

# GRADE 3 TEKS/STAAR-BASED LESSONS

# TEACHER GUIDE General Information

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# OVERVIEW Grade 3 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 and 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 3. 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 wholeclass 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 <sup>1</sup>/<sub>2</sub> 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 ½ 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 <sup>1</sup>/<sub>2</sub> 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*, Parental Roles and Common Questions, Student Activity Sample, Problem-Solving Sample, Skills and Concepts Homework Sample, Mini-Assessment Sample, Problem-Solving Model, 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 the author via e-mail.

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LESSON	MATERIALS NEEDED				
1	<ol> <li>Math Background Part I         Per pair of students: 250 stir sticks and rubber bands, 1 set of base-10 blocks, 2 thousands cubes, 10 flats, 10 rods, 10 units     </li> </ol>				
	<ul> <li>Problem-Solving 1         Per student: 1 copy of Problem-Solving Plan for math notebook, 1 copy of Problem-Solving Questions         Per pair of students: 1,000 stir sticks, rubber bands, and a gallon baggie     </li> </ul>				
	<ul> <li>3. Student Activity 1</li> <li>Per pair of students: 1 set of base-10 sticks made during Problem-Solving 1, 1 set of base-10 blocks (3 thousand cubes, 9 hundred flats, 9 ten rods, 9 unit cubes)</li> </ul>				
	4. Hands-On Activity 1 Per student: 1 Place Value Game Board Per pair of students: 10-section spinner (copy the spinner on cardstock and laminate), 1 sharp pencil and 1 small paper clip to make the pointer for the spinner				
2	<ol> <li>Hands-On Activity 1         Per pair: Rounding Roller Coaster Models 1, 2, 3, and 4 per pair of students         (Be sure to use master in Cardstock Masters folder - Copy on cardstock,         laminate and cut along dotted lines), 1 set of numbers (copy on cardstock,         copy <i>TEKSING TOWARD STAAR</i> logo on back, laminate, cut out and place in a         zipper baggie)     </li> <li>Hands-On Activity 2</li> </ol>				
	Per pair: 1 local restaurant menu (make copies of a real menu from a local restaurant - use a menu that does not list prices in whole dollar amounts)				
3	1. Student Activity 3 Per pair of students: 2 sheets of white cardstock, 1 set of period labels on cardstock (copy thousands period on pink, ones period on yellow), 1 set of pocket labels on cardstock (copy thousands on pink, and ones on yellow), 1 set of number cards (copy on white cardstock and students cut apart), 1 set of word cards (copy on white cardstock and students cut apart), scissors, tape and glue				
4	<ol> <li>Hands-On Activity 2 Per group of 4: 1 set of Addition and Subtraction Expression Cards (copy on cardstock, copy logo on back, then laminate, cut apart and put in a zipper baggie), 4 Story Problem Record Sheets</li> </ol>				
	<ul> <li>2. Hands-On Activity 3</li> <li>Per pair: 6 number cubes, 2 Number Cube Subtraction Record Sheets, blank paper</li> </ul>				

LESSON	MATERIALS NEEDED						
5	1. Hands-On Activity 1						
	Per group of 4 students: 2 analog clocks, 2 digital clocks						
6	1. Concrete Models of Fractions - Fractional Part of a Whole Object						
	Per student: 2 square pieces of $8\frac{1}{2}$ inch by $8\frac{1}{2}$ inch white copy paper, 1 red						
	crayon and 1 blue crayon, scissors						
	Concrete Models of Fractions - Fractional Part of a Set of Objects Per student: 6 pennies, pattern blocks (4 green triangles, 2 red trapezoids)						
	<ul> <li>2. Hands-On Activity 1</li> <li>Per student - scissors, blue crayon and red crayon</li> </ul>						
	<b>3. Hands-On Activity 2</b> Per pair of students: zipper baggie containing 4 red color tiles, 4 blue color tiles, 6 pennies, 3 yellow cubes, and 3 green cubes						
	4. Problem-Solving 1 Per pair of students: 8 blue and 8 red color tiles						
	<b>5. Hands-On Activity 3</b> Per pair of students: Fraction Model Kit that includes fraction number cards, fraction word cards, two 4" by 8" white paper rectangles, two 4" by 4" white paper squares, 8 red color tiles, 8 blue color tiles, 8 pennies, set of pattern blocks (8 yellow hexagons, 8 blue rhombuses, 8 red trapezoids, 8 green triangles)						
	6. Student Activity 1 Per pair of students: zipper baggie containing 1 set of fraction bars, 1 colored pencil						
7	1. Hands-On Activity 1						
	Per pair of students: 1 set of two-dimensional figures cut-out pages, 2 pair of scissors, 1 zipper gallon baggie, 2 pencils						
	3. Hands-On Activity 2						
	Per group of 4: 1 set of Geometry Go Fishing Cards (copy each page on cardstock, then copy Geometry Go-Fishing logo on the opposite side, then cut apart), 1 Geometry Go-Fishing Attributes Chart, (copy on cardstock and laminate), 1 number cube						

LESSON	MATERIALS NEEDED					
8	1. Problem-Solving 1					
	Per pair of students: 1 set of Polygon 1 and Polygon 2 (copy Teacher Notes: Problem-Solving 1 on cardstock - each page makes 3 sets), 2 cardstock copies of STAAR Grade 3 Mathematics Reference Materials					
	2. Hands-On Activity 1					
Per group of 4: 4 cardstock copies of Reference Materials, 1 bag of (choose simple items that will be easy to sketch, describe and mea lengths - label this bag Set 1 and label items #1, #2, #3, and #4; items (choose simple items that will be easy to sketch, describe and lengths - label this bag Set 2 and label items #1, #2, #3, and #4						
	3. Student Activity 1					
	Per pair of students: 2 cardstock copies of Reference Materials					
	4. Problem-Solving 2					
	Per pair of students: 1 set of Polygon 1 and Polygon 2 (copy Teacher Notes: Problem-Solving 2 on cardstock - each page makes 4 sets), 2 cardstock copies of STAAR Grade 3 Mathematics Reference Materials					
	5. Student Activity 2					
	Per pair of students: 2 cardstock copies of Reference Materials					
	6. Hands-On Activity 2					
	Triangle Paper					
	Per teacher: 1 set of overhead Pattern Blocks					
9	1 Hands-On Activity 1					
	Per pair of students: 2 number cubes labeled 1-6					
	2 Hands-On Activity 2					
	2. Hallus-Oll Activity 2 Der pair of students, 1 "Disture Derfest Table" page (senv en white paper					
	1 Picture Perfect Pictograph" page (copy on white paper), 1 page of milk carton symbols (copy on white paper), 2 pair of scissors, 1 glue stick					
10	1. Teacher Notes: Problem-Solving 1					
	Per pair of students: Make 1 copy of this page on cardstock, cut along the dashed lines, then laminate for each pair of students, then cut along the lines					

