

GRADE 4

TEKS/STAAR-BASED LESSONS

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GRADE 4 TEKSING TOWARD STAAR LESSONS

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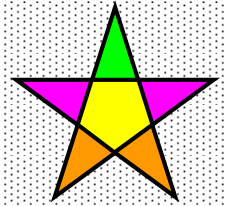
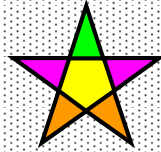
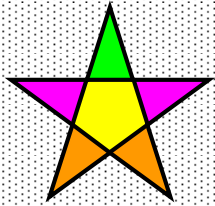
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TEKSING TOWARD STAAR



MATHEMATICS

OVERVIEW

Grade 4 Revised TEKS-Based Lessons

Implementation of Lessons

Implementing these lessons requires a different way of teaching. The traditional teacher roles of authority figure and information disseminator must change to learning facilitator and instructional decision maker.

Knowledge about students and how they learn mathematics can contribute to establishing a conducive learning environment for students. The lessons are designed to meet the requirements of the Revised Texas Essential Knowledge and Skills for grade level mathematics. The design of each lesson is consistent and includes a format for delivery of instruction, assessment, and homework. Where appropriate, the use of manipulatives and technology is included in the lesson. Cooperative learning as a learning setting is utilized in each lesson.

The Role of Assessment

Making changes in the content and methods of mathematics instruction also requires making changes in why and how students' work is assessed. Evaluation should be an integral part of instruction and not be limited to grading and testing. There are at least four reasons for collecting evaluation information:

- to make decisions about the content and methods of mathematics instruction
- to make decisions about classroom climate
- to help in communicating what is important
- to assign grades

Assessment includes much more than marking right and wrong answers. It "must be more than testing; it must be a continuous, dynamic, and often informal process" (NCTM 1989, p. 203). The *Curriculum and Evaluation Standards* recommends that teachers use a variety of types of evaluation: (1) *observing and questioning students* (2) *using assessment data reported by students*; (3) *assessing students' written mathematics work*; and (4) *using multiple-choice or short-answer items*. Use of these methods of collecting assessment data will contribute to a thorough evaluation of students' work.

Implementing the assessment process in the *TEKSING TOWARD STAAR* Lessons may require significant changes in how teachers view and use assessment in the classroom. Teachers will assess frequently to monitor individual performance and guide instruction.

Intent of the *TEKSING TOWARD STAAR* Lessons is to provide teachers with structure for instruction and assessment for the REVISED TEKS that incorporates characteristics of a good mathematics learning environment and the role of assessment.

Data Gathering and Analysis

Recording and analysis of data is a critical component of the *TEKSING TOWARD STAAR* Lessons. Recording in a Class Profile book by the teacher should occur on an almost daily basis. Expectation is that all STAAR-format assessments are recorded, as well as data from Spiraled Practice and other data as teachers choose. Analysis of the data should guide and direct instructional decisions.

Recording in a Student Profile book by each individual student should occur on a regular basis. Expectation is that all STAAR-format assessments are recorded, as well as data from Spiraled Practice. Analysis of this individual student data should be utilized to make decisions regarding reteach/tutorials for each student. Students should be given additional work on TEKS that indicate weakness. Students should not be expected to complete additional work on TEKS that indicate strength.

Lesson Components

Lesson Focus

Each lesson begins with the Lesson Focus. The TEKS expectations, focus for the lesson, and STAAR expectations for the Reporting Category are stated for the teacher.

Process Standards Incorporated Into Lesson

Following the **Lesson Focus**, the teacher is provided with a list of the **Process Standards** student expectations that are incorporated into the lesson.

Materials Needed for Lesson

Following the **Process Standards Incorporated Into Lesson**, the teacher is provided with a list of **Materials Needed for Lesson** to prepare prior to beginning a lesson.

Vocabulary for Lesson

Following the **Materials Needed for Lesson**, the teacher is provided with **Vocabulary for Lesson** words and phrases students should know by the end of each part of lesson.

Math Background

Following the **Vocabulary for Lesson**, a regular print version of the **Math Background** for each part of a lesson is provided for the teacher, followed by a large print projection version for use with students. Student are given a blank **Math Notes** page prior to the beginning of each lesson. (Master for the Math Notes is found in General Information)

Students are expected to take notes during projection of Math Background - notes will be used during lesson activities (this may be the first note taking experience for students in math - the goal is for students to record important information). Students record as much information as they choose. The information should be recorded in the student's own "words," "symbols," and pictures or diagrams.

As each page is projected, the teacher should ask various students to share what they think is important information - the teacher does **NOT** read the math background to the class - and students do **NOT** read the math background to the class. Students should read the information themselves, talk about what the information says, then write their notes. Teachers should make sure the important information is brought out by students. Teachers should talk students through examples. Students should make sure they take good notes and write examples for anything that they do not already know.

SUGGESTION 1: Print out the projection version of the **Math Background** for each part of the lesson. Hole punch the pages and put them into a **Math Background** folder or small 3-ring binder. Leave this information in a certain location where students can come to take additional notes if they discover their notes are not sufficient for completing a **Student Activity**.

SUGGESTION 2: Consider printing the teacher version of the **Math Background** for students who have an IEP that requires highlighting of important information for note taking. This suggestion should NEVER be followed for all students, but could be used for students that the teacher feels would greatly benefit and do not have an IEP.

This version could also be printed to send home with students who have missed school and are completing make-up work at home.

Problem-Solving

A **Problem-Solving Model** is located in Lesson 1 for use throughout the entire school year. This model addresses the Process Standards TEKS in Grade 4. This model should be discussed during this lesson and a copy should be given to each student to keep in a math notebook.

Each **Problem-Solving** activity is provided in a large print version for projection and will follow the **Math Background** projection version in each part of a lesson. A general set of **Problem-Solving Questions** should be addressed by students as they solve the problems and during class discussion of the solution process. Teachers should make a copy of the **Problem-Solving Questions** for each student and distribute prior to beginning **Problem-Solving 1** in this lesson. Teachers should discuss the questions and let students know they will be answering these questions for problem-solving activities during the entire school year. Each student should keep a copy of the questions in a math notebook.

Prior to some Problem-Solving activities a **Teacher Notes: Problem-Solving** page is included with instructions for the teacher - most often this is instructions for pages teachers need to print for students prior to beginning the Problem-Solving.

Students work in partner pairs to complete all **Problem-Solving** activities throughout the entire school year. Students record answers on notebook paper or plain white paper. The teacher projects the problem, then sets a time limit prior to students' beginning their work. Partner pairs are given specific "share" questions from 1-10 on the **Problem-Solving Questions** page. The process that should be followed by students for all **Problem-Solving** activities is to answer questions 1-3, then complete the solution to the problem, and finally answer questions 4-10.

The teacher calls time and the partner pairs guide class discussion on their "share" assignments. Students who did not complete the solution to the problem prior to the time limit must complete recording in a different color.

A Problem-Solving activity is **not** designed to be recorded as a grade, but may be recorded as a holistic score. A scale of 1-5 is appropriate as follows:

- 1 = little if any attempt
- 2 = no understanding evident
- 3 = minimal understanding evident
- 4 = mostly understood or slight mathematical errors
- 5 = complete understanding evident and no mathematical errors

Student Activity

At least one **Student Activity** follows the **Problem-Solving** activity in each part of a lesson. Students work in pairs to complete a Student Activity, however, each student completes their own activity page(s). Math Notes are utilized to enable students to successfully complete the activity. If students did not take notes on material they need to complete the activity, the teacher should invite them to view the Instructional Activity and to take more detailed notes.

Various partner pairs should be assigned portions of the **Student Activity** for whole-class discussion. Before students begin the activity, the teacher should inform the class of the time allotted for completion of the activity. Time should be called even if all partner pairs have not completed the activity. Whole class discussion should begin with the partner pairs that had assignments leading the discussion. Partner pairs who did not complete the activity may complete the activity during discussion time by recording in a different color pencil or pen.

A Student Activity is **not** designed to be recorded as a grade, but may be recorded as a holistic score. The same scale listed for a Problem-Solving activity is appropriate.

Hands-On Activity

Most lessons include at least one Hands-On Activity. These activities require preparation of materials for student use during the activity. A **Teacher Notes: Hands-On Activity** page is included prior to the student pages. Students work in pairs or groups of 4 for a Hands-On Activity, however, each student completes their own recording of data during the activity and questions about the activity.

A Hands-On Activity is **not** designed to be recorded as a grade, but may be recorded as a holistic score. The same scale listed for a Problem-Solving activity is appropriate.

