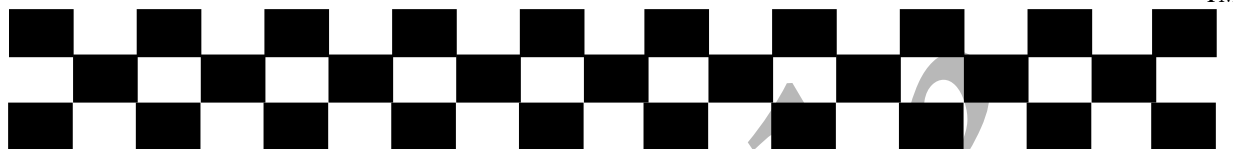
2nd Grade Math Sample Packet

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Gourmet
Learning®

Appetizers™



Gourmet Learning's menu for reading, **math** and science goes beyond the regular educational "menu" and serves smooth, rich differentiated instruction that actively engages students in their learning. The end result is students taking responsibility for their learning and ultimately achieving significantly higher test scores! The Gourmet Lesson design provides teachers with all the tools to learn how to teach more effectively and increases their teaching success with significantly measurable data outcomes.

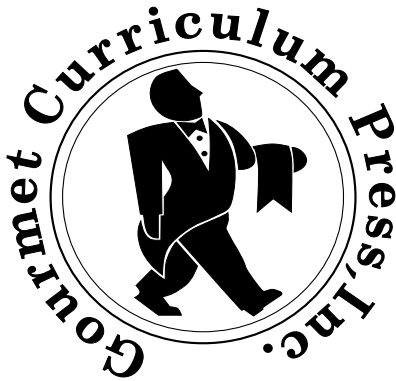
Appetizers are short, daily warm-ups that provide daily math problem-solving skills review. The content for each grade level Appetizer has been carefully selected to include mathematical process standards so that students have ample opportunities to demonstrate mathematical understanding. These teacher-modeled Appetizers provide ongoing assessments of students' abilities to communicate, use, , explain and justify, their mathematical understanding and skills. More specifically *Appetizers*:

- provide high interest content, relating students' experiences to the objective of the lesson and putting the students in a receptive frame of mind for learning;
- focus students' attention on the math skill, create a framework for students to organize and metacognitively interact with text;
- extend students' understanding and application of skills to real-world scenarios;
- review math skills in a short comprehensive format;
- empower teachers with thousands of opportunities to emphasize test-taking strategies;
- provide models that incorporate critical thinking strategies for responses by providing evidence from the text that supports and justifies students' understanding.
- written specifically to the New Texas TEKS/STAAR standards

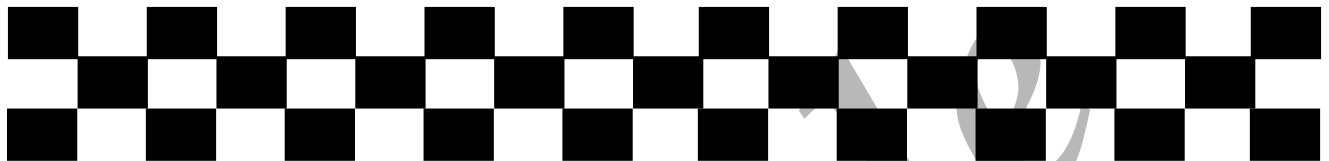
There you have it, fully aligned to **the Texas TEKS/STAAR**, the "full meal deal" utilizing a fun, different approach to learning. All materials are available in print or online. For additional teaching ideas and suggestion for using Appetizers as part of your daily reading, please refer to page iv. Additional information about other Gourmet products can be found at www.gourmetlearning.com. There are no "left-overs" in the Gourmet Learning meals!

Have an extraordinary successful year using the **Gourmet Menu** of products.

Jan Garber
President and Publisher
Gourmet Learning



*Appetizers*TM



Using Math Appetizers:

Model the following procedure and expectations with your entire class for several weeks until students are comfortable with them.

Procedure and Expectations:

- Step 1: Read each card's passage from the transparency or Media Presentation.
- Step 2: Next, read and discuss the question. Read each of the possible multiple-choice answers, and discuss whether that choice is a reasonable answer. If it is a possibility, put a question mark next to the letter. If it is a choice that can be eliminated, draw a \checkmark or an X through the letter.
- Step 3: As students eliminate possible answer choices, ask them to use information from the passage to justify their reasoning. This is a critical test-taking skill that Appetizers help reinforce.
- Step 4: Continue this process until one or two answers remain. Use direct questioning to prompt students to redirect or fine tune their search for accurate justifications from the text that clarify why an answer is correct or incorrect.
- Step 5: Once a final answer is selected, ask students for verbal justification, specific with information from the text, why this is the best possible answer.

After students are comfortable with these expectations, have students complete the recipe cards and record their answers. Using spiral notebooks for this activity allows students to accumulate their daily responses efficiently and simplifies your grading and long-term assessment of their progress.