LESSON	MATERIALS NEEDED						
1	1. Hands-On Activity 1						
	For the teacher: the book <i>Alexander Who Used to Be Rich Last Sunday</i> by Judith Viorst						
	Per pair of students: collection of play money coins and bills, 1 copy of "Alexander's Money Record Sheet"						
	2. Student Activity 1						
	Per pair of students: collection of play money coins and bills						
	3. Hands-On Activity 2						
	For the class: 25 price labels (copy on cardstock, then cut out, write a price for an item, then tape the label on the item), 25 items for a classroom store with a price label on each item						
	Per group of 4: collection of coins and bills (the collection should be less than the amount needed to purchase 10 items in the store)						
2	1. Hands-On Activity 1						
	Per group of 4: 1 set of Multiplication Expression Cards (copy on cardstock,						
	copy logo on back, then laminate, cut apart and put in a zipper baggie)						
3	1.Problem-Solving 1						
4	1. Problem-Solving 1 Por pair of students: 50 round counters in a zinner baggio						
	<ul> <li>Per pair of students: 50 round counters in a zipper baggie</li> <li>Hands-On Activity 1</li> </ul>						
	Per pair of students: 50 color tiles in a zipper baggie, 50 round counters in zipper baggie						
	3. Problem-Solving 2						
	Per pair of students: 1 multiplication chart for each pair of students, 1 of each of these color pencils: green, yellow, red, blue, orange						
	4. Student Activity 1						
	Per student: 1 of each of these color pencils: yellow, green, red, blue, purple, and orange						
	5. Hands-On Activity 2						
	Per pair of students: 1 set of Triangular Flash Cards per pair of students (copy on colored cardstock, cold laminate, cut out, and place in a zipper baggie)						
	6. Problem-Solving 3						
	Per pair of students: 1 multiplication chart for each pair of students 1 blue and 1 yellow color pencil orange						
	7. Student Activity 2 Per student: 1 of each of these color pencils: yellow, green, red, blue, and purple						
	8. Hands-On Activity 3						
	Per pair of students: 1 set of Triangular Flash Cards per pair of students (copy on colored cardstock, cold laminate, cut out, and place in a zipper baggie)						

LESSON	MATERIALS NEEDED					
5	1. Problem-Solving 1					
	Per pair of students: 75 color tiles in a zipper baggie					
	2. Student Activity 1					
	Per pair of students: 75 color tiles in a zipper baggie					
6	1. Hands-On Activity 1					
	Per pair of students: 3 blank file cards					
	Per pair of students: 30 color tiles, 2 sheets of color tile grid paper (copy extra - students may need more), crayons or markers, 1 scissors, 1 standard ruler					
	Per teacher: 1 set of overhead color tiles for demonstration					
7	1. Hands-On Activity 1					
	Per group of 4: 1 set of 8 geometric solids including at least 1 of each: rectangular prism, cube, triangular prism, cylinder, cone, and sphere (use a sticky label to number the solids 1-8 and place the solids in a gallon zipper bag)					
	2. Hands-On Activity 2					
	Per group of 4: 1 set of Geometry Go Fishing Cards (copy one side of each page on cardstock and copy <i>TEKSING TOWARD STAAR</i> logo on the opposite side, then cut apart), 1 Geometry Go-Fishing Attributes Chart (copy on cardstock and laminate), 1 number cube					
8	1. Hands-On Activity 1					
	Per pair of students: 1 set of 20 Pattern Blocks (3 yellow hexagons, 4 red trapezoids, 6 blue rhombuses, and 7 green triangles in a zipper baggie), 1					
	spinner labeled $\frac{1}{2}$ , $\frac{1}{2}$ , $\frac{1}{6}$ , and 1 (copy the spinner on cardstock, laminate, then					
	cut out), 1 sharp pencil and 1 small paper clip to make the pointer for the spinner					
	2. Hands-On Activity 2					
	Per pair of students: 1 set of fraction strips and unit fractions in a zipper gallon baggie					
9	1. Math Background - Part I					
	For the teacher: (items for display for the class to represent capacity benchmarks) 8 oz. milk carton from the school cafeteria , 16 oz. can of tomato sauce, 1 quart orange juice carton, 1 gallon milk jug, 1 milliliter eyedropper, 1 liter bottle of water					
	2. Hands-On Activity 1 Per group of 4: 1 busboy tray or large box to hold the materials for this activity, 1 gallon container, 1 quart container, 1 pint container, 1 cup container, 1 ounce container, 1 tablespoon (measuring spoon), 1 teaspoon (measuring spoon), 1 medicine dropper marked with milliliters, 1 liter container					

LESSON	MATERIALS NEEDED					
9 (continued)	Per class: a collection of containers with the approximate capacity of: 2 gallons, 3 quarts, 4 pints, 2 cups, 5 ounces, 4 tablespoons, 3 teaspoons, 15 milliliters, 2 liters, 5 liters (at least 6 of each capacity), large bags of rice or dried beans to fill containers during Part 2 (enough for each group to fill two 1 gallon containers) - give each group 1 tub of rice or dried beans					
	3. Hands-On Activity 2 Per group of 4: 1 kitchen scale that measures ounces and up to 5 pounds Per class: a collection of objects with the approximate weight of 1 ounce, 1 pound, 2 ounces, 2 pounds, 3 ounces, 3 pounds, 4 ounces, 4 pounds, 5 ounces, 5 pounds (at least 6 of each weight)					
10	1. Hands-On Activity 1					
	Per pair of students: 1 box of crayons per partner pair					

LESSON	MATERIALS NEEDED					
1	<ol> <li>Hands-On Activity 1         Per pair of students: 2 sheets of Base Ten Grid Paper, 1 box of colored pencils (have extra sheets of Base Ten Grid Paper available)     </li> </ol>					
2	<ol> <li>Hands-On Activity 1         Per pair of students: 24 centimeter cubes and 12 small paper cups     </li> <li>Student Activity 1         Des pair of students: C0 centimeter subsects a single handle     </li> </ol>					
	<ul> <li>3. Hands-On Activity 2</li> <li>Per pair of students: 1 set of Triangular Flash Cards on cardstock, 2 zipper baggies, 2 pair of scissors</li> </ul>					
3	1. Hands-On Activity 1 Per student: 1 Even or Odd Game Board Per group of 4: 110-section spinner per group of 4 (copy the spinner on cardstock and laminate), 1 sharp pencil and 1 small paper clip for each group to make the pointer for the spinner					
4	<ol> <li>Part I Projections - Using Objects         Each student: 25 counters in a zipper baggie and 1 sheet of white copy paper     </li> <li>Problem-Solving 1         Der pair of students: 75 color tiles in a zipper baggie     </li> </ol>					
	<b>3. Student Activity 1</b> Per pair of students: 75 color tiles in a zipper baggie					
5	1. Problem-Solving 1 Per pair of students: 8 sheets of construction paper, scissors					
	<ul> <li>2. Problem-Solving 2         Per pair of students: 1 set of bills and coins (3/\$1 bills, 8 quarters, 10 dimes, 10 nickels )     </li> </ul>					
6	<ol> <li>Problem-Solving 1         Per pair of students: 1 geoboard and 1 geoband (have additional geobands available in case bands break), 1 3" x 5 " note card, 1 sheet of geodot paper (use master in Lesson Activity Masters folder - copy on white paper)     </li> </ol>					
	2. Problem-Solving 2 Per pair of students: 1 geoboard and 1 geoband (have additional geobands available in case bands break), 1 3" x 5 " note card, 1 sheet of geodot paper (use master in Lesson Activity Masters folder - copy on white paper)					
	<b>3. Hands-On Activity 1</b> Per group of 4: 1 set of Geometry Go Fishing Cards (copy one side of each page on cardstock and copy <i>TEKSING TOWARD STAAR</i> logo on the opposite side, then cut apart), 1 Geometry Go-Fishing Attributes Chart (copy on cardstock and laminate), 1 number cube					