Skills and Concepts Homework

Following the **Student Activity** and/or **Hands-On Activity** in each part of a lesson, is a **Skills and Concepts Homework**. Each homework includes 5 open-ended questions. The teacher should choose two or three questions to be scored by the teacher. The teacher should make written feedback comments for each student and should return the homework assignments within two days. Partial credit should be given if a student's work only exhibits partial understanding, or if the student makes a mathematical error. Only $\frac{1}{2}$ credit should be given for a correct answer if student work is not shown on the homework. The score on each **Skills and Concepts Homework** may be recorded for each student. Periodically these scores may be combined and recorded as a grade.

Mini-Assessment

A **Mini-Assessment** in STAAR format is located at the end of each lesson. The **Mini-Assessment** is completed by each individual student and scored by the teacher. Only assistance allowed during the actual STAAR should be given during this time. Allow about 20 minutes for completion of a Mini-Assessment. The amount of time may vary for some assessments. Score the Mini-Assessment with a score of 1-10. Partial credit may be given for each question if the student shows evidence of understanding but did not choose the correct answer due to minor mathematical error. Only $\frac{1}{2}$ credit should be given for a correct answer if student work is **not** shown on the assessment. Periodically these scored may be combined and recorded as a grade. Record data in **Profile** books.

Six Weeks Review and Six Weeks Assessment

The **Six Weeks Review** is open-ended and will address all TEKS in lessons. The review includes a **Six Weeks Class Review** and a **Six Weeks Homework Review**.

The **Six Weeks Assessment** is designed to assess all TEKS in lessons from the six weeks. The assessment includes 20 questions. Each question should be given 5 points for a correct answer. Partial credit may be given if a student's work exhibits partial understanding, or if the student makes a minor mathematical mistake. Only $\frac{1}{2}$ credit should be given for a correct answer if student work is not shown on the assessment.

Record data in **Class Profile** book and students record in **Student Profile** book.

Overview of Parent Guide

The **Parent Guide** was written with the goals of giving parents an overview of the mathematics lessons the students will be completing during the school year and assisting parents in helping students to understand the mathematics they are learning. The guide was designed for use by parents and other caring individuals who are interested in helping students progress in comprehension of the Texas Essential Knowledge and Skills.

The Parent Guide includes an Overview of *TEKSING TOWARD STAAR* Lessons philosophy, Parental Roles and Common Questions, Student Activity Sample, Open Ended Sample, Homework Sample, Mini-Assessment Sample, Problem-Solving Plan, Six Weeks Scope and Sequences, and Background Information for all lessons.

Permission will be granted to place the Parent Guide on your district Intranet with password access. A formal written request must be sent to *TEKSING TOWARD STAAR* and a formal response will be sent to the district. (Permission will not be given to place the Parent Guide on a location that can be accessed from the open Internet.)

For additional information please contact Brenda DeBorde.

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GRADE 4 MATERIALS LIST - SIX WEEKS 1

LESSON	MATERIALS NEEDED
1	<p>1. Teacher Notes: Problem-Solving 1 Per pair of students: 1 set of 9 number cards</p> <p>2. Hands-On Activity 1 Per pair of students: base-10 blocks - 1 large cube, 1 flat, 1 rod, 1 small cube</p> <p>3. Teacher Notes: Problem-Solving 2 Per pair of students: 1 set of 8 number cards and 1 decimal point card</p> <p>4. Hands-On Activity 2 Per pair of students: base-10 blocks - 1 flat, 1 rod, 1 small cube</p> <p>5. Hands-On Activity 3 Per pair of students: 1 set of base-10 blocks - 10 flats, 10 rods, and 10 small cubes; 1 Decimal Place-Value Model Mat (be sure to use master in cardstock folder - copy both parts on cardstock, cut out along dashed lines, tape together, laminate, and cut out); 4 Decimal Digits Record sheets; 1 set of Decimal Cards (copy on blue cardstock, copy <i>TEKSING TOWARD STAAR</i> logo on back, laminate, cut out and place in baggie)</p> <p>6. Hands-On Activity 4 Per student: 1 page of 4 Decimal Expanded Form Strips (copy page on white paper - students will cut out their strips - each page makes 4 strips)</p> <p>7. Hands-On Activity 5 Per student: 1 Place Value Game Board per student Per group of 4: 1 10-section spinner per group of 4 (copy the spinner on cardstock and laminate), 1 sharp pencil and 1 small paper clip</p>
2	<p>1. Hands-On Activity 1 Per pair of students: 10-section spinner labeled 0-9, pencil and paper clip to make pointer for spinner, 1 set of Rounding Cards (copy on cardstock, copy <i>TEKSING TOWARD STAAR</i> logo on back, laminate, cut out and place in a zipper baggie), 1 coin</p>
3	<p>1. Teacher Notes: Problem-Solving 1 Per pair of students: 1 set of grids</p> <p>2. Hands-On Activity 1 Per class: Decimal Cards (copy on cardstock so that you will have one class set. Place the decimal cards in one zipper baggie and the blank cards in another zipper baggie.), 15-20 foot length of wide painter's tape for this activity for each class, black permanent marker Per pair of students: 1 dry erase marker</p>
4	<p>1. Teacher Notes: Problem-Solving 2 Per student: Make 1 copy of this page for each student, then cut along the dashed line.</p>
5	<p>1. Hands-On Activity 1 Per pair of students: computer, printer (copy on paper) - 2 Olympic Problems pages, 2 Olympic Problems - Creator's Solutions pages, and 2 Olympic Problems - Partner's Solutions page</p>

GRADE 4 MATERIALS LIST - SIX WEEKS 1

LESSON	MATERIALS NEEDED
6	1. Hands-On Activity 1 Per group of 4 students: 1 set of Relationship Cards (copy each page on cardstock – copy the problem cards in one color and the expression/equation cards in a different color, copy the <i>TEKSING TOWARD STAAR</i> logo on back of each page, then cut apart), 1 number cube
7	None
8	1. Hands-On Activity 1 Per pair of students: 2 number cubes labeled 1-6
9	1. Problem-Solving 1 Per pair of students: (Make copies of the Roy Family Expenses for August 2014 - this page makes enough for 3 pairs of students. Cut along dashed lines.) 2. Teacher Resource: http://economicstexas.org/ - download <i>free Personal Financial Literacy for Grade 4-6 Classrooms</i> from the Texas Council on Economic Education Grade 4 Lesson 1: Not Enough Bucks pages 2-9

GRADE 4 MATERIALS LIST - SIX WEEKS 2

LESSON	MATERIALS NEEDED
1	<p>1. Hands-On Activity 1 Per pair of students: 1 set of 34 Pattern Blocks (10 yellow hexagons, 6 red trapezoids, 6 blue rhombuses, and 12 green triangles in a zipper baggie), 1 spinner labeled $\frac{2}{2}, \frac{2}{3}, \frac{3}{3}, \frac{2}{6}, \frac{3}{6}, \frac{4}{6}, \frac{5}{6}, \frac{6}{6}$ (copy the spinner on cardstock, laminate, then cut out), 1 sharp pencil and 1 small paper clip to make the pointer for the spinner</p> <p>2. Hands-On Activity 2 Per pair of students: 1 set of 32 Pattern Blocks (6 yellow hexagons, 8 red trapezoids, 8 blue rhombuses, and 16 green triangles in a zipper baggie), 1 spinner labeled $\frac{3}{2}, \frac{5}{2}, \frac{4}{3}, \frac{5}{3}, \frac{6}{3}, \frac{7}{6}, \frac{8}{6}, \frac{9}{6}$, (copy the spinner on cardstock, laminate, then cut out), 1 sharp pencil and 1 small paper clip to make the pointer for the spinner</p> <p>3. Hands-On Activity 3 Per pair of students: 3 sets of fraction strips and unit fractions in a zipper gallon baggie</p>
2	<p>1. Hands-On Activity 1 Per pair of students: 1 set of Cuisenaire® rods, crayons the same color as the Cuisenaire® rods</p> <p>2. Hands-On Activity 2 Per group of 4 students: 1 set of fraction cards (copy on cardstock, copy <i>TEKSING TOWARD STAAR</i> logo on back, laminate, cut along dashed lines then place cards in a zipper baggie), 1 set of fraction strips (copy on cardstock, laminate, cut along lines and place cards in a zipper baggie)</p>
3	<p>1. Hands-On Activity 1 Per pair of students: 3 sets of fraction strips and unit fractions copied and cardstock, cut apart, and put into a zipper gallon baggie</p> <p>2. Hands-On Activity 2 Per pair of students: 3 sets of fraction strips and unit fractions copied and cardstock, cut apart, and put into a zipper gallon baggie</p>
4	<p>1. Hands-On Activity 1 Per student: 1 calculator</p> <p>2. Hands-On Activity 2 Per student: 1-9 Number Cards (copy on cardstock, laminate, cut apart and place in a paper sack, Two-Digits by Two-Digits Product Mat</p>
5	1. Hands-On Activity 1 - No materials needed
6	No materials needed for this lesson.