Procedural Example: Sept. 5 page 14
 Card 1 B
 Card 2 H
 Card 3 A

TEKS/STAAR Texas Essential Knowledge and Skills

(b) Knowledge and skills

(1) MATHEMATICAL PROCESS STANDARDS. The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:

- (A) Apply mathematics to problems arising in everyday life, society, and the workplace;
- (B) Uses a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solutions and evaluation the problem-solving process and the reasonableness of the solution.
- (C) Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques including mental math, estimation, and number sense as appropriate to solve problems
- (D) Communicate mathematical ideas, reasoning and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;
- (E) Create and use representations to organize, record, and communicate mathematical ideas;
- (F) Analyze mathematical relationships to connect and communicate mathematical ideas; and
- (G) Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication

(2) NUMBER and OPERATIONS. The student applies mathematical process standards to understand how to represent compare, whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. The student is expected to:

- (A) use concrete and pictorial models to compose and decompose numbers up to 1,200 in more than one way as a sum of so many thousands, hundreds, tens, and ones;
- (B) use standard, word, and expanded form to represent numbers up to 1,200;
- (C) generate a number that is greater than or less than a given whole number up to 1,200;
- (D) use place value to compare and order whole numbers up to 1,200 using comparative language, numbers and symbols $>$, $<$, or $=$;
- (E) locate the position of a given whole number on an open number line;
- (F) name the whole number that corresponds to a specific point on a number line;

TEKS/STAAR Texas Essential Knowledge and Skills

(3) NUMBER and OPERATIONS. The student applies mathematical process standards to recognize and represent fractional units and communicate how they are used to name parts of a whole. The student is expected to:

- (A) partition objects into equal parts and name the parts including halves, fourths, and eighths, using words;
- (B) explain that the more fractional parts used to make a whole, the smaller the part; and the fewer fractional parts, the larger the part;
- (C) use concrete models to count fractional parts beyond one whole using words and recognize how many parts it takes to equal one whole; and
- (D) identify examples and non examples of halves, fourths, and eighths.

(4) NUMBER and OPERATIONS. The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to:

- (A) recall basic facts to add and subtract within 20 with automaticity;
- (B) add up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations;
- (C) solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms; and
- (D) generate and solve problem situations for a given mathematical number sentence involving addition and subtraction of whole numbers within 1,000.

(5) NUMBER and OPERATIONS. The student applies mathematical process standards to determine the value of coins in order to solve monetary transactions. The student is expected to:

- (A) determine the value of a collection of coins up to one dollar; and
- (B) use the cent symbol, dollar sign, and the decimal point to name the value of a collection of coins;

TEKS/STAAR Texas Essential Knowledge and Skills

(6) NUMBER and OPERATIONS. The student applies mathematical process standards to connect repeated addition and subtraction to multiplication and division situations that involve equal groupings and shares. The student is expected to:

- (A) model, create, and describe contextual multiplication situations in which equivalent sets of concrete objects are joined; and
- (B) model, create, and describe contextual division situations in which a set of concrete objects, separated in equivalent sets.

(7) ALGEBRAIC REASONING. The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. The student is expected to:

- (A) determine whether a number up to 40 is even or odd using pairings of objects to represent the number;
- (B) used an understanding of place value to determine the number that is 10 or 100 more or less than a given number up to 1,200; and
- (C) represent and solve addition and subtraction word problems where unknowns may be any of the terms in the problem.

(8) GEOMETRY and MEASUREMENT. The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to:

- (A) create two-dimensional shapes based on given attributes, including numbers of sides and vertices;
- (B) classify and sort three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes as special rectangular prisms), and triangular prisms, based on attributes using formal geometric language
- (C) classify and sort polygons with 12 or fewer sides according to attributes, including identifying the number of sides and number of vertices;
- (D) compose two-dimensional shapes and three-dimensional solids with given properties or attributes, and;
- (E) decompose two-dimensional shapes such as cutting out a square from a rectangle, dividing a shape in half, or partitioning a rectangle into identical triangles and identify the resulting geometric parts.

TEKS/STAAR Texas Essential Knowledge and Skills

(9) GEOMETRY and MEASUREMENT. The student applies mathematical process standards to select and use units to describe length, area, and time. The student is expected to:

- (A) find the length of objects using concrete models for standard units of length;
- (B) describe the inverse relationship between the size of the unit and the number of units needed to equal the length of an object;
- (C) represent whole numbers as distances from any given location on a number line;
- (D) determine the length of an object to the nearest marked unit using rulers, yardsticks, meter sticks, or measuring tapes;
- (E) determine the solution to a problem involving length, including estimating lengths;
- (F) use concrete models of square units to find the area of a rectangle by covering it with no gaps or overlaps, counting to find the total number of square units, and describing the measurement using a number and the unit; and
- (G) read and write time to the nearest one-minute increment using analog and digital clocks and distinguish between a.m., and p.m..

(10) DATA ANALYSIS. The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems. The student is expected to:

- (A) explain that the length of a bar in a bar graph or the number of pictures in a pictograph represents the number of data points for a given category;
- (B) organize a collection of data with up to four categories using pictographs and bar graphs with interval of one or more;
- (C) write and solve one-step word problems involving addition or subtraction using data represented within pictographs and bar graphs with intervals of one; and
- (D) draw conclusions and make predictions from information in a graph

TEKS/STAAR
Texas Essential Knowledge and Skills

(11) PERSONAL FINANCIAL LITERACY The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. The student is expected to:

- (A) calculate how money saved can accumulate into a larger amount over time;
- (B) explain that saving is an alternative to spending;
- (C) distinguish between a deposit and a withdrawal;
- (D) identify examples of borrowing and distinguish between responsible and irresponsible borrowing;
- (E) identify examples of lending and use concepts of benefits and costs to evaluate lending decisions; and
- (F) differentiate between producers and consumers and calculate the cost to produce a simple item [such as a shirt, a pitcher of lemonade, or a class art project].