LESSON	MATERIALS NEEDED					
7	<b>1. Problem-Solving 1</b> Per pair of students: 1 number cube 1-6, 1 Problem-Solving 1 Dot Plots record sheet (copy from Activity Masters folder)					
	2. Hands-On Activity 1 Per pair of students: 1 box of crayons per partner pair, 1 sheet of white paper					
	3. Problem-Solving 2					
	Per pair of students: 1 Problem-Solving 1 Dot Plots record sheet (completed during Problem-Solving 1					
8	No additional materials needed					

LESSON	MATERIALS NEEDED					
1	<ol> <li>Hands-On Activity 1         Per pair of students: 1 set of Triangular Flash Cards (copy on cardstock), 2         zipper baggies, 2 pair of scissors     </li> </ol>					
	<ul> <li>Hands-On Activity 2</li> <li>Per group of 4: 1 set of Equation Cards (copy on cardstock, copy logo on back, then laminate, cut apart and put in a zipper baggie), 4 Story Problem Record Sheets</li> </ul>					
2	Problem-Solving 1 Per pair of students: 1 sheet of white copy paper					
	<ol> <li>Student Activity 1         Per pair of students: 1 set of fraction strips copied on cardstock, cut out and put in a zipper baggie.     </li> </ol>					
	3. Hands-On Activity 1					
	Per pair of students: 1 set of Cuisenaire® rods, crayons the same color as the Cuisenaire® rods					
	<b>4. Hands-On Activity 2</b> Per group of 4: 1 set of fraction cards (copy on cardstock, copy <i>TEKSING</i> <i>TOWARD STAAR</i> logo on back, laminate, cut along dashed lines then place					
	cards in a zipper baggie), 1 set of fraction bars (copy on cardstock, laminate, cut along lines and place cards in a zipper baggie)					
3	<ol> <li>Hands-On Activity 1         Per pair of students: 4 squares of white paper (all squares need to be the same size), ruler, crayons (red, blue, yellow and green)     </li> </ol>					
	Hands-On Activity 2 Per pair of students: 1 set of multi-link cubes - 8 of 1 color and 8 of a different color, 1 box of crayons, 1 coin					
4	No additional materials are needed for this lesson.					
5	1. Hands-On Activity 1					
	Per pair of students: 10 color tiles in a zipper baggie					
	2. Teacher Notes: Problem Solving 1					
	Per pair of students: 40 color tiles in a zipper baggie, 1 piece of color tile grid paper					
	3. Hands-On Activity 2					
	Per pair of students: 2 hexagon pattern blocks, 2 hexagon pattern blocks, 3 rhombus pattern blocks, 6 triangle pattern blocks, 6 different color pencils, 2 rulers					
	4. Teacher Notes: Problem Solving 1					
	Per pair of students: 2 sheets of grid paper on white copy paper, crayons <b>NOTE:</b> Copy the master in the Activity Masters for Lesson 5					
6	<b>1. Teacher Resource:</b> http://economicstexas.org/ - download <i>free Personal</i> <i>Financial Literacy for Grade 2-3 Classrooms</i> from the Texas Council on Economic Education					
	Grade 3 Lessons - Lesson 4: "Flat Broke"					

LESSON	MATERIALS NEEDED					
7	<b>1. Teacher Resource:</b> http://economicstexas.org/ - download free Personal					
	Financial Literacy for Grade 2-3 Classrooms from the Texas Council on					
	Economic Education					
	Grade 3 Lessons - Lesson 5: "Pooling Our Savings"					

LESSON	MATERIALS NEEDED					
1	1. Hands-On Activity 1					
	For the teacher: The Math Curse by John Scleszka					
	Per pair of students: "Our Everyday Mathematics Story" recording sheet					
2	Per pair of students: 1 "Our Problem-Solving Procedures" sheet, 1 highlighter Per class: 1 set of Problem Cards - Page 1 and Problem Cards - Page 2 (copy on cardstock, copy <i>TEKSING TOWARD STAAR</i> logo on the back, laminate, cut apart and place in a zipper baggie)					
	2. Hands-On Activity 2					
	Per pair of students: 1 "Problem-Solving Strategies" sheet, 1 highlighter Per class: 1 set of Problem Cards - Page 1 and Problem Cards - Page 2 (copy on cardstock, copy <i>TEKSING TOWARD STAAR</i> logo on the back, laminate, cut apart and place in a zipper baggie)					
	3. Problem-Solving 3					
	Per pair of students: 1 sheet of grid paper					
3	1. Hands-On Activity 1					
	Per pair of students: 1 mirror, sheets of plain white paper, pencils, crayons, computer with software that automatically replicates a design drawn on one side of a line of symmetry so that the complete picture remains symmetrical					
4	1. Hands-On Activity 1					
	For the class: empty cafeteria milk cartons the students in the class drink during 1 week at school, class data record to record the data for each day, computer software that will automatically create a bar graph from data Per pair of students: 1 "Drinking Milk Class Data Record Sheet"					
5	1. Hands-On Activity 1					
	Per pair of students: 1 set of play money					
	For the teacher: Alexander Who Used To Be Rich Last Sunday, by Judith Vorst					
6	1. Problem-Solving 1 Per pair of students: 1 copy of the fraction strips on cardstock (cut along the dashed line on the Activity Master to make enough for 3 pairs of students), scissors, 1 sheet of white paper					
	2. Hands-On Activity 2					
	Per pair of students: 1 Hundreds Chart					
7	No materials needed					





GRADE 3 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 3 Class Profile for Spiraled Practice