GRADE 4 MATERIALS LIST - SIX WEEKS 2

LESSON	MATERIALS NEEDED
7	<p>1. Hands-On Activity 1 Per group of 4: 1 rectangular prism (place adhesive labels on each prism before you give them to students: top base, bottom base, front face, back face, left face, right face), 1 metric ruler, 1 standard ruler</p> <p>NOTE: prism must be able to be measure with a metric and a standard ruler for this activity - empty box for 100 jumbo paper clips or empty box for standard staples works well - groups can be give the same type of box or different boxes.</p> <p>2. Hands-On Activity 2 Per teacher: 1 set of overhead color tiles Per pair of students: 1 set of 40 color tiles, color tile grid paper, colored markers</p>
8	<p>1. Math Background: Part I Per student: 1 sheet of copy paper</p> <p>2. Hands-On Activity 1 Per pair of students: 4 cardstock strips and 2 brass fasteners, 1 coin</p> <p>3. Hands-On Activity 2 Per class: 1 set of Angle Cards (copy the angle cards on one color cardstock, copy the angle type cards on a different color of cardstock, laminate, and cut apart), neck signs labeled Student 1 and Student 2 (copy Student 1 and Student 2 signs on different colors of cardstock, laminate, hole punch and put string in the holes so the cards can be hung around the neck), large angle type signs (copy on cardstock and laminate) Per student: 3" by 5" index card</p> <p>4. Hands-On Activity 3 Per student: 1 sheet of cardstock per pair of students</p> <p>5. Hands-On Activity 4 Per group of 4: 1 set of Triangles and Quadrilaterals Cards (copy on cardstock, copy the <i>TEKSING TOWARD STAAR</i> logo on the back of each page, laminate, cut apart and place in a zipper baggie) Per student: one 3 x 5 note card</p>

GRADE 4 MATERIALS LIST - SIX WEEKS 3

LESSON	MATERIALS NEEDED
1	<p>1. Part I Projections - Use Division Models and Equations Per pair of students: 30 color tiles in a zipper baggie, 1 sheet of white copy paper</p> <p>2. Problem-Solving 1 Per pair of students: 100 color tiles in a zipper baggie</p> <p>3. Hands-On Activity 1 Per pair of students: 1 set of 1-9 Number Cards (copy on cardstock, laminate, cut apart and place in a paper sack, Three-Digit Divided by One-Digit Quotient Mat, Four-Digit Divided by One-Digit Quotient Mat</p>
2	<p>1. Projection Masters - Division with Remainders Per pair of students: 25 color tiles and 1 sheet of white paper</p>
3	<p>1. Hands-On Activity 1 Per group of 4 students: 1 set of Relationship Cards (copy each page on cardstock – copy the problem cards in one color and the expression/equation cards in a different color, copy the <i>TEKSING TOWARD STAAR</i> logo on back of each page, then cut apart), 1 number cube</p>
4	<p>1. Teacher Notes: Problem-Solving 1 Per pair of students: 1 meterstick, 1 yardstick, 1 standard ruler, 1 metric ruler</p> <p>2. Hands-On Activity 1 Per pair of students: 1 kilogram masses/weights (find a common item that is 1 kilogram or fill a coffee can with fishing weights or paper clips to make a kilogram mass), 1,000 gram masses (find a paperclip that is close to one gram and use 1,000 of them as the gram masses), balance, 1-pound weight (can of vegetables) and 16 1-ounce weights (fill 1-ounce condiment cups with a metal object that is close to one ounce)</p> <p>3. Hands-On Activity 2 Per group of 4: 1 busboy tray or large box to hold the materials for this activity, 1-gallon plastic jug, 1-quart milk or juice carton, 1-pint milk or juice carton, 16-ounce yogurt cup, 1-ounce condiment cup, 1 eyedropper, 1 liter plastic bottle, large bags of rice or dried beans to fill the containers during the scavenger hunt (enough to fill the 1-gallon jug), collection of containers with the approximate capacity of the following: gallon, quart, pint, cup, ounce, milliliter, and liter (at least 10 of each capacity)</p> <p>4. Hands-On Activity 3 Per group of 4: 1 busboy tray or large rectangular container to hold the materials for this activity, 1 yardstick, 1 customary measuring tape, 1 gallon container, 1 quart container, 1 pint container, 1 measuring cup with cups and ounces marked, large bag of rice, dried beans, or other materials to fill containers, 2 1-pound weighs (find a common item or fill a container with fishing weights or paper clips to make a 1-pound weight), 32 1-ounce weights (fill an empty prescription bottle with dried beans to make a 1-ounce weight), 2 balances</p>

GRADE 4 MATERIALS LIST - SIX WEEKS 3

LESSON	MATERIALS NEEDED
5	<p>1. Hands-On Activity 1</p> <p>Per student: $\frac{1}{2}$ of "Angles and Fractional Parts" page on cardstock (copy master from Activities Masters folder on cardstock - each page makes materials for 2 students, scissors, pencil, colored pencil</p> <p>2. Hands-On Activity 2</p> <p>Per group of 4: 1 set of triangle cards (copy on cardstock, copy the <i>TEKSING TOWARD STAAR</i> logo on the back of each page, laminate, cut apart and place in a zipper baggie), 4 protractors</p>
6	<p>1. Problem-Solving 1</p> <p>Per pair of students: 25 pieces of drinking straw (a combination of different numbers of these lengths: $\frac{1}{4}$ in., $\frac{1}{2}$ in., $\frac{3}{4}$ in., 1 in., $1\frac{1}{4}$ in., $1\frac{1}{2}$ in.), 1 Problem-Solving 1 Dot Plots record sheet (copy from Activity Masters folder)</p> <p>2. Hands-On Activity 1</p> <p>Per pair of students: 1 box of crayons per partner pair, 1 sheet of white paper</p> <p>3. Problem-Solving 2</p> <p>Per pair of students: 1 Problem-Solving 1 Dot Plots record sheet (completed during Problem-Solving 1)</p>
7	<p>1. Hands-On Activity 1</p> <p>Per group of 4: Twelve 1-6 number cubes (3 for each student), 4 paper plates</p>

GRADE 4 MATERIALS LIST - SIX WEEKS 4

LESSON	MATERIALS NEEDED
1	<p>1. Problem-Solving 1 - Part 1 Per student: "Discovering Symmetry 1" (copy on colored paper using master in Activity Masters folder), scissors</p> <p>2. Problem-Solving 1 - Part 2 Per student: "Discovering Symmetry 2" (copy on colored paper using master in Activity Masters folder), scissors</p> <p>3. Problem-Solving 1 - Part 3 Per student: "Discovering Symmetry 2" (copy on colored paper using master in Activity Masters folder), scissors</p> <p>4. Problem-Solving 1 - Part 4 Per pair of students: 7 color tiles, 2 copies of "Symmetry Activity 4", blue crayon, red crayon, scissors</p> <p>5. Hands-On Activity 1 Per pair of students: 2 sets of Symmetry Search Figures and 2 pair of scissors</p> <p>6. Problem-Solving 2 Per pair of students: 2 pairs of the same pattern block (one pair is two trapezoids and the other pair is two rhombuses), sheet of white paper</p> <p>7. Hands-On Activity 2 Per student: 1 set of pattern blocks (2 yellow hexagons, 2 orange squares, 3 blue rhombuses, 4 green triangles, 2 red trapezoids), crayons (1 yellow, 1 orange, 1 blue, 1 green and 1 red)</p>
2	<p>1. Math Background - Part I: Draw An Angle With a Given Measure Per student: 1 protractor, 1 sheet white paper</p> <p>2. Hands-On Activity 2 Per pair of students: 2 sheets cardstock, 2 pair of scissors, 2 protractors, clear tape</p> <p>3. Hands-On Activity 3 Per class: 1 set of Angle Cards (copy on cardstock, laminate, and cut apart), neck signs labeled Student 1 and Student 2 (copy Students 1 and Student 2 on different colors of cardstock, laminate, hole punch and put string in the holes so the cards can be hung around the neck), calculators</p>
3	<p>1. Hands-On Activity 1 Per student: 20-centimeter length of wire, ribbon, or pipe cleaner Per group of 4: 4 metric and standard rulers, 1 dark color marker</p> <p>2. Hands-On Activity 3 Per group of 4: 1 busboy tray or large rectangular container to hold materials for this activity, 4 differently-shaped bowls (label Bowl 1 and Bowl 2, Bowl 3 and Bowl 4), 1 gallon container, 1 quart container, 1 pint container, 1 measuring cup with cups and ounces marked, 1 liter container with milliliters marked, water</p>

