General description/overview

Fundamentos de los Números Enteros: Nivel K™ (FNE-K) is an ¡Avanzando! Matemáticas™ product. FNE-K is a Spanish translation and adaptation of Whole Number Foundations Level K, the Moving Up! Mathematics™ intervention program for kindergarten students. With instruction in Spanish, Fundamentos de los Números Enteros: Nivel K provides Tier 2 small-group intervention designed to accelerate the mathematics achievement of kindergarten students who face difficulties developing proficiency with whole number concepts and skills.

- 50-lessons focused on whole number understanding
- Instructional objectives aligned with the Common Core State Standards in Mathematics (CCSS-M) for kindergarten

Product information

Fundamentos de los Números Enteros: Nivel K (FNE-K) is designed to accelerate the mathematics achievement of kindergarten students who are at risk for mathematics difficulties by focusing primarily on early number sense, numbers and operations, and vocabulary. The primary aim of FNE-K is to promote mastery of number concepts and skills through the number 20. With FNE-K, instruction is delivered in Spanish and includes the same math content as the English program Whole Number Foundations Level K.

- Tier 2 small-group intervention
- 50-lessons focused on whole number understanding
- Delivered in small-group formats, three to five times per week, 20 minutes per lesson
- Provided in addition to core (Tier 1) mathematics instruction
- Research on the English version, Whole Number Foundations Level K, has been reviewed by the National Center on Intensive Intervention (NCII) as the program “ROOTS”

Conceptual Framework

- Students develop conceptual understanding through engagement with mathematical models, including number lines, “nifty fifty” chart, ten-frames, finger models, tally marks, and base-ten models.
- Fundamentos de los Números Enteros: Nivel K teaches procedural fluency and automaticity with
  - Systematic practice and review within and across lessons, including frequent opportunities for students to respond;
  - Checks for mastery at the end of each activity, and
  - Math Practice worksheets to help teachers monitor students’ mastery of concepts and skills.
- Vocabulary and Discourse
  - Key mathematical vocabulary is identified and explicitly taught and reviewed.
  - Scripted lessons ensure continuity and precise definitions.
  - Students are provided opportunities to use mathematical vocabulary to reason and provide justification.

Instructional Design Components

- Explicit scripted lessons. Lessons explicitly, concisely and consistently introduce important whole number concepts and skills, emphasizing important math vocabulary. Lessons also provide frequent opportunities for students to respond. Scripted guidelines allow teachers to address potential misconceptions and reinforce mathematical language and vocabulary.
- Home-school connection. Each lesson includes a “note home” which summarizes the lesson’s concepts and skills, and provides suggestions to practice the math content at home.
- Math Check Points. Individually administered progress monitoring assessments are administered every 5th lesson through lesson 25, and at lessons 34, 42, and 50.
Materials
Formats consist of downloadable PDFs for self-printing according to a Distribution License Agreement, or as pre-printed materials that will be shipped to you.

*Fundamentos de los Números Enteros Nivel K* includes 50 lessons divided into two Teacher Books, Math Practice worksheets, Program Support Materials, and a manipulative list.

- **Libro para el maestro Volumen I (Teacher Book 1):** Teacher’s Guide and Lessons 1 – 25
- **Libro para el maestro Volumen 2 (Teacher Book 2):** Lessons 26 – 50
- **Práctica de Matemáticas (Math Practice worksheets):**
  - One Math Practice worksheet for each lesson
  - Math Check Point worksheets for assessing student progress after every 5th lesson through lesson 25, and at lessons 34, 42, and 50
  - Math Check Point data sheets for recording student progress
  - One set of worksheets required for each participating student
- **Program Support Materials:**
  - Number cards, place value mats, ten-frames, and a number chart
- **Manipulative list:** Manipulatives are required for implementation of the program and are NOT included. These manipulatives are commonly available in kindergarten classrooms, or may be purchased from educational retailers.

These materials can be purchased together as an Intervention Kit. Additional and/or replacement Teacher Books and Math Practice worksheets may also be purchased separately.
Research

Whole Number Foundations Level K, the English version of Fundamentos de los Números Enteros: Nivel K, has shown positive outcomes for students. The Spanish program uses the same conceptual framework and instructional design principles as the English program. In addition, objectives and math content of the two programs are identical and directly aligned.

The following is a summary of research results related to Whole Number Foundations Level K, the English program.

Whole Number Foundations Level K (WNF-K) was developed and evaluated with funding from the U.S. Department of Education’s Institute of Education Sciences (IES). An initial study of WNF-LK involved nearly 300 at-risk students in 29 kindergarten classrooms from four Oregon school districts. Students eligible for the WNF-LK intervention were randomly assigned to the WNF-LK intervention or a control condition that implemented the standard district mathematics instruction. In general, results suggested that WNF-LK students made greater gains on important math outcomes than their peers in the control condition. Specifically, findings revealed small to medium effect sizes favoring WNF-LK for the Test of Early Mathematics Ability 3rd Edition (Hedges’ g = 0.37, p = .037) and Early Numeracy-Curriculum Based Measurement total score (g = 0.30, p = .187). Based on the What Works Clearinghouse standards (WWC, 2013), these results would describe FNE-K as having a “statistically significant positive effect” on student math outcomes. This initial study of WNF-LK was also recently reviewed by the National Center on Intensive Intervention (NCII), which rated it as having “partially convincing evidence” regarding the study design, and “convincing evidence” regarding participants, fidelity of implementation, and broad math outcome measures.


Pricing

Formats consist of downloadable PDFs for self-printing in accordance with a Distribution License Agreement along with printing guidelines, or as pre-printed materials that will be delivered to you*. The table below is provided for planning purposes. See https://dibels.uoregon.edu/market for specific ordering information.

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<th>Item</th>
<th>Ordering recommendations</th>
<th>Price for PDF license to print</th>
<th>Price for pre-printed materials</th>
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<tr>
<td>Kit de la intervención (Intervention Kit). Includes Teacher Book 1 and Teacher Book 2; Math Practice worksheets (1 worksheet per lesson and three additional Math Check Points. 5 copies); Program Support Materials; manipulative list**</td>
<td>Order at least one complete kit per school.</td>
<td>$250</td>
<td>$405</td>
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<td>Libro para el maestro Volumen I Lecciones 1 a 25 (Teacher Book 1)</td>
<td>May be ordered in addition to the Intervention Kit for an additional interventionist, or as a replacement.</td>
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<tr>
<td>Libro para el maestro Volumen 2 Lecciones 26 a 50 (Teacher Book 2)</td>
<td>May be ordered in addition to the Intervention Kit for an additional interventionist, or as a replacement.</td>
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<tr>
<td>Práctica de Matemáticas (Math Practice worksheets)</td>
<td>Each student in the intervention will need a copy. Order in addition to kit and in subsequent years.</td>
<td>$10 (license to print 1 copy)</td>
<td>$102 (set of 5 copies)</td>
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* Prices for PDF delivery are for a license to print one copy, unless otherwise specified, and do not include cost of printing. Prices for pre-printed materials include shipping anywhere in the contiguous United States.
**Manipulatives are not included.