# Teacher Class \_\_\_

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	STAAR REPORTING CATEGORY 1: NUMERICAL REPRESENTATIONS AND RELATIONSHIPS											
Standard	TEKS	Student Expectation				Clas	s Peri	forma	nce			
Readiness	3.2(A)	compose and decompose numbers up to 100,000 as a sum of so many ten thousands, so many	1	10	18	27	36	45	53	62	71	80
		thousands, so many hundreds, so many tens, and so many ones using objects, pictorial models, and	88	93	103	108						
		numbers, including expanded notation as appropriate										
Supporting	3.2(B)	describe the mathematical relationships found in the base-10 place value system through the bundred thousands place	31	46	60	95						
			-									
Supporting	3.2(C)	represent a number on a number line as being between two consecutive multiples of 10; 100; 1,000; or 10,000 and use words to describe relative	2	33	97	117						
Depdipers	(ח) ב ב	size of numbers in order to round whole numbers	2	10	21	20	20	47	FC	6 E	72	02
Reduitiess	3.2(D)	and represent comparisons using the symbols >,	5	12	21	30	30	47	50	05	/3	02
		<, or =	90	96	105	111						
Supporting	3 3(V)	represent fractions greater than zero and loss than	7	37	66	100						
Supporting	5.5(A)	or equal to one with denominators of 2, 3, 4, 6, and 8 using concrete objects and pictorial models,	/	57	00	100						
Supporting	3.3(B)	including strip diagrams and number lines determine the corresponding fraction greater than	11	40	68	102						
Supporting	515(2)	zero and less than or equal to one with denominators of 2, 3, 4, 6, and 8 given a specified				102						
Supporting	3.3(C)	explain that the unit fraction 1/b represents the	5	13	42	72						
		quantity formed by one part of a whole that has been partitioned into <i>b</i> equal parts where <i>b</i> is a non-zero whole number										
Supporting	3.3(D)	compose and decompose a fraction <i>a/b</i> with a numerator greater than zero and less than or	16	64	75	112						
		equal to $b$ as a sum of parts $1/b$										
Supporting	3.3(E)	solve problems involving partitioning an object or a set of objects among two or more recipients	20	48	77	115						
		denominators of 2, 3, 4, 6, and 8										
Readiness	3.3(F)	represent equivalent fractions with denominators of 2, 3, 4, 6, and 8 using a variety of objects and	6	15	23	32	41	50	58	67	76	85
		pictorial models, including number lines	91	98	106	113						
Supporting	3.3(G)	explain that two fractions are equivalent if and only if they are both represented by the same	22	51	81	110						
		point on the number line or represent the same portion of a same size whole for an area model										
Readiness	3.3(H)	compare two fractions having the same numerator or denominator in problems by reasoning about	8	17	26	35	43	52	61	70	78	87
		their sizes and justifying the conclusion using symbols, words, objects, and pictorial models	92	101	107	116						
Supporting	3.4(I)	determine if a number is even or odd using divisibility rules	25	55	83	118						
	0 = / - >					105						
Supporting	3.7(A)	represent fractions of halves, fourths, and eighths as distances from zero on a number line.	28	57	86	120						

	STAAR REPORTING CATEGORY 2: COMPUTATIONS AND ALGEBRAIC RELATIONSHIPS         ndard       TEKS       Student Expectation       Class Performance												
Standard	TEKS	Student Expectation	Class Performance										
Readiness	3.4(A)	solve with fluency one-step and two-step	1	9	15	22	29	36	43	50	57	64	
		within 1,000 using strategies based on place value, properties of operations, and the	71	78	84	92	99	105	114				
Connection	2.4(D)	relationship between addition and subtraction	2	20	20	50		110					
Supporting	3.4(B)	numbers to estimate solutions to addition and subtraction problems	2	20	39	58	//	113					
Supporting	3.4(D)	determine the total number of objects when equally-sized groups of objects are combined or	4	23	41	60	79	98	114				
		arranged in arrays up to 10 by 10											
Supporting	3.4(E)	represent multiplication facts by using a variety of approaches such as repeated addition, equal- sized groups, arrays, area models, equal jumps	6	24	44	62	81	99	116				
		on a number line, and skip counting		~ -									
Supporting	3.4(F)	automaticity and recall the corresponding division facts	8	27	45	83	95	102	118				
Supporting	3 4(G)	use strategies and algorithms, including standard	10	29	48	66	85	104	119				
Supporting	511(0)	algorithm, to multiply a two-digit number by a one-digit number: mental math, partial products;						101					
Supporting	3.4(H)	determine the number of objects in each group	12	31	49	69	87	106					
		when a set of objects is partitioned into equal shares or a set of objects is shared equally											
Supporting	3.4(J)	determine a quotient using the relationship between multiplication and division	14	33	52	70	89	108					
Readiness	3.4(K)	solve one-step and two-step problems involving multiplication and division within 100 using	3	9	17	24	30	38	44	51	59	65	
		strategies based on objects; pictorial models, including arrays, area models, and equal groups; properties of opprations; or recall of facts	72	79	86	93	100	107	115				
Readiness	3.5(A)	represent one- and two-step problems involving	4	11	19	25	32	39	46	53	59	67	
		addition and subtraction of whole numbers to	74	80	88	94	101	109	117				
		equations											
Readiness	3.5(B)	represent and solve one- and two-step	5	13	19	26	34	40	47	54	61	68	
		multiplication and division problems within 100 using arrays, strip diagrams, and equations	75	82	89	96	103	110	119				
Supporting	3.5(C)	describe a multiplication expression as a comparison such as $3 \times 24$ represents $3 \times 24$ rimes as	16	35	54	73	91	109					
		much as 24											
Supporting	3.5(D)	determine the unknown whole number in a multiplication or division equation relating three whole numbers when the unknown is either a	18	37	56	74	94	111					
		missing factor or product											
Readiness	3.5(E)	represent real-world relationships using number pairs in a table and verbal descriptions	7	14	21	28	34	42	49	55	63	69	
			76	84	90	97	104	112	120				

		STAAR REPORTING CATEGORY 3: GEOM	IETR	Y AN	D ME	ASU	REM	ENT				
Standard	TEKS	Student Expectation	Class Performance									
Readiness	3.6(A)	classify and sort two- and three-dimensional solids, including cones, cylinders, spheres, triangular and	1	9	16	24	31	39	48	54	64	73
		rectangular prisms, and cubes, based on attributes using formal geometric language	81	89	98	108	116					
Supporting	3.6(B)	use attributes to recognize rhombuses, parallelograms, trapezoids, rectangles, and squares as examples of quadrilaterals and draw examples that do not belong to any of these subcategories	3	33	63	74	106					
Readiness	3.6(C)	determine the area of rectangles with whole number side lengths in problems using	4	11	19	26	34	43	49	63	68	76
		multiplication related to the number of rows times the number of unit squares in each row	83	91	101	111	119					
Supporting	3.6(D)	decompose composite figures formed by rectangles into non-overlapping rectangles to determine the	8	66	78	109						
		property of area										
Supporting	3.6(E)	decompose two congruent 2-D figures into parts with equal areas and express area of each part as a	13	36	69	84	114					
		of identical wholes need not have the same shape										
Readiness	3.7(B)	determine the perimeter of a polygon or a missing length when given perimeter and	6	14	21	29	38	44	53	58	61	71
		remaining side lengths in problems	79	86	94	104	113					
Supporting	3.7(C)	determine the solutions to problems involving addition & subtraction of time intervals in minutes	18	41	88	93	118					
		using pictorial models or tools such as a 15-min event plus a 30-min event equals 45 min										
Supporting	3.7(D)	determine when it is appropriate to use measurements of liquid volume (capacity) or weight	23	46	56	96	99					
		weight										
Supporting	3.7(E)	determine liquid volume (capacity) or weight using appropriate units and tools	28	51	59	103	112					