GRADE 4 MATERIALS LIST - SIX WEEKS 4

LESSON	MATERIALS NEEDED
3 (continued)	3. Hands-On Activity 4 Per group of 4: 1 large sack with 8 objects such as an empty soda can, a gallon baggie filled with dried beans, a toy car, a textbook, a container with heavy metal washers, a container filled with coins, a small beanbag animal, a container filled with golf balls, a gallon baggie filled with cotton balls, 4 kilogram masses (find a common item that is 1 kilogram or fill a coffee can with fishing weights or paper clips to make a kilogram mass), 1,000 gram masses (find a paperclip that is close to one gram and use 1,000 of them as the gram masses), pan balance
4	No extra materials are needed for this lesson.
5	1. Teacher Resource: http://economicstexas.org/ - download <i>free Personal Financial Literacy for Grade 4-6 Classrooms</i> from the Texas Council on Economic Education Grade 4 Lessons - Lesson 5: "Smart Cash"

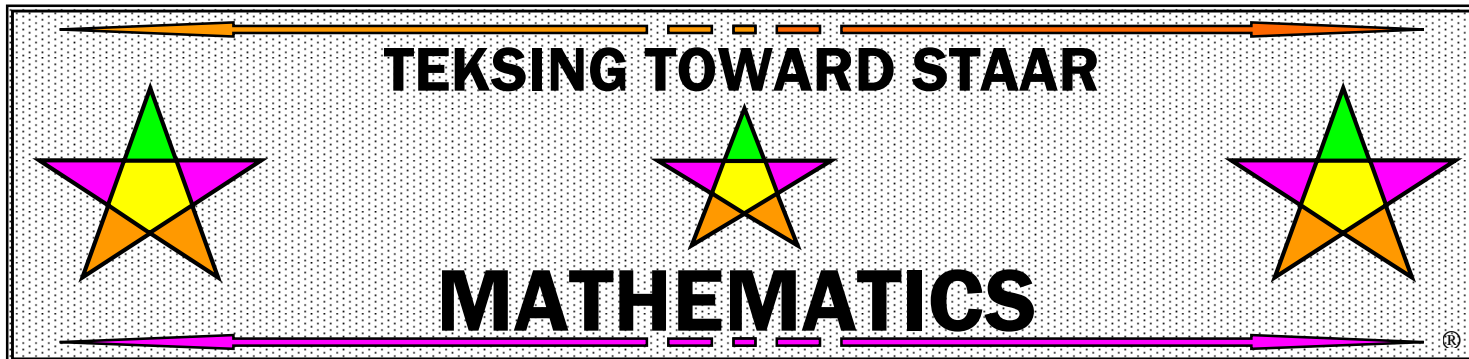
GRADE 4 MATERIALS LIST - SIX WEEKS 5

LESSON	MATERIALS NEEDED
1	1. Hands-On Activity 1 For the teacher: <i>The Math Curse</i> by John Scieszka Per pair of students: "Our Everyday Mathematics Story" recording sheet
2	1. Hands-On Activity 1 Per group of 4: 2 "Problem-Solving Strategies" sheets, 2 highlighters Per class: 1 set of Problem Cards (copy on cardstock, copy <i>TEKSING TOWARD STAAR</i> logo back, laminate, cut apart and place in a zipper baggie)
3	1. Hands-On Activity 1 Per student: calculator with the capability to change an improper fraction to a mixed number and a mixed number to an improper fraction
4	1. Hands-On Activity 1 Per student: calculator
5	1. Hands-On Activity 1 Per pair of students: newspapers, various manipulatives to choose from, "Decimals in the Real World Problems" sheet, highlighter
6	1. Hands-On Activity 1 Per student: 1 geoboard and a set of geobands
7	1. Hands-On Activity 1 Per pair of students: 1 Hundreds Chart per pair of students, 1 light color crayon

Name _____

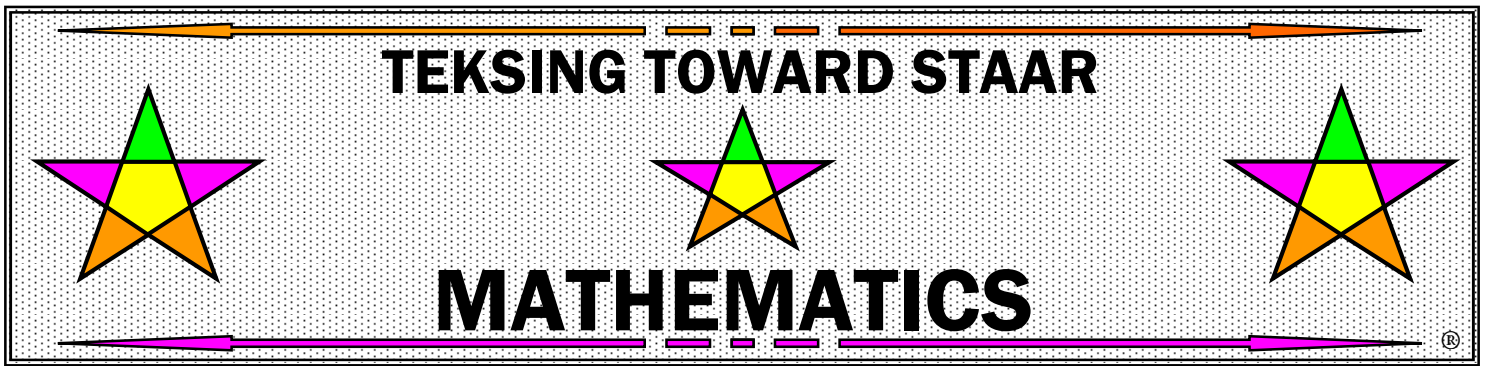
Date _____

Grade 4 Math Notes



GRADE 4 SCORING RUBRIC

SCORE	UNDERSTANDING CRITERIA Summarize Identify supporting details	PLANNING CRITERIA Choose a strategy	SOLVING CRITERIA Solve the problem	LOOKING BACK CRITERIA Check for reasonableness
1	No attempt	No attempt	No attempt	No attempt
2	Complete misunderstanding of the problem	Totally inappropriate plan	Wrong answer based on inappropriate plan	Wrong approach to reasonableness and accuracy of answer
3	Part of the problem misunderstood or misinterpreted	Partially correct plan based on part of the problem being interpreted correctly	Copying error, computational error, or partial answer for problem with multiple steps	Copying error, computational error, or partial check of reasonableness for problem with multiple steps
4	Complete understanding of the problem	Correct plan implemented and led to a correct solution	Correct answer and correct label for the answer	Correct approach to check for reasonableness and accuracy of answer
5	Extends the problem	Additional strategy implemented and confirms a correct solution	Correct answer and correct label for the answer	Correct approach to check for reasonableness and accuracy of answer



Grade 4

Class Profile for

Spiraled Practice

Teacher _____

Class _____

GRADE 4 TEKSING TOWARD STAAR MATHEMATICS CLASS PROFILE

STAAR REPORTING CATEGORY 1: NUMERICAL REPRESENTATIONS AND RELATIONSHIPS												
Standard	TEKS	Student Expectation	Class Performance									
Supporting	4.2(A)	interpret the value of each place-value position as 10 times the position to the right and as one-tenth of the value of the place to its left	2	32	63	93						
Readiness	4.2(B)	represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals	1	8	16	23	30	36	45	53	59	65
			75	81	88	96	103	110				
Supporting	4.2(C)	compare and order whole numbers to 1,000,000,000 and represent comparisons using the symbols $>$, $<$, or $=$	5	37	66	95						
Supporting	4.2(D)	round whole numbers to a given place value through the hundred thousands place	10	39	68	97						
Supporting	4.2(E)	represent decimals, including tenths and hundredths, using concrete and visual models and money	13	41	70	99						
Supporting	4.2(F)	compare and order decimals using concrete and visual models to the hundredths	15	43	73	102						
Readiness	4.2(G)	relate decimals to fractions that name tenths and hundredths	3	9	18	26	33	38	48	55	61	69
			77	83	89	98	106	113	116			
Supporting	4.2(H)	determine the corresponding decimal to the tenths or hundredths place of a specified point on a number line	17	46	76	105						
Supporting	4.3(A)	represent a fraction a/b as a sum of fractions $1/b$, where a and b are whole numbers and $b > 0$, including when $a > b$	19	49	78	109						
Supporting	4.3(B)	decompose a fraction in more than one way into a sum of fractions with the same denominator using concrete and pictorial models and recording results with symbolic representations	22	52	82	112						
Supporting	4.3(C)	determine if two given fractions are equivalent using a variety of methods	25	56	85	117						
Readiness	4.3(D)	compare two fractions with different numerators and different denominators and represent the comparison using the symbols $>$, $=$, or $<$	6	12	21	28	35	42	50	57	62	72
			79	86	92	101	108	115	118			
Supporting	4.3(G)	represent fractions and decimals to the tenths or hundredths as distances from zero on a number line	29	58	90	119						

