

Dual Language/Bridging Lessons

Unidad 4: Estrategias Numéricas: Sumar con fluidez dentro de 100

Gran idea: Estrategias Numéricas

Conexión de contenido: Separar los enteros, juntar las partes

Pregunta esencial: ¿Qué se puede descubrir con modelos, símbolos y dibujos?

Unit 4: Number Strategies: Fluently Add within 100

Big Idea: Number Strategies

Content Connection: Taking wholes apart, putting parts together

Essential Question: What can you discover with models, symbols, and drawings?

Preguntas de enfoque por lección • Focus Questions by Lesson

Lección 1	Estrategias para sumar con fluidez dentro del 20 ¿Cómo se pueden sumar números con fluidez en el rango de 20 usando diferentes estrategias para resolver problemas?
Lección 2	Más estrategias para sumar con fluidez dentro de 20 ¿Cómo se pueden sumar números de hasta 20 usando dobles, casi dobles y diferentes estrategias mientras se muestra el razonamiento?
Lección 3	Estimar sumas dentro de 100 ¿Cómo se puede usar la estimación para encontrar sumas dentro de 100 y resolver problemas de un paso?
Lección 4	Representar la suma dentro de 100 ¿Cómo se pueden usar estrategias y representaciones para sumar números dentro de 100?
Lección 5	Usar propiedades para sumar ¿Cómo se pueden reorganizar los sumandos para encontrar la suma?

Lesson 1	Strategies to Fluently Add within 20 How can numbers be added fluently within 20 using different strategies to solve problems?
Lesson 2	More Strategies to Fluently Add within 20 How can numbers be added within 20 using doubles, near doubles, and different strategies while showing reasoning?
Lesson 3	Estimate Sums within 100 How can estimation be used to find sums within 100 to solve one-step problems?
Lesson 4	Represent Addition within 100 How can strategies and representations be used to add numbers within 100?
Lesson 5	Use Properties to Add How can addends be rearranged to find a sum?

Lección 6	Descomponer dos sumandos para sumar ¿Cómo se pueden usar diferentes estrategias para sumar números y resolver problemas de un paso?	Lesson 6	Decompose Two Addends to Add How can different strategies be used to add numbers and solve one-step word problems?
Lección 7	Usar una recta numérica para sumar ¿Cómo se puede usar una recta numérica y diferentes estrategias para sumar números y resolver problemas de un paso?	Lesson 7	Use a Number Line to Add How can a number line and different strategies be used to add numbers and solve one-step word problems?
Lección 8	Descomponer un sumando para sumar ¿Cómo se pueden usar diferentes estrategias para sumar números hasta 100?	Lesson 8	Decompose One Addend to Add How can different strategies be used to add numbers within 100?
Lección 9	Ajustar los sumandos para sumar ¿Cómo se pueden usar diferentes estrategias para sumar números?	Lesson 9	Adjust Addends to Add How can different strategies be used to add numbers?
Lección 10	Sumar más de dos números ¿Cómo se pueden sumar más de dos números de dos cifras?	Lesson 10	Add More than Two Numbers How can more than two 2-digit numbers be added?

Explorar palabras • Explore Words

Las palabras de vocabulario de la unidad se pueden usar para ayudar a los estudiantes a transferir su conocimiento del contenido de un idioma al otro: del español al inglés o del inglés al español. Consulte las estrategias para *construir el lenguaje de las matemáticas* en la página 275 de la Edición para el docente. Se pueden encontrar estrategias adicionales en las páginas 9-12 de este Manual del estudiante multilingüe.

The unit vocabulary words can be used to help students transfer their content knowledge from one language to the other—from Spanish to English, or from English to Spanish. See the *Building the Language of Math* strategies on page 275 of the Teacher Edition. Additional strategies can be found on pages 9-12 of this Multilingual Learner Handbook.

Cognados • Cognates

California Reveal Math	California Reveal Math
Ajustar Contar con Doubles Estimar Sumas Parciales Reagrupar	Adjust Count on Doubles Estimate Partial Sums Regroup

Parts of a Sentence

Understanding the components and purpose of sentences will help students comprehend different texts.