	S	TAAR REPORTING CATEGORY 4: DATA ANA	LYSI	S ANI	d fin	ANCI	AL L	ITER	ACY				
Standard	TEKS	Student Expectation	Class Performance										
Supporting	3.4(C)	determine the value of a collection of coins and bills	2	5	35	65	95						
Readiness	3.8(A)	summarize a data set with multiple categories using a frequency table, dot plot, pictograph, or	7	12	17	22	27	32	37	42	47	52	
		bar graph with scaled intervals	57	62	67	72	77	87	92	97	102	117	
Supporting	3.8(B)	solve one- and two-step problems using categorical data represented with a frequency table, dot plot,	10	40	70	82	100						
		pictograph, or bar graph with scaled intervals											
Supporting	3.9(A)	explain the connection between human capital/labor and income	15	45	75	105							
Supporting	3.9(B)	describe the relationship between the availability or scarcity of resources and how that impacts cost	20	50	80	110							
Not Tested	3.9(C)	identify the costs and benefits of planned and unplanned spending decisions											
Supporting	3.9(D)	explain that credit is used when wants or needs exceed the ability to pay and that it is the	25	55	85	115							
		borrower's responsibility to pay it back to the lender, usually with interest											
Supporting	3.9(E)	list reasons to save and explain the benefit of a savings plan, including for college	30	60	90	120							
Not Tested	3.9(F)	identify decisions involving income, spending, saving, credit, and charitable giving											



# Grade 3 Student Profile for Spiraled Practice

# Student Teacher

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	STAAR REPORTING CATEGORY 1: NUMERICAL REPRESENTATIONS AND RELATIONSHIPS											
Standard	TEKS	Student Expectation			:	Stude	nt Pe	rform	nance			_
Readiness	3.2(A)	compose and decompose numbers up to 100,000 as a sum of so many ten thousands, so many	1	10	18	27	36	45	53	62	71	80
		thousands, so many hundreds, so many tens, and so many ones using objects, pictorial models, and	88	93	103	108						
		appropriate										
Supporting	3.2(B)	describe the mathematical relationships found in the base-10 place value system through the	31	46	60	95						
Supporting	3.2(C)	represent a number on a number line as being between two consecutive multiples of 10; 100; 1,000: or 10,000 and use words to describe relative	2	33	97	117						
		size of numbers in order to round whole numbers										
Readiness	3.2(D)	compare and order whole numbers up to 100,000 and represent comparisons using the symbols >,	3	12	21	30	38	47	56	65	73	82
		<, or =	90	96	105	111						
Supporting	3.3(A)	represent fractions greater than zero and less than or equal to one with denominators of 2, 3, 4, 6, and 8 using concrete objects and nictorial models	7	37	66	100						
	2.2(2)	including strip diagrams and number lines		10		100						
Supporting	3.3(B)	determine the corresponding fraction greater than zero and less than or equal to one with	11	40	68	102						
		denominators of 2, 3, 4, 6, and 8 given a specified point on a number line										
Supporting	3.3(C)	explain that the unit fraction 1/b represents the	5	13	42	72						
		been partitioned into <i>b</i> equal parts where <i>b</i> is a non-zero whole number										
Supporting	3.3(D)	compose and decompose a fraction <i>a/b</i> with a numerator greater than zero and less than or	16	64	75	112						
		equal to b as a sum of parts 1/b										
Supporting	3.3(E)	solve problems involving partitioning an object or a set of objects among two or more recipients	20	48	77	115						
		denominators of 2, 3, 4, 6, and 8										
Readiness	3.3(F)	represent equivalent fractions with denominators of 2, 3, 4, 6, and 8 using a variety of objects and	6	15	23	32	41	50	58	67	76	85
		pictorial models, including number lines	91	98	106	113						
Supporting	3.3(G)	explain that two fractions are equivalent if and	22	51	81	110						
		point on the number line or represent the same										
Readiness	3.3(H)	compare two fractions having the same numerator	8	17	26	35	43	52	61	70	78	87
		or denominator in problems by reasoning about their sizes and justifying the conclusion using symbols, words, objects, and pictorial models	92	101	107	116						
Supporting	3.4(I)	determine if a number is even or odd using divisibility rules	25	55	83	118						
Supporting	3.7(A)	represent fractions of halves, fourths, and eighths as distances from zero on a number line.	28	57	86	120						

	STAAR REPORTING CATEGORY 2: COMPUTATIONS AND ALGEBRAIC RELATIONSHIPS           Indard         TEKS         Student Expectation         Student Performance												
Standard	TEKS	Student Expectation	Student Performance										
Readiness	3.4(A)	solve with fluency one-step and two-step	1	9	15	22	29	36	43	50	57	64	
		within 1,000 using strategies based on place	71	78	84	92	99	105	114				
		relationship between addition and subtraction											
Supporting	3.4(B)	round to the nearest 10 or 100 or use compatible numbers to estimate solutions to addition and	2	20	39	58	77	113					
		subtraction problems											
Supporting	3.4(D)	determine the total number of objects when equally-sized groups of objects are combined or	4	23	41	60	79	98	114				
		arranged in arrays up to 10 by 10											
Supporting	3.4(E)	represent multiplication facts by using a variety of approaches such as repeated addition, equal-	6	24	44	62	81	99	116				
		on a number line, and skip counting											
Supporting	3.4(F)	recall facts to multiply up to 10 by 10 with automaticity and recall the corresponding division facts	8	27	45	83	95	102	118				
Supporting	3.4(G)	use strategies and algorithms, including standard algorithm, to multiply a two-digit number by a one-digit number: mental math, partial products;	10	29	48	66	85	104	119				
Cupporting	2 4(11)	commutative, associative, distributive properties	12	21	40	60	07	100					
Supporting	3.4(⊓)	when a set of objects is partitioned into equal shares or a set of objects is shared equally	12	31	49	69	87	106					
Supporting	3.4(J)	determine a quotient using the relationship	14	33	52	70	89	108					
		between multiplication and division											
Readiness	3.4(K)	solve one-step and two-step problems involving	3	9	17	24	30	38	44	51	59	65	
		multiplication and division within 100 using strategies based on objects; pictorial models, including arrays, area models, and equal groups;	72	79	86	93	100	107	115				
		properties of operations; or recall of facts											
Readiness	3.5(A)	represent one- and two-step problems involving addition and subtraction of whole numbers to	4	11	19	25	32	39	46	53	59	67	
		1,000 using pictorial models, number lines, and equations	74	80	88	94	101	109	117				
Readiness	3.5(B)	represent and solve one- and two-step	5	13	19	26	34	40	47	54	61	68	
		multiplication and division problems within 100 using arrays, strip diagrams, and equations	75	82	89	96	103	110	119				
Supporting	3.5(C)	describe a multiplication expression as a	16	35	54	73	91	109					
		much as 24											
Supporting	3.5(D)	determine the unknown whole number in a multiplication or division equation relating three	18	37	56	74	94	111					
		whole numbers when the unknown is either a missing factor or product											
Readiness	3.5(E)	represent real-world relationships using number	7	14	21	28	34	42	49	55	63	69	
			76	84	90	97	104	112	120				