GRADE 4 TEKSING TOWARD STAAR MATHEMATICS CLASS PROFILE

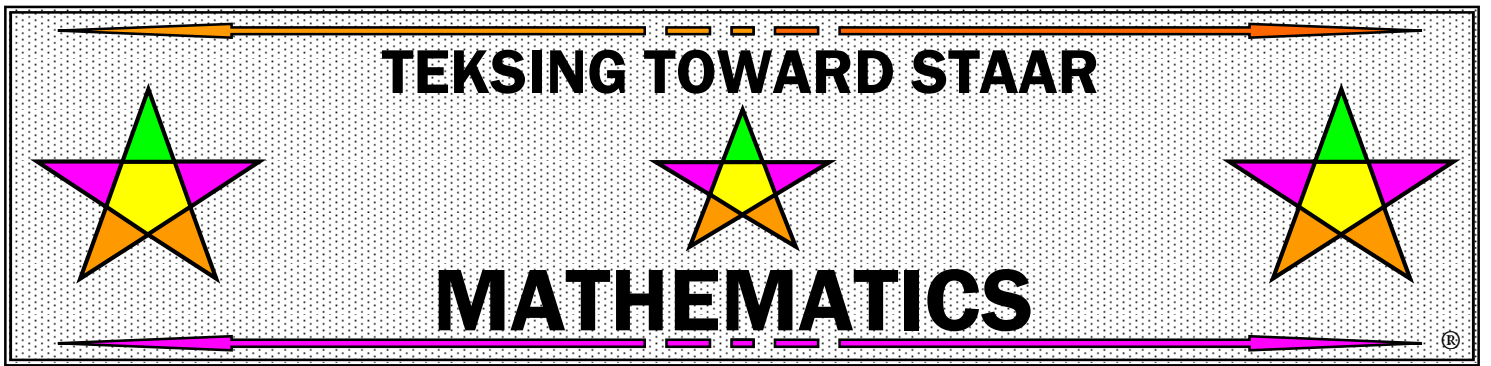
STAAR REPORTING CATEGORY 2: COMPUTATIONS AND ALGEBRAIC RELATIONSHIPS												
Standard	TEKS	Student Expectation	Class Performance									
Readiness	4.3(E)	represent and solve addition and subtraction of fractions with equal denominators using objects and pictorial models that build to the number line and properties of operations	1	11	19	27	36	45	53	61	69	77
			86	95	103	111						
Supporting	4.3(F)	evaluate the reasonableness of sums and differences of fractions using benchmark fractions 0, 1/4, 1/2, 3/4, and 1, referring to the same whole lines	2	18	34	52	70	88	104			
Readiness	4.4(A)	add and subtract whole numbers and decimals to the hundredths place using the standard algorithm	3	12	21	29	37	47	55	62	71	79
			87	97	105	113						
Supporting	4.4(B)	determine products of a number and 10 or 100 using properties of operations and place value understandings	4	20	38	54	72	90	106			
Supporting	4.4(C)	represent the product of 2 two-digit numbers using arrays, area models, or equations, including perfect squares through 15 by 15	6	22	40	56	76	92	108			
Supporting	4.4(D)	use strategies and algorithms, including standard algorithm, to multiply up to a four-digit number by a one-digit number and to multiply a two-digit number by a two-digit number. Strategies include mental math, partial products; commutative, associative, and distributive properties	8	26	42	58	78	94	112			
Supporting	4.4(E)	represent the quotient of up to a four-digit whole number divided by a one-digit whole number using arrays, area models, or equations	10	28	44	64	80	96	114			
Supporting	4.4(F)	use strategies and algorithms, including the standard algorithm, to divide up to a four-digit dividend by a one-digit divisor	14	30	46	66	82	100	116			
Supporting	4.4(G)	round to the nearest 10, 100, or 1,000 or use compatible numbers to estimate solutions involving whole numbers	16	32	50	68	84	102	119			
Readiness	4.4(H)	solve with fluency one- and two-step problems involving multiplication and division, including interpreting remainders	5	13	23	31	39	48	57	63	73	81
			89	98	107	115						
Readiness	4.5(A)	represent multi-step problems involving the four operations with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity	7	15	24	33	41	49	59	65	74	83
			91	99	109	118						
Readiness	4.5(B)	represent problems using an input-output table and numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence	9	17	25	35	43	51	60	67	75	85
			93	101	110	120						
Not Tested	4.5(C)	use models to determine the formulas for the perimeter of a rectangle ($l + w + l + w$ or $2l + 2w$), including the special formula for perimeter of a square ($4s$) and the area of a rectangle ($l \times w$)										

GRADE 4 TEKSING TOWARD STAAR MATHEMATICS CLASS PROFILE

STAAR REPORTING CATEGORY 3: GEOMETRY AND MEASUREMENT													
Standard	TEKS	Student Expectation	Class Performance										
Readiness	4.5(D)	solve problems related to perimeter and area of rectangles where dimensions are whole numbers	1	7	14	22	28	34	43	49	55	62	
			67	73	82	88	94	96	105				
Supporting	4.6(A)	identify points, lines, line segments, rays, angles, and perpendicular and parallel lines	3	20	40	60	81	100	116				
Supporting	4.6(B)	identify and draw one or more lines of symmetry, if they exist, for a two-dimensional figure	5	24	42	66	83	102	118				
Supporting	4.6(C)	apply knowledge of right angles to identify acute, right, and obtuse triangles	8	27	44	68	86	104	119				
Readiness	4.6(D)	classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size	2	9	16	23	30	36	45	51	58	63	
			69	75	84	90	99	106	111	117			
Not Tested	4.7(A)	illustrate the measure of an angle as the part of a circle whose center is at the vertex of the angle that is "cut out" by the rays of the angle - angle measures are limited to whole numbers											
Not Tested	4.7(B)	illustrate degrees as the units used to measure an angle, where 1/360 of any circle is one degree & an angle that "cuts" $n/360$ out of any circle whose center is at the angle's vertex has a measure of n degrees-angle measures limited to whole numbers											
Readiness	4.7(C)	determine the approximate measures of angles in degrees to the nearest whole number using a protractor	4	10	19	25	31	39	46	52	59	64	
			70	78	85	91	101	107	113				
Supporting	4.7(D)	draw an angle with a given measure	11	29	47	71	89	108					
Supporting	4.7(E)	determine the measure of an unknown angle formed by two non-overlapping adjacent angles given one or both angle measures	13	33	50	74	92	110					
Supporting	4.8(A)	identify relative sizes of measurement units within the customary and metric systems	15	35	53	76	95	112					
Supporting	4.8(B)	convert measurements within the same system, customary or metric, from smaller unit into larger unit or larger unit into smaller unit when given other equivalent measures represented in a table	18	38	56	79	98	114					
Readiness	4.8(C)	solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate	6	12	21	26	32	41	48	54	61	65	
			72	80	87	93	103	109	115	120			

GRADE 4 TEKSING TOWARD STAAR MATHEMATICS CLASS PROFILE

STAAR REPORTING CATEGORY 4: DATA ANALYSIS AND FINANCIAL LITERACY												
Standard	TEKS	Student Expectation	Class Performance									
Readiness	4.9(A)	represent data on a frequency table, dot plot, or stem-and-leaf plot marked with whole numbers and fractions	4	11	17	24	31	34	40	47	57	67
			74	87	97	104	111	117	120			
Supporting	4.9(B)	solve one- and two-step problems using data in whole number, decimal, and fraction form in a frequency table, dot plot, or stem-and-leaf plot	7	20	44	54	60	71	80	91	94	100
Supporting	4.10(A)	distinguish between fixed and variable expenses	14	51	84							
Supporting	4.10(B)	calculate profit in a given situation	27	64	107							
Not Tested	4.10(C)	Compare the advantages and disadvantages of various savings options										
Not Tested	4.10(D)	Describe how to allocate a weekly allowance among spending, saving, including for college, and sharing										
Supporting	4.10(E)	describe the basic purpose of financial institutions, including keeping money safe, borrowing money, and lending	37	77	114							