- Start by stating that sentences are the basic units or building blocks for expressing thoughts. Activate prior knowledge and ask: What do you know about sentences? Record and briefly explain responses such as “have subjects,” “can be questions,” and “end with periods.”
- Use these responses to transition to describing the two main components of sentences. Say: Every sentence is about a person, thing, or idea, and what a person or thing is doing. Sometimes the ‘doing’ isn’t an action, but just how something is being.
- Turn and Talk: Display the sentence *The floor is hard*. Ask: What thing the sentence about? Guide students to understand that it is about *floor* or the *floor*. Then display *The work is hard*. Point out that though *hard* means different things in each sentence, the “being” part of both sentences is the same—the verb is. In the second sentence, work is not a concrete thing, but more of an idea.
- Wrap Up Practice gradual release by presenting the final two sentences. Have students identify, without guidance, what they are about and what the action (or being) word is. Alex picks 43 pears and 21 apples. 40 and 50 are good estimates.

Select a question or set of questions to use for bridging content. Have students work in pairs or small groups to complete questions. A table of possible questions focused on representing information is presented below.

Have students use counters, cubes, or arrays to represent the problems. Students explain their model in Spanish, then English.

Lesson	Guided Practice Questions	Practice Questions
4-1	#4-5	#9-10
4-2	#5	#8-9
4-3	#4-5	#8-10
4-4	#5-6	#11-12
4-5	#5	#9-10
4-6	#4-5	#9-10
4-7	#3	#6
4-8	#5-6	#9-11
4-9	#4	#8
4-10	#4	#8

Multilingual Learner Scaffolds

- Emerging** Ask: What makes up a sentence? Why sentences are important? For this reason, focus on practicing common phrases and academic language used to discuss sentences. For example: The action is... or The two subjects are... or I think the sentence is about....
- Expanding** Pair students to analyze the final two sentences displayed. If partners disagree, have them share their opinions for group discussion. For the second sentence, point out that more than one subject can be conveyed as shown, using and, or by making singular words plural: Those numbers are reasonable estimates.
- Bridging** Work with students to identify sentences in the student edition with more complex syntax. Show how to disregard modifying phrases or clauses to determine the core meaning. You can also show how inverted subject-verb order functions, and challenge students to identify sentence components in questions.

Partes de una Oración

Comprender los componentes y el propósito de las oraciones ayudará a los estudiantes a comprender diferentes textos.

- Comience declarando que las oraciones son las unidades básicas o los bloques de construcción para expresar pensamientos. Active el conocimiento previo y pregunte: ¿Qué saben sobre las oraciones? Registre y explique brevemente las respuestas tales como "tienen sujetos", "pueden ser preguntas" y "terminan con puntos".
- Use estas respuestas para hacer la transición a describir los dos componentes principales de las oraciones. Diga: Cada oración trata sobre una persona, cosa o idea y lo que una persona o cosa está haciendo. A veces el "hacer" no es una acción, sino simplemente cómo algo está siendo.
- Diálogo en Parejas (Turn and Talk) Muestre la oración *The floor is hard* (El piso es duro/está duro). Pregunte: ¿Sobre qué cosa trata la oración? Guíe a los estudiantes a comprender que trata sobre *floor* (piso) o *the floor* (el piso). Luego muestre *The work is hard* (El trabajo es difícil/está difícil). Señale que aunque *hard* significa cosas diferentes en cada oración, la parte de "ser/estar" de ambas oraciones es la misma—el verbo *is* (es/está). En la segunda oración, *work* (trabajo) no es una cosa concreta, sino más bien una idea.
- Cierre Practique la liberación gradual presentando las dos últimas oraciones. Pida a los estudiantes que identifiquen, sin guía, sobre qué tratan y cuál es la palabra de acción (o ser/estar). *Alex picks 43 pears and 21 apples* (Alex recoge 43 peras y 21 manzanas). *40 and 50 are good estimates* (40 y 50 son buenas estimaciones).

Seleccione una pregunta o un conjunto de preguntas para usar como puente de contenido. Pida a los estudiantes que trabajen en parejas o en grupos pequeños para completar las preguntas. A continuación, se presenta una tabla con posibles preguntas enfocadas en representar información.