	STAAR REPORTING CATEGORY 3: GEOMETRY AND MEASUREMENT											
Standard	TEKS	Student Expectation	Student Performance									
Readiness	3.6(A)	classify and sort two- and three-dimensional solids, including cones, cylinders, spheres, triangular and	1	9	16	24	31	39	48	54	64	73
		rectangular prisms, and cubes, based on attributes using formal geometric language	81	89	98	108	116					
Supporting	3.6(B)	use attributes to recognize rhombuses, parallelograms, trapezoids, rectangles, and squares as examples of quadrilaterals and draw examples that do not belong to any of these subcategories	3	33	63	74	106					
Readiness	3.6(C)	determine the area of rectangles with whole number side lengths in problems using	4	11	19	26	34	43	49	63	68	76
		multiplication related to the number of rows times the number of unit squares in each row	83	91	101	111	119					
Supporting	3.6(D)	decompose composite figures formed by rectangles into non-overlapping rectangles to determine the area of the original figure using the additive property of area	8	66	78	109						
Supporting	3.6(E)	decompose two congruent 2-D figures into parts with equal areas and express area of each part as a unit fraction of the whole & recognize equal shares of identical wholes need not have the same shape	13	36	69	84	114					
Readiness	3.7(B)	determine the perimeter of a polygon or a missing length when given perimeter and	6	14	21	29	38	44	53	58	61	71
		remaining side lengths in problems	79	86	94	104	113					
Supporting	3.7(C)	determine the solutions to problems involving addition & subtraction of time intervals in minutes	18	41	88	93	118					
		using pictorial models or tools such as a 15-min event plus a 30-min event equals 45 min										
Supporting	3.7(D)	determine when it is appropriate to use measurements of liquid volume (capacity) or weight	23	46	56	96	99					
Supporting	3.7(E)	determine liquid volume (capacity) or weight using appropriate units and tools	28	51	59	103	112					

	S	TAAR REPORTING CATEGORY 4: DATA ANA	LYSIS	S ANI	D FIN	ANCI	AL LI	TER	ACY				
Standard	TEKS	Student Expectation	Student Performance										
Supporting	3.4(C)	determine the value of a collection of coins and bills	2	5	35	65	95						
	2.0(1)			10	47				07	10	17		
Readiness	3.8(A)	summarize a data set with multiple categories using a frequency table, dot plot, pictograph, or	/	12	1/	22	27	32	3/	42	47	52	
		bar graph with scaled intervals	57	62	67	72	77	87	92	97	102	117	
Supporting	3.8(B)	solve one- and two-step problems using categorical data represented with a frequency table, dot plot,	10	40	70	82	100						
		pictograph, or bar graph with scaled intervals											
Supporting	3.9(A)	explain the connection between human capital/labor and income	15	45	75	105							
Supporting	3.9(B)	describe the relationship between the availability or scarcity of resources and how that impacts cost	20	50	80	110							
Not Tested	3.9(C)	identify the costs and benefits of planned and unplanned spending decisions											
Supporting	3.9(D)	explain that credit is used when wants or needs exceed the ability to pay and that it is the	25	55	85	115							
		borrower's responsibility to pay it back to the lender, usually with interest											
Supporting	3.9(E)	list reasons to save and explain the benefit of a savings plan, including for college	30	60	90	120							
Not Tested	3.9(F)	identify decisions involving income, spending, saving, credit, and charitable giving											



# TEKS/STAAR-BASED

# **Grade 3** Scope and Sequence

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# TEKSING TOWARD STAAR SCOPE AND SEQUENCE **Grade 3 Mathematics**

# **SIX WEEKS 1**

Lesson	TEKS-BASED LESSON CONTENT	STAAR Category Standard	Spiraled	Student (SA) and Hands-On (HO)	Problem	Skills and Concepts
Lesson 1	3 2A/compose and decompose numbers up to 100 000 as a sum of so	Category 1				Homowork 1
davs	many ten thousands, so many thousands, so many hundreds, so many	Readiness		SA 1 SA 2		Homework 2
	tens, and so many ones using objects, pictorial models, and numbers,		012	SA 3	PS 3	Homework 3
	including expanded notation as appropriate			SA 4	PS 4	Homework 4
	<b>3.2B</b> /describe the mathematical relationships found in the base-10 place	Category 1		HO 1		
	value system through the hundred thousands place	Supporting				
Lesson 2	<b>3.2C</b> /represent a number on a number line as being between two	Category 1	SP 3	SA 1	PS 1	Homework 1A
days	consecutive multiples of 10; 100; 1,000; or 10,000 and use words to	Supporting	SP 4	HO 1	PS 2	Homework 1B
	describe relative size of numbers in order to round whole numbers		••••	HO 2		Homework 2A
	<b>3.4B</b> /round to the nearest 10 or 100 or use compatible numbers to	Category 2		SA 2		Homework 2B
	estimate solutions to addition and subtraction problems	Supporting		HO 3		
Lesson 3	<b>3.2D/</b> compare and order whole numbers up to 100,000 and represent the	Category 1	SP 5	SA 1	PS 1	Homework 1
days	comparisons using the symbols >, <, or =	Readiness	SP 6	SA 2	PS 2	Homework 2
				HO 1		
Lesson 4	3.5A/represent one- and two-step problems involving addition and	Category 2	SP 7	SA 1	PS 1	Homework 1
days	subtraction of whole numbers to 1,000 using pictorial models, number	Readiness	SP 8	SA 2	PS 2	Homework 2
	lines, and equations			HO 1	PS 3	Homework 3
	<b>3.4</b> A solve with fluency one-step and two-step problems involving	Category 2		SA 3	PS 4	Homework 4
	addition and subtraction within 1,000 using strategies based on place	Readiness		SA 4	PS 5	Homework 5
	value, properties of operations, and the relationships between addition			SA 5	PS 6	Homework 6
	and subtraction			HO 2		
				SA 6		
Lesson 5	<b>3.7C</b> /determine the solutions to problems involving addition and	Category 3	SP 9	HO 1	PS 1	Homework 1
days	such as a 15-minute even plus a 30-minute event equals 45 minutes	Supporting	SP 10	SA 1	PS 2	Homework 2
		Cotomory 1	0044	SA 2		
Lesson 6	<b>3.3</b> A represent fractions greater than zero and less than or equal to one with denominators of 2, 3, 4, 6, and 8 using concrete objects and nictorial	Category 1	SP 11	HO 1	PS 1	Homework 1
days	models, including strip diagrams and number lines	Cuppering	5P 12		P52	Homework 2
	<b>3 7Δ</b> /represent fractions of halves, fourths, and eights as distances from	Category 1				
	zero on a number line	Supporting				
	<b>3.3B</b> /determine the corresponding fraction greater than zero and less than	Category 1				
	or equal to one with denominators of 2, 3, 4, 6, and 8 given a specified point on a number line	Supporting				
Lesson 7	<b>3.6</b> <i>A</i> classify and sort twodimensional figures based on attributes	Category 3	SP 13	HO 1	PS 1	Homework 1
days	using formal geometric language	Readiness	SP 14	SA 1	PS 2	Homework 2
				HO 2		

TEKSING TOWARD STAAR SCOPE AND SEQUENCE Grade 3 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	<b>3.7B</b> /determine the perimeter of a polygon or a missing length when given perimeter and remaining side lengths in problems	Category 3 Readiness	SP 15 SP 16	HO 1 SA 2 HO2 SA2 HO3	PS 1 PS 2	Homework 1 Homework 2			
Lesson 9 days	<ul> <li><b>3.8A</b>/summarize a data set with multiple categories using a frequency tablepictograph</li> <li><b>3.8B</b>/solve one- and two-step problems using categorical data represented with a frequency tablepictograph</li> </ul>	Category 4 Readiness Category 4 Supporting	SP 17 SP 18	HO 1 SA 1 HO 2 SA 2	PS 1 PS 2	Homework 1 Homework 2			
Lesson 10 days	<b>3.9A/</b> explain the connection between human capital/labor and income	Category 4 Supporting	SP 19 SP 20	SA 1	PS 1	Homework 1			
Review Assessment	Six Weeks 1 Open-Ended Review Six Weeks 1 Assessment								

**TEACHER NOTES:** 

TEKSING TOWARD STAAR SCOPE AND SEQUENCE Grade 3 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	<b>3.4C</b> /determine the value of a collection of coins and bills	Category 4 Supporting	SP 21 SP 22	HO1 SA 1 HO 2	PS 1 PS 2	Homework 1 Homework 2					
Lesson 2 days	<b>3.4D</b> /determine the total number of objects when equally sized groups of objects are combined or arranged in arrays up to 10 by 10	Category 2 Supporting	SP 23 SP 24	SA 1 HO 1	PS 1 PS 2	Homework 1 Homework 2					
Lesson 3 days	<b>3.4E/</b> represent multiplication facts by using a variety of approaches such as repeated addition, equal-sized groups, arrays, area models, equal jumps on a number line, and skip counting	Category 2 Supporting	SP 25 SP 26	SA 1	PS 1	Homework 1					
Lesson 4 days	<b>3.4F/</b> recall facts to multiply up to 10 by 10 with automaticity	Category 2 Supporting	SP 27 SP 28	HO 1 SA 1 HO 2 SA 2 HO 3	PS 1 PS 2 PS 3	Homework 1 Homework 2 Homework 3					
Lesson 5 days	<b>3.4K/</b> solve one-step and two-step problems involving multiplication within 100 using strategies based on objects; pictorial models, including arrays, area models, and equal groups; properties of operations; or recall of facts	Category 2 Readiness	SP 29 SP 30	SA 1 SA 2 SA 3	PS 1 PS 2 PS 3	Homework 1 Homework 2 Homework 3					
	<b>3.5B</b> /represent and solve one- and two-step multiplicationproblems within 100 using arrays, strip diagrams, and equations	Category 2 Readiness									
Lesson 6	<b>3.5C</b> /describe a multiplication expression as a comparison such as $3 \times 24$ represents 3 times as much as 24 <b>3.6C</b> /determine the area of rectangles with whole number side lengths in problems using multiplication related to the number of rows times the number of unit squares in each row	Category 2 Supporting Category 3 Readiness	SP 31 SP 32	SA 1 HO 1 HO 2 SA 2	PS 1 PS 2	Homework 1 Homework 2					
Lesson 7 days	<b>3.6A</b> /classify and sort two- and three-dimensional figures, including cones, cylinders, spheres, triangular and rectangular prisms, and cubes, based on attributes using formal geometric language	Category 3 Readiness	SP 33 SP 34	HO 1 SA 1 SA 2 HO 2	PS 1 PS 2	Homework 1 Homework 2					
Lesson 8 days	<b>3.3C/</b> explain that the unit fraction $1/b$ represents the quantity formed by one part of a whole that has been partitioned into <i>b</i> equal parts where <i>b</i> is a non-zero whole number	Category 1 Supporting	SP 35 SP 36	HO 1 SA 1 HO 2	PS 1 PS 2	Homework 1 Homework 2					
	<b>3.3D/</b> compose and decompose a fraction $a/b$ with a numerator greater than zero and less than or equal to $b$ as a sum of parts $1/b$	Category 1 Supporting		SA 2							

TEKSING TOWARD STAAR SCOPE AND SEQUENCE Grade 3 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 9 days	<b>3.7D/</b> determine when it is appropriate to use measurement of liquid volume (capacity) or weight	Category 3 Supporting	SP 37 SP 38	HO 1 SA 1	PS 1 PS 2	Homework 1 Homework 2					
	<b>3.7E/</b> determine liquid volume (capacity) or weight using appropriate units and tools	Category 3 Supporting		HO 2 SA 2							
Lesson 10 days	<b>3.8A/</b> summarize a data set with multiple categories using a…bar graph with scaled intervals	Category 4 Readiness	SP 39 SP 40	SA 1 HO 1	PS 1 PS 2	Homework 1 Homework 2					
	<b>3.8B/</b> solve one- and two-step problems using categorical data represented with abar graph with scaled intervals	Category 4 Supporting		SA 2							
Review	Six Weeks 2 Open-Ended Review										
Assessment	Assessment Six Weeks 2 Assessment										
TEACHER N	IOTES:										

TEKSING TOWARD STAAR SCOPE AND SEQUENCE Grade 3 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	<b>3.4G/</b> use strategies and algorithms, including the standard algorithm, to multiply a two-digit number by a one-digit number. Strategies may include mental math, partial products, and the commutative, associate, and distributive properties	Category 2 Supporting	SP 61 SP 62 SP 63	SA 1 HO1 SA 2 HO 2	PS 1 PS 2	Homework 1 Homework 2 Homework 3
Lesson 2	<ul> <li>3.4H/determine the number of objects in each group when a set of objects is partitioned into equal shares or a set of objects is shared equally</li> <li>3.4F/recall facts to multiply up to 10 by 10 with automaticity and recall the corresponding division facts</li> <li>3.4J/determine a quotient using the relationship between multiplication and division</li> </ul>	Category 2 Supporting Category 2 Supporting Category 2 Supporting	SP 64 SP 65 SP 66	HO 1 SA 1 SA 2 HO 2 SA 3	PS 1 PS 2 PS 3	Homework 1 Homework 2
Lesson 3 days	<b>3.4I/</b> determine if a number is even or odd using divisibility rules	Category 1 Supporting	SP 67 SP 68	SA 1 HO 1	PS 1	Homework 1
Lesson 4 days	<ul> <li>3.5B/represent and solve one- and two-stepdivision problems within 100 using arrays, strip diagrams, and equations</li> <li>3.4K/solve one-step and two-step problems involvingdivision within 100 based on objects; pictorial models, including arrays, area models, and equal groups; properties of operations or recall of facts</li> </ul>	Category 2 Readiness Category 2 Readiness	SP 69 SP 70 SP 71	SA 1 SA 2 SA 3	PS 1 PS 2 PS 3	Homework 1 Homework 2 Homework 3
Lesson 5 days	<b>3.3E/</b> solve problems involving partitioning an object or a set of objects among two or more recipients using pictorial representations of fractions with denominators of 2, 3, 4, 6, and 8	Category 1 Supporting	SP 72 SP 73	SA 1	PS 1 PS 2	Homework 1
Lesson 6 days	<b>3.6B/</b> use attributes to recognize rhombuses, parallelograms, trapezoids, rectangles, and squares as examples of quadrilaterals and draw examples of quadrilaterals that do not belong to any of these subcategories	Category 3 Supporting	SP 74 SP 75	SA 1 SA 2 HO 1	PS 1 PS 2	Homework 1 Homework 2
Lesson 7 days	<ul> <li>3.8A/summarize a data set with multiple categories using adot plot with scaled intervals</li> <li>3.8B/solve one- and two-step problems using categorical data represented with a dot plot</li> </ul>	Category 4 Readiness Category 4 Supporting	SP 76 SP 77	SA 1 SA 2 HO 1	PS 1 PS 2	Homework 1 Homework 2
Lesson 8 days	<b>3.9B/</b> describe the relationship between the availability or scarcity of resources and how that impacts cost	Category 4 Supporting	SP 78 SP 79 SP 80	SA 1	PS 1	Homework 1
Review	Six Weeks 3 Open-Ended Review					
Assessment Six Weeks 3 Assessment						
TEACHER NOTES:						

Grade 3 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	<b>3.5D/</b> determine the unknown whole number in a multiplication or a division equation relating three whole numbers when the unknown is either a missing factor or a product	Category 2 Supporting	SP 61 SP 62 SP 63	HO 1 SA 1 SA 2 HO 2	PS 1 PS 2	Homework 1 Homework 2	
Lesson 2 days	<ul> <li>3.3F/represent equivalent fractions with denominators of 2, 3, 4, 6, and 8 using a variety of objects and pictorial models, including number lines</li> <li>3.3G/explain that two fractions are equivalent if and only if they are both represented by the same point on the number line or represent the same portion of a same size whole for an area model</li> </ul>	Category 1 Readiness Category 1 Supporting	SP 64 SP 65 SP 66	SA 1 HO 1 SA 2 HO 2	PS 1 PS 2	Homework 1 Homework 2	
Lesson 3 days	<b>3.3H</b> /compare two fractions having the same numerator or denominator in problems by reasoning about their sizes and justifying the conclusion using symbols, words, objects, and pictorial models	Category 2 Readiness	SP 67 SP 68 SP 69	HO 1 SA 1 HO 2	PS 1 PS 2	Homework 1 Homework 2	
Lesson 4 days	<b>3.5E/</b> represent real-world relationships using number pairs in a table or verbal description	Category 2 Readiness	SP 70 SP 71	SA 1	PS 1	Homework 1	
Lesson 5 days	<ul> <li>3.6D/decompose composite figures formed by rectangles into non-overlapping rectangles to determine the area of the original figure using the additive property of area</li> <li>3.6E/decompose two congruent two-dimensional figures into parts with equal areas and express the area of each part as a unit fraction of the whole and recognize that equal shares of identical wholes need not have the same shape.</li> </ul>	Category 3 Supporting Category 3 Supporting	SP 72 SP 73 SP 74	HO 1 SA 1 HO 2 SA 2	PS 1 PS 2	Homework 1 Homework 2	
Lesson 6 days	<b>3.9D/</b> explain that credit is used when wants or needs exceed the ability to pay and that it is the borrower's responsibility to pay it back to the lender, usually with interest	Category 4 Supporting	SP 75 SP 76 SP 77	SA 1	PS 1	Homework 1	
Lesson 7 days	<b>3.9E/</b> list reasons to save and explain the benefit of a savings plan, including for college	Category 4 Supporting	SP 78 SP 79 SP 80	SA 1 SA 2	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 3 Mathematics						
SIX WEEKS 5						
STAAR       Student (SA) and Hands-On (HO)       Student (SA) and Hands-On (HO)       Standard       Problem       Standard       Standar	kills and Concepts Iomework					
Lesson 1       3.1A/apply mathematics to problems arising in everyday life, society, and the workplace       Category 1-4       SP 81       SA 1       PS 1       Ho	omework 1 omework 2 omework 3					
Lesson 2 days3.1B/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 solutionCategory 1-4 SP 83 Review of TEKSSP 83 SP 84 SP 84SA 1 SP 84 SA 2 SP 85PS 1 PS 2 Ho PS 3Ho 	omework 1 omework 2 omework 3					
Lesson 3 adays3.1C/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 problemsCategory 1-4 Review of TEKSSP 86 SP 87SA 1 	omework 1 omework 2 omework 3					
Lesson 4 days3.1D/communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriateCategory 1-4 Review of TEKSSP 89 SP 90 	omework 1 omework 2 omework 3					
Lesson 5 adays3.1E/create and use representations to organize, record, and communicate mathematical ideasCategory 1-4 Review of TEKSSP 92 SP 93SA 1 SA 2 	omework 1 omework 2 omework 3					
Lesson 6 mathematical ideas3.1F/ analyze mathematical relationships to connect and communicate mathematical ideasCategory 1-4 Review of TEKSSP 95 SP 96SA 1 SA 2 	omework 1 omework 2 omework 3					
Lesson 7 days3.1G/ display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communicationCategory 1-4 Review of TEKSSP 98 SP 99SA 1 SA 2PS 1 	omework 1 omework 2 omework 3					
Assessment Six Weeks 4 Assessment						

### **TEACHER NOTES:**

TEKSING TOWARD STAAR SCOPE AND SEQUENCE Grade 3 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	<b>3.9C/</b> identify the costs and benefits of planned and unplanned spending decisions	NOT TESTED		SA 1	PS 1	Homework 1	
Lesson 2 days	<b>3.9F/</b> identify decisions involving income, spending, saving, credit, and charitable giving	NOT TESTED		SA 1	PS 1	Homework 1	
TEACHER NOTES:							