Grade 4

Student Profile for

Spiraled Practice

Student _____

Teacher _____

GRADE 4 TEKSING TOWARD STAAR MATHEMATICS STUDENT PROFILE

STAAR REPORTING CATEGORY 1: NUMERICAL REPRESENTATIONS AND RELATIONSHIPS												
Standard	TEKS	Student Expectation	Student Performance									
Supporting	4.2(A)	interpret the value of each place-value position as 10 times the position to the right and as one-tenth of the value of the place to its left	2	32	63	93						
Readiness	4.2(B)	represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals	1	8	16	23	30	36	45	53	59	65
			75	81	88	96	103	110				
Supporting	4.2(C)	compare and order whole numbers to 1,000,000,000 and represent comparisons using the symbols $>$, $<$, or $=$	5	37	66	95						
Supporting	4.2(D)	round whole numbers to a given place value through the hundred thousands place	10	39	68	97						
Supporting	4.2(E)	represent decimals, including tenths and hundredths, using concrete and visual models and money	13	41	70	99						
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Readiness	4.2(G)	relate decimals to fractions that name tenths and hundredths	3	9	18	26	33	38	48	55	61	69
			77	83	89	98	106	113	116			
Supporting	4.2(H)	determine the corresponding decimal to the tenths or hundredths place of a specified point on a number line	17	46	76	105						
Supporting	4.3(A)	represent a fraction a/b as a sum of fractions $1/b$, where a and b are whole numbers and $b > 0$, including when $a > b$	19	49	78	109						
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			79	86	92	101	108	115	118			
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GRADE 4 TEKSING TOWARD STAAR MATHEMATICS STUDENT PROFILE

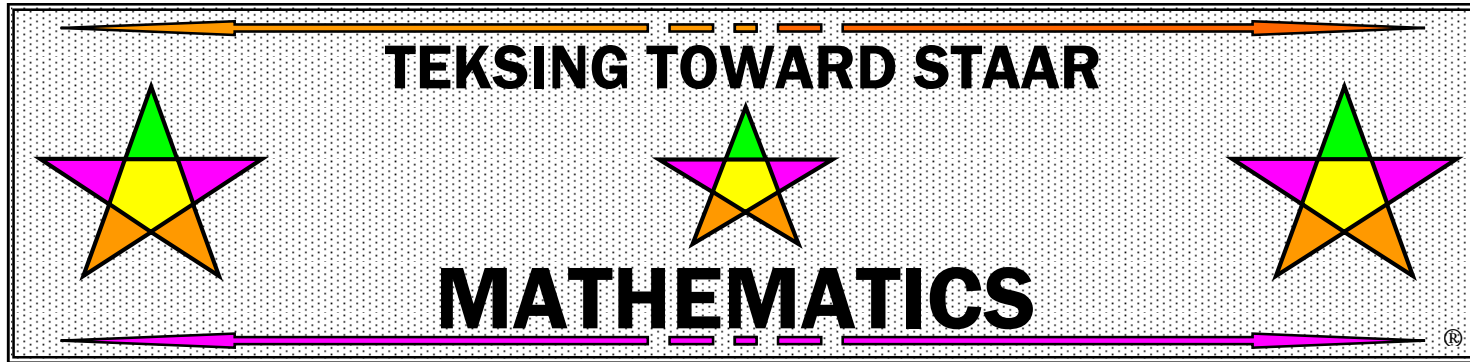
STAAR REPORTING CATEGORY 2: COMPUTATIONS AND ALGEBRAIC RELATIONSHIPS													
Standard	TEKS	Student Expectation	Student Performance										
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Readiness	4.4(A)	add and subtract whole numbers and decimals to the hundredths place using the standard algorithm	3	12	21	29	37	47	55	62	71	79	
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Supporting	4.4(F)	use strategies and algorithms, including the standard algorithm, to divide up to a four-digit dividend by a one-digit divisor	14	30	46	66	82	100	116				
Supporting	4.4(G)	round to the nearest 10, 100, or 1,000 or use compatible numbers to estimate solutions involving whole numbers	16	32	50	68	84	102	119				
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			89	98	107	115							
Readiness	4.5(A)	represent multi-step problems involving the four operations with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity	7	15	24	33	41	49	59	65	74	83	
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Readiness	4.5(B)	represent problems using an input-output table and numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence	9	17	25	35	43	51	60	67	75	85	
			93	101	110	120							
Not Tested	4.5(C)	use models to determine the formulas for the perimeter of a rectangle ($l + w + l + w$ or $2l + 2w$), including the special formula for perimeter of a square ($4s$) and the area of a rectangle ($l \times w$)											

GRADE 4 TEKSING TOWARD STAAR MATHEMATICS STUDENT PROFILE

STAAR REPORTING CATEGORY 3: GEOMETRY AND MEASUREMENT													
Standard	TEKS	Student Expectation	Student Performance										
Readiness	4.5(D)	solve problems related to perimeter and area of rectangles where dimensions are whole numbers	1	7	14	22	28	34	43	49	55	62	
			67	73	82	88	94	96	105				
Supporting	4.6(A)	identify points, lines, line segments, rays, angles, and perpendicular and parallel lines	3	20	40	60	81	100	116				
Supporting	4.6(B)	identify and draw one or more lines of symmetry, if they exist, for a two-dimensional figure	5	24	42	66	83	102	118				
Supporting	4.6(C)	apply knowledge of right angles to identify acute, right, and obtuse triangles	8	27	44	68	86	104	119				
Readiness	4.6(D)	classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size	2	9	16	23	30	36	45	51	58	63	
			69	75	84	90	99	106	111	117			
Not Tested	4.7(A)	illustrate the measure of an angle as the part of a circle whose center is at the vertex of the angle that is "cut out" by the rays of the angle - angle measures are limited to whole numbers											
Not Tested	4.7(B)	illustrate degrees as the units used to measure an angle, where $\frac{1}{360}$ of any circle is one degree & an angle that "cuts" $\frac{n}{360}$ out of any circle whose center is at the angle's vertex has a measure of n degrees-angle measures limited to whole numbers											
Readiness	4.7(C)	determine the approximate measures of angles in degrees to the nearest whole number using a protractor	4	10	19	25	31	39	46	52	59	64	
			70	78	85	91	101	107	113				
Supporting	4.7(D)	draw an angle with a given measure	11	29	47	71	89	108					
Supporting	4.7(E)	determine the measure of an unknown angle formed by two non-overlapping adjacent angles given one or both angle measures	13	33	50	74	92	110					
Supporting	4.8(A)	identify relative sizes of measurement units within the customary and metric systems	15	35	53	76	95	112					
Supporting	4.8(B)	convert measurements within the same system, customary or metric, from smaller unit into larger unit or larger unit into smaller unit when given other equivalent measures represented in a table	18	38	56	79	98	114					
Readiness	4.8(C)	solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate	6	12	21	26	32	41	48	54	61	65	
			72	80	87	93	103	109	115	120			

GRADE 4 TEKSING TOWARD STAAR MATHEMATICS STUDENT PROFILE

STAAR REPORTING CATEGORY 4: DATA ANALYSIS AND FINANCIAL LITERACY												
Standard	TEKS	Student Expectation	Student Performance									
Readiness	4.9(A)	represent data on a frequency table, dot plot, or stem-and-leaf plot marked with whole numbers and fractions	4	11	17	24	31	34	40	47	57	67
			74	87	97	104	111	117	120			
Supporting	4.9(B)	solve one- and two-step problems using data in whole number, decimal, and fraction form in a frequency table, dot plot, or stem-and-leaf plot	7	20	44	54	60	71	80	91	94	100
Supporting	4.10(A)	distinguish between fixed and variable expenses	14	51	84							
Supporting	4.10(B)	calculate profit in a given situation	27	64	107							
Not Tested	4.10(C)	Compare the advantages and disadvantages of various savings options										
Not Tested	4.10(D)	Describe how to allocate a weekly allowance among spending, saving, including for college, and sharing										
Supporting	4.10(E)	describe the basic purpose of financial institutions, including keeping money safe, borrowing money, and lending	37	77	114							