Lección	Preguntas de Práctica Guiada	Preguntas de Práctica
4-1	#4-5	#9-10
4-2	#5	#8-9
4-3	#4-5	#8-10
4-4	#5-6	#11-12
4-5	#5	#9-10
4-6	#4-5	#9-10
4-7	#3	#6
4-8	#5-6	#9-11
4-9	#4	#8
4-10	#4	#8

Pida a los estudiantes que usen fichas, cubos o arreglos para representar los problemas. Los estudiantes explican su modelo en español, luego en inglés.

Apoyos para Estudiantes Multilingües

- Emergente** Pregunte: ¿Qué compone una oración? ¿Por qué las oraciones son importantes? Por esta razón, enfóquese en practicar frases comunes y lenguaje académico usado para discutir oraciones. Por ejemplo: La acción es... o Los dos sujetos son... o Creo que la oración trata sobre...
- En Expansión** Empareje a los estudiantes para analizar las dos últimas oraciones mostradas. Si los compañeros no están de acuerdo, pídeles que compartan sus opiniones para la discusión grupal. Para la segunda oración, señale que más de un sujeto puede transmitirse como se muestra, usando y, o haciendo plurales las palabras singulares: Esos números son estimaciones razonables.
- En Transición** Trabaje con los estudiantes para identificar oraciones en la edición del estudiante con sintaxis más compleja. Muestre cómo ignorar frases o cláusulas modificadoras para determinar el significado central. También puede mostrar cómo funciona el orden invertido sujeto-verbo, y desafiar a los estudiantes a identificar componentes de oraciones en preguntas.

Dual Language Connections

Language Objectives

Students speculate about alternative strategies by using gerunds. (Lesson 4-1)
Students follow directions to write a word problem. (Lesson 4-2)
Students analyze word meanings to interpret word problems. (Lesson 4-3)
Students explain a process using precise domain vocabulary. (Lesson 4-4)
Students exchange information and ideas to defend their opinions. (Lesson 4-5)
Students discuss a process by using appropriate domain vocabulary. (Lesson 4-6)
Students write a word problem by <i>interpreting</i> a graphic support. (Lesson 4-7)
Students describe a process by explaining how to use a visual representation. (Lesson 4-8)
Students analyze text in a word problem to provide a problem-solution response. (Lesson 4-9)
Students express reflections on their thinking by explaining a process. (Lesson 4-10)

Communicate Your Understanding

Have students work with partners or in small groups to discuss the Essential question of the unit or the focus question for that lesson. Students can first discuss in Spanish, then rephrase or summarize in English.

Transfer Learning from English to Spanish

Invite students to generate words, phrases, and sentences in English that express what they have learned about the Essential Question or lesson focus question. Record their ideas on the left side of an anchor chart like the one below. Then tell students they will now transfer what they learned from English to Spanish. Begin by having students work with partners or in small groups to come up with Spanish translations for each item in the left column. Record their translations in the right column of the chart, providing any Spanish terms that students are unable to translate.

How can different strategies be used to add numbers?	¿Cómo se pueden usar diferentes estrategias para sumar números?
Use doubles to add numbers Use a number line to add Group numbers	Usar doubles para sumar numeros Usar una recta numérica para sumar Agrupa números

Language and Math Sentence Frames for Unit 4

Puedo sumar números _____.	I can add numbers by ____.
Puedo usar _____ para ayudarme a sumar.	I can use _____ to help me add.
La suma de _____ y _____ es _____.	The sum of _____ and _____ is _____.

Conexiones de Lenguaje Dual

Objetivos de Lenguaje

Los estudiantes especulan sobre estrategias alternativas usando gerundios. (Lección 4-1)
Los estudiantes siguen instrucciones para escribir un problema verbal. (Lección 4-2)
Los estudiantes analizan los significados de las palabras para interpretar problemas verbales. (Lección 4-3)
Los estudiantes explican un proceso usando vocabulario de dominio preciso. (Lección 4-4)
Los estudiantes intercambian información e ideas para defender sus opiniones. (Lección 4-5)
Los estudiantes discuten un proceso usando vocabulario de dominio apropiado. (Lección 4-6)
Los estudiantes escriben un problema verbal interpretando un apoyo gráfico. (Lección 4-7)
Los estudiantes describen un proceso explicando cómo usar una representación visual. (Lección 4-8)
Los estudiantes analizan el texto en un problema verbal para proporcionar una respuesta de problema-solución. (Lección 4-9)
Los estudiantes expresan reflexiones sobre su pensamiento explicando un proceso. (Lección 4-10)

Comunica tu Comprensión

Pida a los estudiantes que trabajen con compañeros o en grupos pequeños para discutir la pregunta esencial de la unidad o la pregunta enfoque de esa lección. Los estudiantes pueden primero discutir en español y luego reformular o resumir en inglés.

Transferencia del Aprendizaje del Inglés al Español

Invite a los estudiantes a generar palabras, frases y oraciones en inglés que expresen lo que han aprendido sobre la Pregunta Esencial o la pregunta enfoque de la lección. Registre sus ideas en el lado izquierdo de una tabla de apoyo como la que se muestra a continuación. Luego diga a los estudiantes que ahora transferirán lo que aprendieron del inglés al español. Comience pidiendo a los estudiantes que trabajen con compañeros o en grupos pequeños para crear traducciones al español para cada elemento en la columna izquierda. Registre sus traducciones en la columna derecha de la tabla, proporcionando cualquier término en español que los estudiantes no puedan traducir.

How can different strategies be used to add numbers?	¿Cómo se pueden usar diferentes estrategias para sumar números?
Use doubles to add numbers Use a number line to add Group numbers	Usar doubles para sumar numeros Usar una recta numérica para sumar Agrupa números

Marcos de Oraciones de Lenguaje y Matemáticas para la Unidad 4

Puedo sumar números _____.	I can add numbers by ____.
Puedo usar _____ para ayudarme a sumar.	I can use _____ to help me add.
La suma de _____ y _____ es _____.	The sum of _____ and _____ is _____.

Written Communication

Have students write a short (one paragraph) response to the essential question “How can different strategies be used to add numbers?”...(or choose a focus question from one of the lessons.)

Use the Multilingual Learner Scaffolds listed below. Remind students to use the bilingual anchor chart as a resource for vocabulary and ideas.

Multilingual Learner Scaffolds

Emerging Students can use visuals to help clarify their writing. The visuals should be labeled. Students may also write primarily in their home language and include key vocabulary words in English.

Expanding Students can write their main idea in English, and then write clarifying and supporting sentences in their home language. Provide students with transition phrases in both languages to help connect ideas (e.g., because, in addition, in summary).

Bridging Students will write their response in English, but can brainstorm and do their prewriting in their home language. Remind students to use academic connectors (e.g., therefore, this shows, as a result).

Reading

Students read mathematical statements and contextual problems, then identify and justify appropriate solution strategies. Working in pairs, students analyze the problem, discuss which strategy would be most effective, select their approach, and document their chosen strategy on a recording sheet.

Use the Multilingual Learner Scaffolds listed below. Remind students to use the bilingual anchor chart as a resource for vocabulary and ideas.

Multilingual Learner Scaffolds

Emerging Provide visual supports by including pictures, diagrams, or manipulatives alongside the mathematical statements or word problems. Conduct a guided reading of the problem, pointing to key words and visuals while reading aloud. Have students echo-read or chorally read short phrases. In pairs, students point to and discuss visuals, select a strategy using the anchor chart, and record it on their sheet using provided sentence frames such as: "We will use ___" or "Our strategy is ___."

Expanding Provide mathematical statements and word problems with visual supports such as manipulatives, number lines, diagrams, or annotated text with key vocabulary highlighted. Have students read the problem with a partner, taking turns reading sentences aloud. In pairs, students discuss which strategy to use by completing sentence frames such as: "We chose ___ because ___" or "This strategy works because ___." Students record their chosen strategy with a brief explanation on their recording sheet and share their reasoning with another pair using the sentence frames.

Bridging

Have students read mathematical statements and word problems independently, annotating key information and vocabulary as they read. In pairs, students discuss and select a strategy, then write a complete explanation of their reasoning using mathematical vocabulary and connecting words (because, since, so, therefore). Students record: (1) their chosen strategy, (2) why they selected it, and (3) how it connects to the problem. Pairs share their written reasoning with another pair, comparing solution approaches and justifications.

Speaking

Students practice using mathematical language to explain their problem-solving strategies and reasoning. After the teacher models solving a problem using multiple approaches, students independently consider how to solve a similar problem. Using a Turn and Talk protocol, partners take turns explaining their chosen strategy, asking clarifying or probing questions, and comparing approaches.

Use the Multilingual Learner Scaffolds listed below. Remind students to use the bilingual anchor chart as a resource for vocabulary and ideas.

Multilingual Learner Scaffolds**Emerging**

Provide students with a visual strategy poster or anchor chart showing different approaches with pictures, symbols, or diagrams. Have students point to the visuals while speaking. Offer manipulatives (counters, blocks, number lines, diagrams) for students to touch and move while explaining. Model the Turn and Talk by demonstrating with a student, showing how to point to materials and visuals. Prompt: "Show your partner. What do you use?" Accept gestures, pointing, and brief responses with the sentence frame. Have students practice 2-3 times with support before sharing independently.

Expanding

Present students with 2-3 visual strategy options (anchor chart, strategy cards, or worked examples) labeled with step-by-step pictures. Have them choose one and prepare to explain. Provide a word bank with action verbs and math vocabulary. Model a complete explanation with the frames. During Turn and Talk, students explain their process. Listening partners ask follow-up questions, such as: "Why did you choose that strategy?" or "Can you show that step again?" Encourage pointing to work or manipulatives. Selected pairs share with the class.

Bridging

Students independently solve the problem using any strategy and prepare to explain their reasoning. During Turn and Talk, partners describe their strategies using precise math vocabulary and compare approaches by asking questions such as "How is your strategy different?" "Which is more efficient and why?" or "What are the advantages?" Students justify their reasoning, connect strategies, and volunteers share their discussions, highlighting how different methods relate to the same concepts.

Listening

Students practice listening comprehension by hearing verbal descriptions or explanations of how a mathematical problem is solved using a particular strategy, method, or approach. Students listen carefully to identify the strategy being described and demonstrate understanding through responses appropriate to their language level (pointing, naming, writing, or explaining). The teacher presents each explanation twice, and students share their responses with a partner. This cycle is repeated for multiple strategies, procedures, or approaches, building students' ability to distinguish between different mathematical methods through auditory processing.

Use the Multilingual Learner Scaffolds listed below. Remind students to use the bilingual anchor chart as a resource for vocabulary and ideas.

Multilingual Learner Scaffolds

Emerging Provide visual strategy cards or anchor charts showing each strategy with images and labels. Read the explanation slowly with frequent pauses, using simple sentences and gestures. Example: "I use [strategy]. First, I [action]. Then, I [action]. I get [result]." Repeat twice, pointing to visuals or demonstrating with manipulatives. Students respond by pointing to the correct strategy card. Prompt: "Which strategy? Show me." Accept single words, pointing, or gestures. Students share with a partner by showing their card and saying the strategy name.

Expanding Read explanations using complete sentences with clear pacing and grade-appropriate vocabulary. Example: "To solve this, I used [strategy]. First, I [step]. Then, I [step]. Finally, I [result and reasoning]." Read twice without visual modeling. Provide strategy cards or a listening checklist with questions: "What strategy?" "What numbers?" "What steps?" Students identify the strategy and complete 2-3 checklist items using short phrases. Partners compare responses using frames: "I heard ____" or "The strategy was ____ because ____."

Bridging Read explanations at a natural pace using complex sentences, academic vocabulary, and detailed reasoning. Include transition words and justifications (because, therefore, in order to). Read twice without support. Students take brief notes, writing key words, steps, or mathematical terms. After listening, students: (1) identify the strategy, (2) list the main steps heard, (3) note the academic vocabulary. Partners compare notes and discuss: "What strategy and what evidence supports it?" "What key vocabulary did you hear?" Students paraphrase the explanation, demonstrating comprehension of the procedure and reasoning.