Directory of Instructional Materials for English Language Learners – Math for Grades 6-8

March 2019

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Introduction

By the joint procurement initiative that resulted in the contracts included in this directory, the intent of the Los Angeles Unified School District, together with the Council of the Great City Schools and certain of the Council's member school districts, is to provide teachers of English Learners with a menu of choices to support the ***mathematical and language needs of English Learners*** based on formative and summative data. This bench of contracts offers that choice in ***math instructional materials for Grades 6 through 8.***

The contracts identified below offer the described instructional materials and corresponding ***related professional development*** to support language-acceleration and future A-G success through mathematics content that incorporates the following ***key instructional practices*** identified by the Council of the Great City Schools: rigorous tasks, productive struggle, multiple modes and representations, academic language and conversations and strategic scaffolding.

The contracts are available for use by schools and offices in the LAUSD as well as by other school districts ***in the continental United States*** to the extent that applicable law and policy would allow. Schools, offices and school districts will have the option of selecting the resources for use school-wide or for specific classrooms or grade-levels to support the needs of English Learners.

Each of the contracts on this bench includes, at Section 28, express provision for the use of the contract by school districts that are a part of the Council of the Great City Schools and by other school districts within the continental United States.

Find the Request for Proposal document, through which the proposals were solicited that ultimately resulted in the contracts of this bench, together with each of the two addenda to that RFP document, here: RFP & ADDENDA.pdf

Following is the page of the report adopted by the LAUSD's Board of Education on February 19, 2019, showing the Board's approval of the contracts to provide instructional materials for English-language learners.

ATTACHMENT B

REQUEST FOR APPROVAL OF PROCUREMENT CONTRACTS NOT UNDER DELEGATED AUTHORITY

A. APPROVAL OF PROFESSIONAL SERVICE CONTRACTS

APPROVED

NEW CONTRACTS EXCEEDING $250,000 **$5,800,000**

CONTRACTOR	IDENTIFICATION NO.	DESCRIPTION	SOURCE OF FUNDS	AMOUNT
Curriculum Associates, LLC; Imagine Learning, Inc.; K12 OER Collaborative, d/b/a Open Up Resources	4400006090 4400006091 4400006039 (RFP 2000001304) **Item D**	Formally competed bench contracts to provide math instructional materials tailored to the needs of English Learners in Grades 6-8. The materials were developed in collaboration with the Council of the Great City Schools, five other schools districts and experts in the field of pedagogical theory relating to English Learners and mathematics. The authority to increase or decrease the individual amounts of these contracts will be limited to the aggregate value of $5,000,000. **Contract Term:** 03/01/19 through 02/28/24 includes two (2) one-year renewal options **Aggregate Five-Year Value for Three (3) Contracts: $5,000,000** Requesters: *Derrick Chau* *Senior Executive Director* *P-12 Instruction, Division of Instruction* *Lydia Acosta Stephen, Executive Director* *Multilingual and Multicultural Education* *Division of Instruction*	Various per Requesting School or Office (100%)	$5,000,000

Contracting Procedure

LAUSD staff and others wishing to take advantage of the services offered by the listed contracts should take the following steps:

1. Using the list of Products Included and links to the websites of the contracted publishers contained in the Publisher Contact Information table below, review the publishers' products and consider which may be of interest;

2. Click on the Contract Number in the Publisher Contact Information table to review the associated contract(s) for pricing information and to ensure terms are acceptable;

3. Email the selected publisher(s) outlining the specific proposed purchase and requesting the publisher's written quote, noting that (a) each quote request should identify the product(s) sought, requested delivery date and any special terms; and (b) for items listed in the contract where no special terms are requested, the price quoted by the vendor should be no higher than the price shown in that publisher's contract;

4. Non-LAUSD purchasers, issue a purchase order or other purchase request to the selected publisher in accordance with your school district policy. LAUSD requestors, please follow the additional instructions below.

LAUSD requestors:

A. Attach the accepted quote to a LAUSD shopping cart, and the District's Procurement Services Division will issue the purchase order to the vendor with a copy to the requestor.
B. Be sure to reference, in the "Preferred Vendor #" field of your shopping cart, the LAUSD Vendor number for the selected publisher and, in the Sources of Supply tab, the contract number for the selected publisher's contract;
C. Choose the Product Category from the following list that most accurately describes your proposed purchase:

Prod Cat (NIGP Code)	Description
71500	PUBLICATIONS AND AUDIOVISUAL MATERIALS (PREPARED MATERIALS ONLY)
71586	TEXTBOOKS: 6TH THRU 8TH GRADE (INCLUDES STUDENT AND TEACHER EDITIONS)
78570	INSTRUCTIONAL AIDS: COURSES, LESSON PLANS (PREPARED), PROGRAMS, ANCILLARY MATERIALS, VIDEOS, ETC.
78575	INSTRUCTIONAL SOFTWARE LICENSES, NON-TAXABLE
78576	PAPER ITEMS: COMPOSITION BOOKS, SCRAPBOOKS, EXAMINIATION BOOKLETS, NOTEBOOK FILLER, TABLETS, ETC.

PUBLISHER CONTACT INFORMATION

	Firm Name	LAUSD Vendor No.	Contract Number	Products Included	Contact Name, Title	Contact Tel. #	Email Address
1	***Curriculum Associates, LLC***	1000000184	4400006090	• Ready Math Textbook • Ready Math Textbook Teacher Guide • i-Ready Instruction	• Claudia Salinas, V.P. of English Learning (TX); • John Sipe, Regional V. P. (CA) • Andres Gorbea, Educational Consultant (Los Angeles, CA)	• 214.519.3677 • 760.213.6163 • 909.648.6019	csalinas@cainc.com; jsipe@cainc.com agorbea@cainc.com
2	***Imagine Learning, Inc.***	1000003998	4400006091	• Imagine Math • Math Performance Task Blackline Master (upper EL) • Math Performance Task Blackline Master (MS) • Student Journals Printed (consumable)	Chiara Tellini Area Partnership Mgr., L.A.	626.437.7350 (cell)	chiara.tellini@imaginelearning.com
3	***Open Up Resources***	1000015030	4400006039	• Open Up Resources 6 – 8 Math • Open Up Resources 6 – 8 Math, TE	Christina Magee Director, National Field Team	516.617.2571	christina.magee@openup.org

LINKS TO PUBLISHER WEBSITES:

- Curriculum Associates: https://www2.curriculumassociates.com/products/subjects.aspx?topic=CM0
- Imagine Learning: https://www.imaginelearning.com/programs/math
- Open Up Resources: https://openupresources.org/math-curriculum/

Open Up Resources 6-8 Math- This product was developed by Illustrative Mathematics with Open Up Resources. Professional development and further updates to the product will be provided by Open Up Resources.

LAUSD CONTACT INFORMATION

Sybil Ward
Contract Administration Manager
Procurement Services Division
213-241-3594
sybil.ward@lausd.net

Alicia Martinez
Assistant Contract Administration Manager
Procurement Services Division
213-241-3527
alicia.martinez@lausd.net

Curriculum Associates, LLC

VENDOR #	1000000184
CONTRACT #	4400006090

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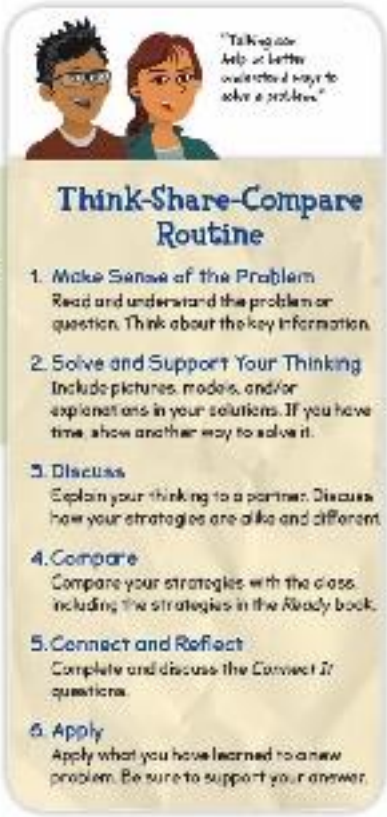
Ready Mathematics, Grades 6-8 ©2020

Teacher support provided at every lesson in the Teacher Resource Book help facilitate classroom



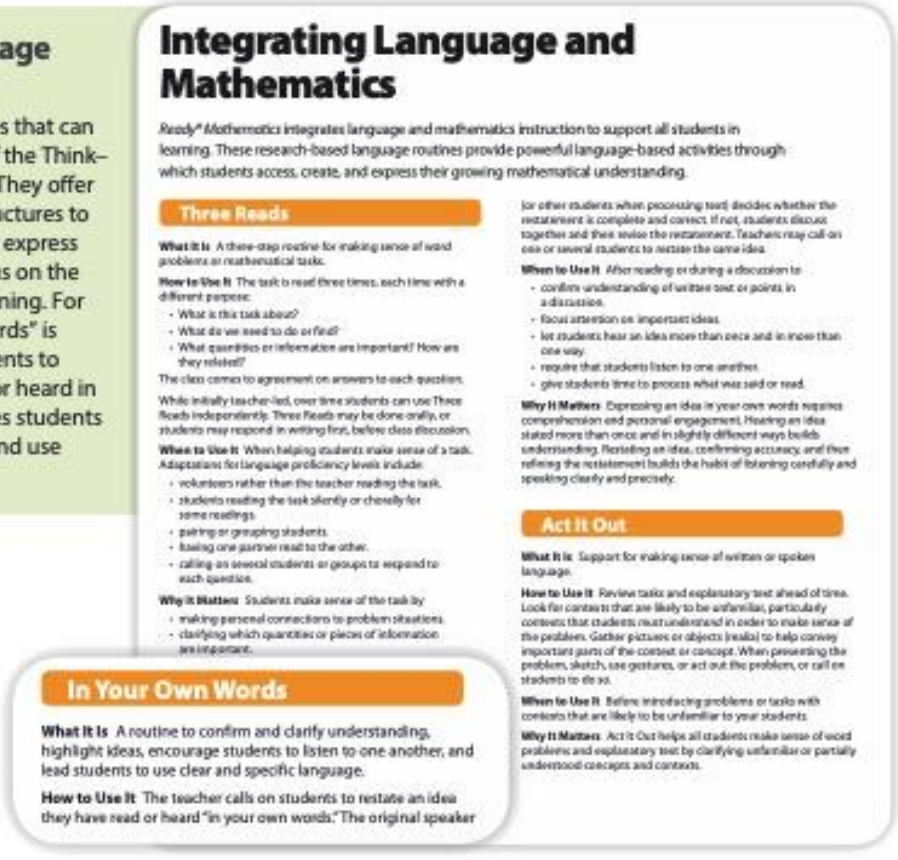
Think–Share–Compare Routine

Engages students in solving problems and discussing their work, first with partners, then with the whole class. Teachers select from the Step-by-Step questions in the lessons to guide discussion during the Compare portion of the routine.

Language routines, found in the Teacher Resource Book, enhance the overall Think-Share-Compare discourse routine and suggest an overall approach to teaching problems.

Integrating Language and Mathematics

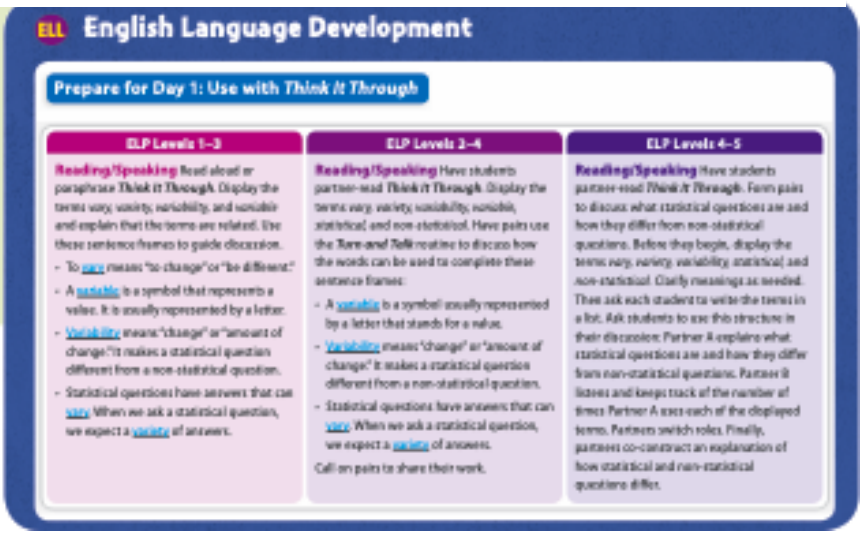
Outlines language routines that can be used within any part of the Think–Share–Compare Routine. They offer consistent, repeatable structures to understand language and express ideas so students can focus on the mathematics they are learning. For example, "In your own words" is a routine that allows students to restate an idea they read or heard in their own words. It requires students to clarify understanding and use clear, specific language.



Students communicate information, ideas, and concepts necessary for academic success, and they are given opportunities to listen, speak, read, and write at the appropriate level of language proficiency.

English Language Development

Offers suggestions for scaffolding language use during the lesson so students at different levels of English proficiency can access the mathematics and express their own ideas.



ELL English Language Development

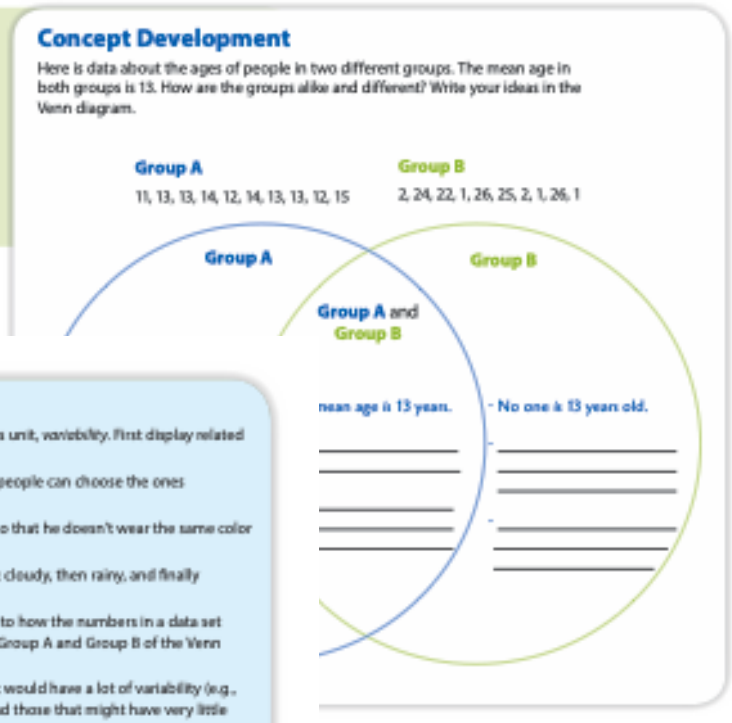
Prepare for Day 1: Use with *Think It Through*

ELP Levels 1–3	ELP Levels 2–4	ELP Levels 4–5
Reading/Speaking Read aloud or paraphrase *Think It Through*. Display the terms *vary, variety, variability,* and *variable* and explain that the terms are related. Use these sentence frames to guide discussion. - To vary means "to change" or "be different." - A variable is a symbol that represents a value. It is usually represented by a letter. - Variability means "change" or "amount of change." It makes a statistical question different from a non-statistical question. - Statistical questions have answers that can vary. When we ask a statistical question, we expect a variety of answers.	**Reading/Speaking** Have students partner-read *Think It Through*. Display the terms *vary, variety, variability, variable, statistical,* and *non-statistical*. Have pairs use the *Turn-and-Talk* routine to discuss how the words can be used to complete these sentence frames: - A variable is a symbol usually represented by a letter that stands for a value. - Variability means "change" or "amount of change." It makes a statistical question different from a non-statistical question. - Statistical questions have answers that can vary. When we ask a statistical question, we expect a variety of answers. Call on pairs to share their work.	**Reading/Speaking** Have students partner-read *Think It Through*. Form pairs to discuss what statistical questions are and how they differ from non-statistical questions. Before they begin, display the terms *vary, variety, variability, statistical,* and *non-statistical*. Clarify meanings as needed. Then ask each student to write the terms in a list. Ask students to use this structure in their discussion: Partner A explains what statistical questions are and how they differ from non-statistical questions. Partner B listens and keeps track of the number of times Partner A uses each of the displayed terms. Partners switch roles. Finally, partners co-construct an explanation of how statistical and non-statistical questions differ.

The Student Instruction Book gives students the opportunity to review mathematical and academic vocabulary and to access and build on familiar concepts.

Concept Development

Provides collaborative visual activities so students with a range of mathematical and English language proficiencies can access and build upon familiar concepts that are prerequisite for the unit.



Concept Development

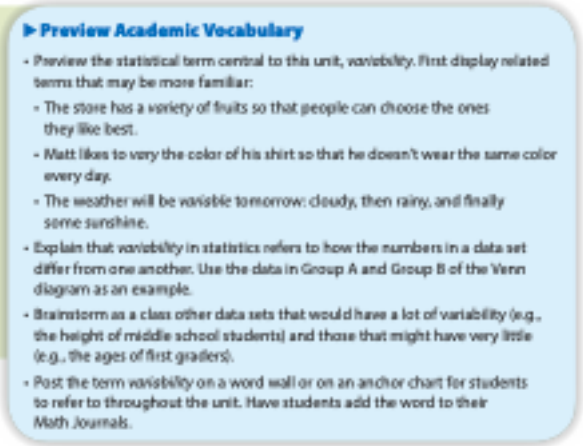
Here is data about the ages of people in two different groups. The mean age in both groups is 13. How are the groups alike and different? Write your ideas in the Venn diagram.

Group A
11, 13, 13, 14, 12, 14, 13, 13, 12, 15

Group B
2, 24, 22, 1, 26, 25, 2, 1, 26, 1

Preview Academic Vocabulary

Suggests activities through which students examine word meanings, word structure, and related words to create a word wall that students can refer to during the unit.



▶ Preview Academic Vocabulary

- Preview the statistical term central to this unit, *variability*. First display related terms that may be more familiar:
  - The store has a *variety* of fruits so that people can choose the ones they like best.
  - Matt likes to *vary* the color of his shirt so that he doesn't wear the same color every day.
  - The weather will be *variable* tomorrow: cloudy, then rainy, and finally some sunshine.
- Explain that *variability* in statistics refers to how the numbers in a data set differ from one another. Use the data in Group A and Group B of the Venn diagram as an example.
- Brainstorm as a class other data sets that would have a lot of variability (e.g., the height of middle school students) and those that might have very little (e.g., the ages of first graders).
- Post the term *variability* on a word wall or on an anchor chart for students to refer to throughout the unit. Have students add the word to their Math Journals.

Imagine Learning, Inc.

VENDOR #	1000003998
CONTRACT #	4400006091

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Imagine Math Overview

At Imagine Learning we believe that all students are language learners. We believe that mathematical understanding and language development are interdependent and symbiotic. And most importantly, we know that when students are provided with meaningful learning experiences, they can master mathematics and acquire language at the same time.

Imagine Math lessons are designed to be instructional learning experiences that engage students in meaningful exploration of understanding mathematics. In an Imagine Math lesson, students will:

- Engage in thinking and reasoning about mathematics
- Investigate mathematical concepts and practices
- Explore mathematical ideas through a problem solving approach
- Solve problems using multiple representations of mathematical relationships

Students receive instructional support throughout the lesson in three main ways:

1. Feedback that is designed to address misconceptions and redirect thinking in response to student work
2. Math Help that is designed to provide direct instruction on the math concepts behind a particular problem, available upon student request
3. Live Help that allows students to **work directly with a bilingual, certified math teacher** on their math problem, also available upon student request

At a Glance: Imagine Math Activities

Imagine Math lessons are designed to be instructional learning experiences that engage students in meaningful exploration of understanding mathematics. In an Imagine Math lesson, students will:

Activity	Overview
Pre-Quiz	Students have the opportunity to demonstrate their understanding of the content within the lesson.
Warm Up	Students practice procedures and recall facts that may be helpful in the lesson.
Guided Learning	Students engage in meaningful instructional tasks designed to facilitate understanding and reinforce college and career readiness standards. To support their learning, students have access to personalized feedback, digital manipulatives, reference tools, and **live certified math teachers.**
Problem Solving Process	Students work through and begin to internalize a problem solving process that can be applied to complex problems.
Practice	Students review, extend, and synthesize the ideas from the Guided Learning, continuing to receive corrective feedback.
Post-Quiz	Students demonstrate their understanding of the content within the lesson.

Open Up Resources

VENDOR #	1000015030
CONTRACT #	4400006039

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Lesson 1
Tiling the Plane

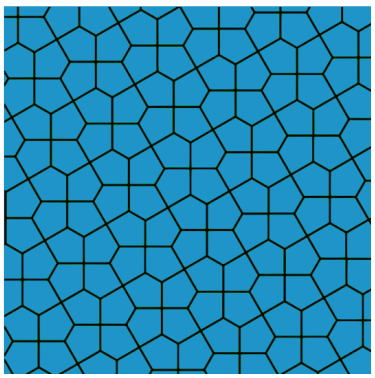
Learning Goals

Let's look at tiling patterns and think about area.

1.1 Which One Doesn't Belong: Tilings

Which pattern doesn't belong?

A



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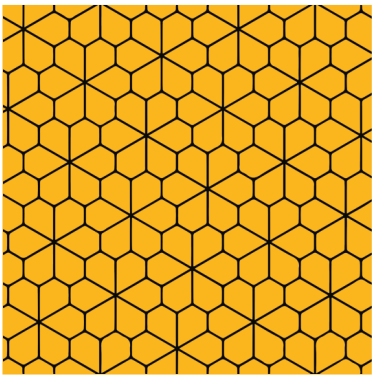

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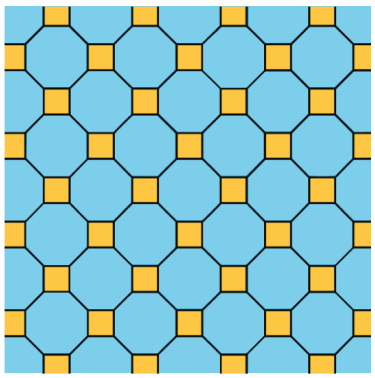

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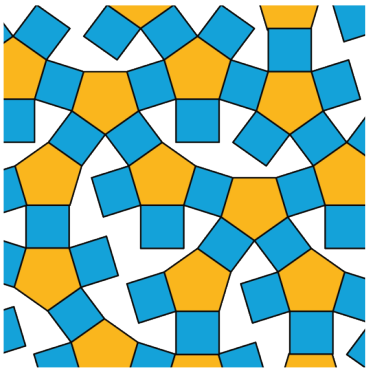


Lección 1
Recubramos el plano

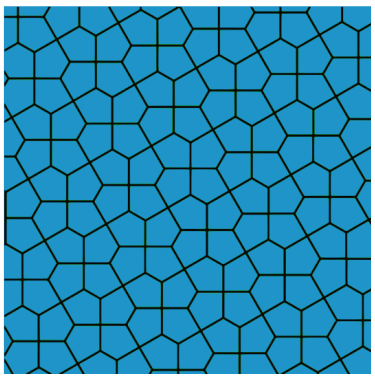
Objetivos de aprendizaje

Observemos patrones de recubrimiento y pensemos en áreas.

1.1 ¿Cuál es diferente?: recubrimientos

¿Cuál patrón es diferente?

A



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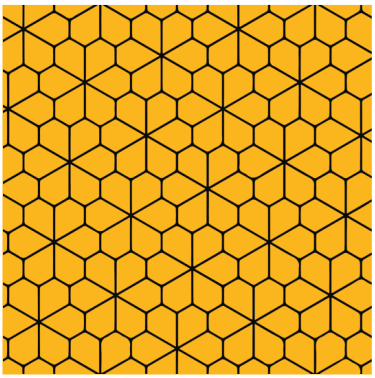

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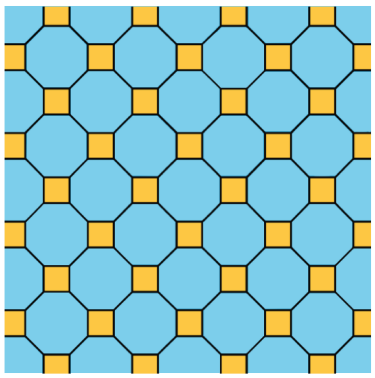

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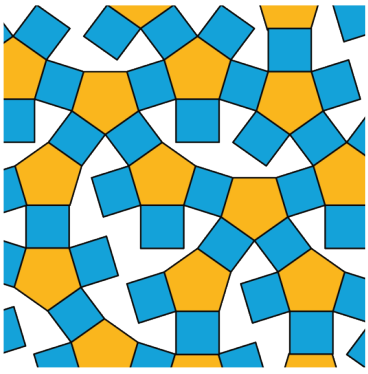
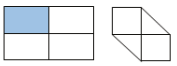
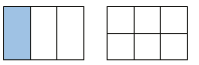


Overview

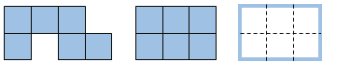
Work with area in grade 6 draws on earlier work with geometry and geometric measurement. Students began to learn about two- and three-dimensional shapes in kindergarten, and continued this work in grades 1 and 2, composing, decomposing, and identifying shapes. Students' work with geometric measurement began with length and continued with area. Students learned to "structure two-dimensional space," that is, to see a rectangle with whole-number side lengths as composed of an array of unit squares or composed of iterated rows or iterated columns of unit squares. In grade 3, students distinguished between perimeter and area. They connected rectangle area with multiplication, understanding why (for whole-number side lengths) multiplying the side lengths of a rectangle yields the number of unit squares that tile the rectangle. They used area diagrams to represent instances of the distributive property. In grade 4, students applied area and perimeter formulas for rectangles to solve real-world and mathematical problems, and learned to use protractors. In grade 5, students extended the formula for the area of rectangles to rectangles with fractional side lengths.

Grade 1 

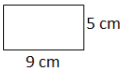
Partition rectangles and circles into halves and quarters. Compose figures in the plane.

Grade 2 

Partition rectangles and circles into thirds. Partition rectangles into squares and count them.

Grade 3 

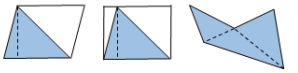
Find whole-number areas. Multiply to find areas of rectangles. Distinguish between perimeter and area.

Grade 4 

Apply area and perimeter formulas for rectangles in real-world contexts.

Grade 5 

Tile to find areas of rectangles with fractional side-lengths. Multiply to find these areas.

Grade 6 

Understand the area of a triangle is half of the product of one of its side-lengths and its corresponding height. Find areas of polygons.

In grade 6, students extend their reasoning about area to include shapes that are not composed of rectangles. Doing this draws on abilities developed in earlier grades to compose and decompose shapes, for example, to see a rectangle as composed of two congruent right triangles. Through activities designed and sequenced to allow students to make sense of problems and persevere in solving them (MP1), students build on these abilities and their knowledge of areas of rectangles to find the areas of polygons by decomposing and rearranging them to make figures whose areas they can determine (MP7). They learn strategies for finding areas of parallelograms and triangles, and use regularity in repeated reasoning (MP8) to develop formulas for these areas, using geometric properties to justify the correctness of these formulas. They use these formulas to solve problems. They understand that any polygon can be decomposed into triangles, and use this knowledge to find areas of polygons. Students find the surface areas of polyhedra with triangular and rectangular surfaces. They study, assemble, and draw nets for polyhedra and use nets to determine surface areas. Throughout, they discuss their mathematical ideas and respond to the ideas of others (MP3, MP6).

Because grade 6 students will be writing algebraic expressions and equations involving the letter x and x is easily confused with $\times$, these materials use the "dot" notation, e.g., $2 \cdot 3$, for

Lesson 1

Tiling the Plane

Learning Goals

Let's look at tiling patterns and think about area.

Learning Targets

- I can explain the meaning of area.

Standards Alignment

Building on	**3.G.A** Reason with shapes and their attributes.
Building towards	**6.G.A.1** Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.

Lesson Narrative

Students start the first lesson of the school year by recalling what they know about **area** (note that students studied the areas of rectangles with whole-number side lengths in grade 3 and with fractional side lengths in grade 5). The mathematics they explore is not complicated, so it offers a low threshold for entry. The lesson does, however, uncover two important ideas:

- If two figures can be placed one on top of the other so that they match up exactly, then they have the same area.
- The area of a **region** does not change when the region is decomposed and rearranged.

At the end of this lesson, students are asked to write their best definition of area. It is important to let them formulate their definition in their own words. For English learners, it is especially important that they be encouraged to use their own words and also to use words of their peers. In the next lesson, students will revisit the definition of area as the number of square units that cover a region without gaps or overlaps.

Lección 1
Recubramos el plano

Objetivos de aprendizaje

Observemos patrones de recubrimiento y pensemos en áreas.

Metas de aprendizaje

- Puedo explicar el significado de área.

Alineación de estándares

Construyendo sobre	**3.G.A** Razonan usando las figuras geométricas y sus atributos.
Avanzando hacia	**6.G.A.1** Hallan el área de triángulos rectos, otros triángulos, cuadriláteros especiales, y polígonos mediante su composición en rectángulos o su descomposición en triángulos y otras figuras geométricas; aplican estas técnicas al contexto de la resolución de problemas matemáticos y del mundo real.

Introducción de lección

Los estudiantes comienzan la primera clase del año escolar recordando lo que saben sobre **área** (recuerde que los estudiantes estudiaron el área de rectángulos con longitudes de lado enteras en grado 3 y con longitudes de lado fraccionarias en grado 5). Las matemáticas que ellos exploran no son complicadas, por lo que ofrecen un umbral bajo de entrada. Esta lección, sin embargo, ayuda a descubrir dos ideas importantes:

- Si dos figuras pueden ponerse una sobre la otra de modo que coincidan exactamente, entonces ellas tienen la misma área.
- El área de una **región** no cambia cuando la región se descompone y reorganiza.

Al final de esta lección, se pide a los estudiantes escribir su mejor definición de área. Es importante dejarlos formular la definición en sus propias palabras. En particular, se debe animar a los