**TEKS/STAAR-BASED
LESSONS**

Grade 4

Scope and Sequence

TEKSING TOWARD STAAR SCOPE AND SEQUENCE

Grade 4 Mathematics

SIX WEEKS 1

Lesson	TEKS-BASED LESSON CONTENT	STAAR Category Standard	Spiraled Practice	Student (SA) and Hands-On (HO) Activity	Problem Solving	Skills and Concepts Homework
Lesson 1 ____ days	4.2A /interpret the value of each place-value position as 10 times the position to the right and as one-tenth of the value of the place to its left 4.2B /represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the hundredths using expanded notation and numerals	Category 1 Readiness Category 1 Readiness	SP 1 SP 2	HO 1 SA 1 HO 2 HO 3 SA 2 HO 4 SA 3 HO 5	PS 1 PS 2 PS 3	Homework 1 Homework 2 Homework 3
Lesson 2 ____ days	4.2C /compare and order whole numbers to 1,000,000,000 and represent comparisons using the symbols $>$, $<$, or $=$ 4.2D /round whole numbers to a given place value through the hundred thousands place	Category 1 Supporting Category 1 Supporting	SP 3 SP 4	SA 1 HO 1	PS 1 PS 2	Homework 1 Homework 2
Lesson 3 ____ days	4.2E /represent decimals, including tenths and hundredths, using concrete and visual models and money 4.2F /compare and order decimals using concrete and visual models to the hundredths	Category 1 Supporting Category 1 Supporting	SP 5 SP 6 SP 7	SA 1 SA 2 HO 1	PS 1 PS 2	Homework 1 Homework 2
Lesson 4 ____ days	4.2G /relate decimals to fractions that name tenths and hundredths 4.2H /determine the corresponding decimal to the tenths or hundredths place of a specified point on a number line 4.3G /represent fractions and decimals to the tenths or hundredths as distances from zero on a number line	Category 1 Readiness Category 1 Supporting Category 1 Supporting	SP 8 SP 9	SA 1 SA 2	PS 1 PS 2	Homework 1 Homework 2
Lesson 5 ____ days	4.4A /add and subtract whole numbers and decimals to the hundredths place using the standard algorithm 4.4G /round to the nearest 10, 100, or 1,000 or use compatible numbers to estimate solutions involving whole numbers	Category 2 Readiness Category 2 Supporting	SP 10 SP 11 SP 12	SA 1 SA 2 HO 2 SA 3	PS 1 PS 2 PS 3	Homework 1 Homework 2 Homework 3
Lesson 6 ____ days	4.5A /represent multi-step problems involving the four operations (addition and subtraction only in lesson) with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity 4.5B /represent problems using an input-output table and numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence (addition and subtraction only in lesson)	Category 2 Readiness Category 2 Readiness	SP 13 SP 14	HO 1 SA 1 SA 2	PS 1 PS 2	Homework 1 Homework 2
Lesson 7 ____ days	4.6A /identify points, lines, line segments, ...and parallel lines	Category 3 Supporting	SP 15 SP 16	SA 1	PS 1	Homework 1

**TEKSING TOWARD STAAR SCOPE AND SEQUENCE
Grade 4 Mathematics**

SIX WEEKS 1

Lesson	TEKS-BASED LESSON CONTENT	STAAR Category Standard	Spiraled Practice	Student (SA) and Hands-On (HO) Activity	Problem Solving	Skills and Concepts Homework
Lesson 8 ____ days	<p>4.9A/represent data on a frequency table...marked with whole numbers and fractions</p> <p>4.9B/solve one- and two-step problems using data in whole number, decimal, and fraction form in a frequency table...</p>	<p>Category 4 Readiness</p> <p>Category 4 Supporting</p>	<p>SP 17</p> <p>SP 18</p>	<p>HO 1</p> <p>SA 1</p>	<p>PS 1</p>	<p>Homework 1</p>
Lesson 9 ____ days	4.10A /distinguish between fixed and variable expenses	Category 4 Supporting	<p>SP 19</p> <p>SP 20</p>	SA 1	PS 1	Homework 1
Review	Six Weeks 1 Open-Ended Review					
Assessment	Six Weeks 1 Assessment					

TEACHER NOTES:

TEKSING TOWARD STAAR SCOPE AND SEQUENCE

Grade 4 Mathematics

SIX WEEKS 2

Lesson	TEKS-BASED LESSON CONTENT	STAAR Category Standard	Spiraled Practice	Student (SA) and Hands-On (HO) Activity	Problem Solving	Skills and Concepts Homework
Lesson 1 ____ days	4.3A /represent a fraction a/b as a sum of fractions $1/b$, where a and b are whole numbers and $b > 0$, including when $a > b$ 4.3B /decompose a fraction in more than one way into a sum of fractions with the same denominator using concrete and pictorial models and recording results with symbolic representations	Category 1 Supporting Category 1 Supporting	SP 21 SP 22	HO 1 SA 1 HO 2 SA 2 HO 3	PS 1 PS 2 PS 3	Homework 1 Homework 2 Homework 3
Lesson 2 ____ days	4.3C /determine if two given fractions are equivalent using a variety of methods 4.3D /compare two fractions with different numerators and different denominators and represent the comparison using the symbols $>$, $=$, or $<$	Category 1 Supporting Category 1 Readiness	SP 23 SP 24	HO 1 SA 1 HO 2 SA 2	PS 1 PS 2	Homework 1 Homework 2
Lesson 3 ____ days	4.3E /represent and solve addition and subtraction of fractions with equal denominators using objects and pictorial models that build to the number line and properties of operations 4.3F /evaluate the reasonableness of sums and differences of fractions using benchmark fractions 0, $1/4$, $1/2$, $3/4$, and 1, referring to the same whole	Category 2 Readiness Category 2 Supporting	SP 25 SP 26	HO 1 SA 1 HO 2 SA 2	PS 1 PS 2	Homework 1 Homework 2
Lesson 4 ____ days	4.4B /determine products of a number and 10 or 100 using properties of operations and place value understandings 4.4G /round to the nearest 10, 100, or 1,000 or use compatible numbers to estimate solutions involving whole numbers	Category 2 Supporting Category 2 Supporting	SP 27 SP 28	HO 1 SA 1 HO 2 SA 2	PS 1 PS 2	Homework 1 Homework 2
Lesson 5 ____ days	4.4D /use strategies and algorithms, including the standard algorithm, to multiply up to a four-digit number by a one-digit number and to multiply a two-digit number by a two-digit number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties 4.4C /represent the product of 2 two-digit numbers using arrays, area models, or equations, including perfect squares through 15 by 15	Category 2 Supporting Category 2 Supporting	SP 29 SP 30 SP 31	SA 1 HO 1 SA 2	PS 1 PS 2	Homework 1 Homework 2
Lesson 6 ____ days	4.5A /represent multi-step problems involving the four operations (multiplication only in lesson) with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity 4.4H /solve with fluency one- and two-step problems involving multiplication...	Category 2 Readiness Category 2 Readiness	SP 32 SP 33 SP 34	SA 1	PS 1	Homework 1
Lesson 7 ____ days	4.5C /use models to determine the formulas for the perimeter of a rectangle ($l + w + l + w$ or $2l + 2w$), including the special form for perimeter of a square ($4s$) and the area of a rectangle ($l \times w$) 4.5D /solve problems related to perimeter and area of rectangles where dimensions are whole numbers	NOT TESTED Category 3 Readiness	SP 35 SP 36 SP 37	HO 1 SA 1 HO 2 SA 2	PS 1 PS 2	Homework 1 Homework 2

TEKSING TOWARD STAAR SCOPE AND SEQUENCE
Grade 4 Mathematics

SIX WEEKS 2

Lesson	TEKS-BASED LESSON CONTENT	STAAR Category Standard	Spiraled Practice	Student (SA) and Hands-On (HO) Activity	Problem Solving	Skills and Concepts Homework
Lesson 8 ____ days	4.6A /identify ...rays, angles...and perpendicular...lines 4.6C /apply knowledge of right angles to identify acute, right, and obtuse triangles 4.6D /classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size	Category 3 Supporting Category 3 Supporting Category 3 Readiness	SP 38 SP 39 SP 40	HO 1 HO 2 HO 3 SA 1 HO 4 SA 2	PS 1 PS 2	Homework 1 Homework 2
Review	Six Weeks 2 Open-Ended Review					
Assessment	Six Weeks 2 Assessment					

TEACHER NOTES:

TEKSING TOWARD STAAR SCOPE AND SEQUENCE

Grade 4 Mathematics

SIX WEEKS 3

Lesson	TEKS-BASED LESSON CONTENT	STAAR Category Standard	Spiraled Practice	Student (SA) and Hands-On (HO) Activity	Problem Solving	Skills and Concepts Homework
Lesson 1 ____ days	<p>4.4E/represent the quotient of up to a four-digit whole number divided by a one-digit whole number using arrays, area models, or equations</p> <p>4.4F/ use strategies and algorithms, including the standard algorithm, to divide up to a four-digit dividend by a one-digit divisor</p> <p>4.4G/ round to the nearest 10, 100, or 1,000 or use compatible numbers to estimate solutions involving whole numbers</p>	<p>Category 2 Supporting</p> <p>Category 2 Supporting</p> <p>Category 2 Supporting</p>	<p>SP 41</p> <p>SP 42</p> <p>SP 43</p>	<p>SA 1</p> <p>SA 2</p> <p>SA 3</p> <p>HO 1</p>	<p>PS 1</p> <p>PS 2</p> <p>PS 3</p>	<p>Homework 1</p> <p>Homework 2</p>
Lesson 2 ____ days	<p>4.4H/solve with fluency one- and two-step problems involving...division, including interpreting remainders</p> <p>4.5A/represent multi-step problems involving the four operations (division only) with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity</p>	<p>Category 2 Readiness</p> <p>Category 2 Readiness</p>	<p>SP 44</p> <p>SP 45</p> <p>SP 46</p>	<p>SA 1</p> <p>SA 2</p>	<p>PS 1</p> <p>PS 2</p>	<p>Homework 1</p> <p>Homework 2</p>
Lesson 3 ____ days	<p>4.5B/represent problems using an input-output table and numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values in the resulting sequence and their position in the sequence (multiplication and division)</p>	<p>Category 2 Readiness</p>	<p>SP 47</p> <p>SP 48</p>	<p>HO 1</p> <p>SA 1</p>	<p>PS 1</p> <p>PS 2</p>	<p>Homework 1</p> <p>Homework 2</p>
Lesson 4 ____ days	<p>4.8A/identify relative sizes of measurement units within the customary and metric systems</p> <p>4.8B/convert measurements within the same measurement system, customary or metric, from a smaller unit into a larger unit or a larger unit into a smaller unit when given other equivalent measures represented in a table</p>	<p>Category 3 Supporting</p> <p>Category 3 Supporting</p>	<p>SP 49</p> <p>SP 50</p> <p>SP 51</p>	<p>HO 1</p> <p>HO 2</p> <p>SA 1</p> <p>HO 3</p> <p>SA 2</p>	<p>PS 1</p> <p>PS 2</p>	<p>Homework 1</p> <p>Homework 2</p>
Lesson 5 ____ days	<p>4.7A/illustrate the measure of an angle as the part of a circle whose center is at the vertex of the angle that is "cut out" by the rays of the angle. Angle measures are limited to whole numbers</p> <p>4.7B//illustrate degrees as the units used to measure an angle, where 1/360 of any circle is one degrees and an angle that "cuts" $n/360$ out of any circle whose center is at the angle's vertex has a measure of n degrees. Angle measures are limited to whole numbers</p> <p>4.7C/determine the approximate measures of angles in degrees to the nearest whole number using a protractor</p>	<p>NOT TESTED</p> <p>NOT TESTED</p> <p>Category 3 Readiness</p>	<p>SP 52</p> <p>SP 53</p> <p>SP 54</p>	<p>HO 1</p> <p>SA 1</p> <p>HO 2</p> <p>SA 2</p>	<p>PS 1</p> <p>PS 2</p>	<p>Homework 1</p> <p>Homework 2</p>
Lesson 6 ____ days	<p>4.9A/represent data on a...dot plot...with whole numbers and fractions</p> <p>4.9B/solve one- and two-step problems using data in whole number, decimal, and fraction form in a...dot plot</p>	<p>Category 4 Readiness</p> <p>Category 4 Supporting</p>	<p>SP 55</p> <p>SP 56</p> <p>SP 57</p>	<p>SA 1</p> <p>HO 1</p> <p>SA 2</p>	<p>PS 1</p> <p>PS 2</p>	<p>Homework 1</p> <p>Homework 2</p>

TEKSING TOWARD STAAR SCOPE AND SEQUENCE
Grade 4 Mathematics

SIX WEEKS 3

Lesson	TEKS-BASED LESSON CONTENT	STAAR Category Standard	Spiraled Practice	Student (SA) and Hands-On (HO) Activity	Problem Solving	Skills and Concepts Homework
Lesson 7 ____ days	4.10B/calculate profit in a given situation	Category 4 Supporting	SP 58 SP 59 SP 60	HO 1 SA 1	PS 1	Homework 1
Review	Six Weeks 3 Open-Ended Review					
Assessment	Six Weeks 3 Assessment					

TEACHER NOTES:

TEKSING TOWARD STAAR SCOPE AND SEQUENCE

Grade 4 Mathematics

SIX WEEKS 4

Lesson	TEKS-BASED LESSON CONTENT	STAAR Category Standard	Spiraled Practice	Student (SA) and Hands-On (HO) Activity	Problem Solving	Skills and Concepts Homework
Lesson 1 ____ days	4.6B /interpret and draw one or more lines of symmetry, if they exist, for a two-dimensional figure	Category 3 Supporting	SP 61 SP 62 SP 63	SA 1 HO 1 HO 2 SA 2	PS 1 PS 2	Homework 1 Homework 2
Lesson 2 ____ days	4.7D /draw an angle with a given measure 4.7E /determine the measure of an unknown angle formed by two non-overlapping adjacent angles given one or both angle measures	Category 3 Supporting Category 3 Supporting	SP 64 SP 65 SP 66	HO 1 SA 1 HO 2 SA 1 HO 3	PS 1 PS 2	Homework 1 Homework 2
Lesson 3 ____ days	4.8C /solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate	Category 3 Readiness	SP 67 SP 68 SP 69 SP 70 SP 71 SP 72 SP 73 SP 74	SA 1 HO 1 SA 2 HO 2 SA 3 HO 3 SA 4 HO 4 SA 5	PS 1 PS 2 PS 3 PS 4 PS 5	Homework 1 Homework 2 Homework 3 Homework 4 Homework 5
Lesson 4 ____ days	4.9A /represent data on a...stem-and-leaf plot with whole numbers and fractions 4.9B /solve one- and two-step problems using data in whole number, decimal, and fraction form in a...stem-and-leaf plot	Category 4 Readiness Category 4 Supporting	SP 75 SP 76 SP 77	SA 1 SA 2	PS 1 PS 2	Homework 1 Homework 2
Lesson 5 ____ days	4.10E /describe the basic purpose of financial institutions, including keeping money safe, borrowing money, and lending.	Category 4 Supporting	SP 78 SP 79 SP 80	SA 1	PS 1	Homework 1
Review	Six Weeks 4 Open-Ended Review					
Assessment	Six Weeks 4 Assessment					

TEACHER NOTES:

TEKSING TOWARD STAAR SCOPE AND SEQUENCE

Grade 4 Mathematics

SIX WEEKS 5

Lesson	TEKS-BASED LESSON CONTENT	STAAR Category Standard	Spiraled Practice	Student (SA) and Hands-On (HO) Activity	Problem Solving	Skills and Concepts Homework
Lesson 1 ____ days	4.1A /apply mathematics to problems arising in everyday life, society, and the workplace	Category 1-4 Review of TEKS	SP 81 SP 82	SA 1 SA 2 SA 3	PS 1 PS 2 PS 3	Homework 1 Homework 2 Homework 3
Lesson 2 ____ days	4.1B /use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution	Category 1-4 Review of TEKS	SP 83 SP 84 SP 85	SA 1 SA 2 SA 3	PS 1 PS 2 PS 3	Homework 1 Homework 2 Homework 3
Lesson 3 ____ days	4.1C /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	Category 1-4 Review of TEKS	SP 86 SP 87 SP 88	SA 1 SA 2 SA 3	PS 1 PS 2 PS 3	Homework 1 Homework 2 Homework 3
Lesson 4 ____ days	4.1D /communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate	Category 1-4 Review of TEKS	SP 89 SP 90 SP 91	SA 1 SA 2 SA 3	PS 1 PS 2 PS 3	Homework 1 Homework 2 Homework 3
Lesson 5 ____ days	4.1E /create and use representations to organize, record, and communicate mathematical ideas	Category 1-4 Review of TEKS	SP 92 SP 93 SP 94	SA 1 SA 2 SA 3	PS 1 PS 2 PS 3	Homework 1 Homework 2 Homework 3
Lesson 6 ____ days	4.1F / analyze mathematical relationships to connect and communicate mathematical ideas	Category 1-4 Review of TEKS	SP 95 SP 96 SP 97	SA 1 SA 2 SA 3	PS 1 PS 2 PS 3	Homework 1 Homework 2 Homework 3
Lesson 7 ____ days	4.1G / display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication	Category 1-4 Review of TEKS	SP 98 SP 99 SP 100	SA 1 SA 2 SA 3	PS 1 PS 2 PS 3	Homework 1 Homework 2 Homework 3
Review	Six Weeks 5 Open-Ended Review					
Assessment	Six Weeks 5 Assessment					

TEACHER NOTES:

TEKSING TOWARD STAAR SCOPE AND SEQUENCE

Grade 4 Mathematics

SIX WEEKS 6

Lesson	TEKS-BASED LESSON CONTENT	STAAR Category Standard	Spiraled Practice	Student (SA) and Hands-On (HO) Activity	Problem Solving	Skills and Concepts Homework
	NOTE: Begin the Six Weeks with Spiraled Practice 101-120 as a tool to review all TEKS – students should answer the problems on these spirals individually and should follow all testing rules in effect during the administration of the actual STAAR – sharing of student work on these problems should continue the procedure used throughout the school year	Category 1-4 Review of TEKS	SP 101- SP 120			
Lesson 1 ____ days	4.10C /compare the advantages and disadvantages of various savings options	NOT TESTED		SA 1	PS 1	Homework 1
Lesson 2 ____ days	4.10D /describe how to allocate a weekly allowance among spending; saving, including for college; and sharing	NOT TESTED		SA 1	PS 1	Homework 1

TEACHER NOTES: