SCOTT FORESMAN Investigations IN NUMBER, DATA, AND SPACE®

In-Service On Demand

Investigations: Second Edition Enhancements

Introduction

This tutorial explains the important changes that were made to the Investigations curriculum in the 2nd edition. Though the philosophy of the program remains the same from the 1st to the 2nd edition, there are improvements in the 2nd edition that clarify the purpose, flow, and connections in the curriculum.

There is a greater focus on developing students' understanding and application of number and operations. There is additional professional development and support.

Great Math Just Got Better

Five years of additional research has been conducted since the 1st edition, which makes the 2nd edition of Investigations even more powerful for students and accessible for teachers.

In the 2nd edition, there is greater emphasis on computational fluency. Additional lessons in numbers and operations help students build a solid foundation in math skills such as addition, division, and estimation. This allows students to get a better understanding of higher-level concepts such as data analysis.

The updated design and writing make the program easier to use. The units, activities, and assessments in the 2nd edition are related in such a way that the concepts students learn during a lesson are revisited in daily practice, homework, and assessments. This helps students make connections between ideas.

The carefully selected wording, lesson objectives, focus, and samples of student work make Investigations so straightforward that teachers will not need to skip over or add more activities, wonder what skill they are teaching, or guess if students reached a benchmark or not. Teachers will deliver instruction, assist students, and assess with confidence.

Support for students and teachers is now built into the program. For example, the discussion techniques in the curriculum guides can be used to facilitate active participation from the class. Teachers can use the differentiation suggestions to modify the curriculum for students who have difficulties or for students who need new challenges.

Student Benefits

Throughout all grade levels in the 2nd edition, more lessons focus on numbers and operations with an algebraic connection. There are additional lessons on time, money, and measurement in the primary grades.

Extra practice pages in the Student Activity Book reinforce these and other skills. If students need assistance or review on a topic, they can reference the new Student Math Handbook, a great resource with definitions, game directions, and more.

Improvements were also made to the family letters. In the 2nd edition, these letters clearly show objectives for each unit and examples of student work. Some letters provide suggestions for activities that can be done at home to strengthen the math concepts students are learning in school. Investigations is different from the traditional math methods parents and guardians learned during their schooling, so these suggestions will help them feel better equipped to help students with homework.

All of these great new features allow students to access a wider range of content and meet state standards.

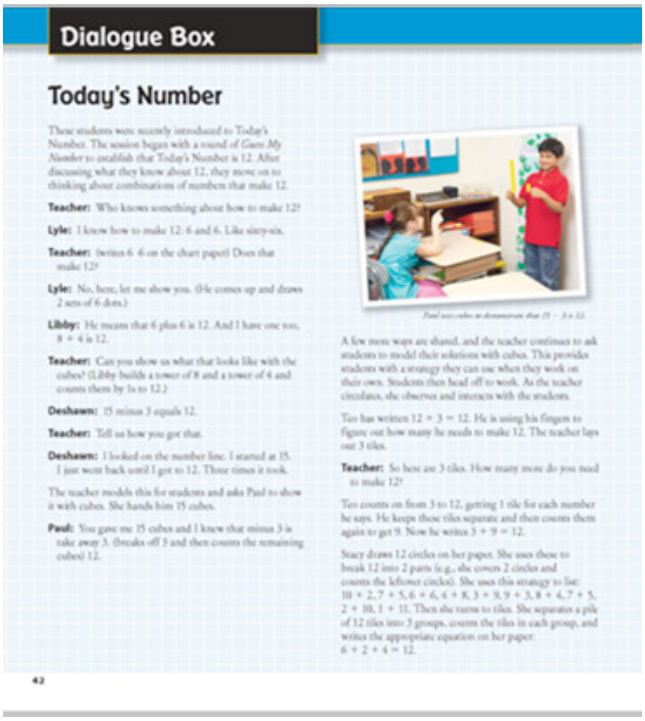
Teacher Benefits

The 2nd edition of Investigations also benefits teachers.

The more teacher-friendly 2nd edition shows teachers what they are teaching, how long the lesson takes, what vocabulary and materials are used, and how to group students.

Objectives are clear and stated multiple times to reinforce the concepts within the lesson as well as to emphasize how the lesson is important to future learning.

Dialogue Boxes provide suggestions on how to enrich class discussions so they are productive and useful. Reasons, questions, examples, and outcomes for discussions are explained.



Dialogue Box

Today's Number

These students were recently introduced to Today's Number. The session began with a round of *Guess My Number* to establish that Today's Number is 12. After discussing what they know about 12, they move on to thinking about combinations of numbers that make 12.

Teacher: Who knows something about how to make 12?

Lyle: I know how to make 12. 6 and 6. Like sixty-six.

Teacher: (writes 6 6 on the chart paper) Does that make 12?

Lyle: No, here, let me show you. (He comes up and draws 2 sets of 6 dots.)

Libby: He means that 6 plus 6 is 12. And I have one too, 8 + 4 is 12.

Teacher: Can you show us what that looks like with the cubes? (Libby builds a tower of 8 and a tower of 4 and counts them by 1s to 12.)

Deshawn: 15 minus 3 equals 12.

Teacher: Tell us how you got that.

Deshawn: I looked on the number line. I started at 15. I just went back until I got to 12. Those times it took.

The teacher models this for students and asks Paul to show it with cubes. She hands him 15 cubes.

Paul: You gave me 15 cubes and I knew that minus 3 is take away 3. (breaks off 3 and then counts the remaining cubes) 12.

Paul uses cubes to demonstrate that 15 − 3 is 12.

A few more ways are shared, and the teacher continues to ask students to model their solutions with cubes. This provides students with a strategy they can use when they work on their own. Students then head off to work. As the teacher circulates, she observes and interacts with the students.

Tim has written 12 + 3 = 12. He is using his fingers to figure out how many he needs to make 12. The teacher lays out 3 tiles.

Teacher: So here are 3 tiles. How many more do you need to make 12?

Tim counts on from 3 to 12, getting 1 tile for each number he says. He keeps these tiles separate and then counts them again to get 9. Now he writes 3 + 9 = 12.

Stacy draws 12 circles on her paper. She uses these to break 12 into 2 parts (e.g., she covers 2 circles and counts the leftover circles). She uses this strategy to list: 10 + 2, 7 + 5, 6 + 6, 4 + 8, 3 + 9, 9 + 3, 8 + 4, 7 + 5, 2 + 10, 1 + 11. Then she turns to tiles. She separates a pile of 12 tiles into 3 groups, counts the tiles in each group, and writes the appropriate equation on her paper: 6 + 2 + 4 = 12.

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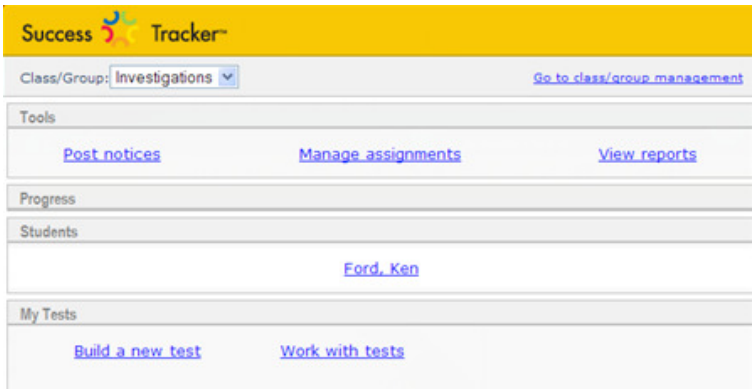
In-depth professional development is incorporated into the program so teachers can understand how students think, know if students meet lesson objectives, and help foster higher-level thinking.

Digital components such as ExamView, Shapes, and LogoPaths, as well as the SuccessNet and Success Tracker online access packs, are also available. These technologies make assessment, differentiated instruction, and planning easier for teachers.



With additional prepared materials, such as card packages, teachers can spend more time teaching and less time copying, collating, and cutting. The 2nd edition of Investigations will save teachers a significant amount of time.

The teaching schedule for Investigations 2nd edition is realistic. On average, the new program has 160 sessions per grade, including assessment days. This is about 15% to 20% less than the 1st edition, which means teachers will cover more topics during the school year and meet more state standards in less time.

Investigations 2nd edition helps teach effectively, efficiently, and easily. Teachers will spend less time planning instruction, gathering materials, and assessing student work, and they will still provide quality math instruction.

Review

To review, this tutorial explained the enhancements made to the 2nd edition of Investigations and the benefits both to teachers and students.

Teachers will enjoy the new, user-friendly design and will find that the 2nd edition is a time saver with clear instructions, new digital and supplemental components, and a shorter teaching time frame.

Students will benefit from more emphasis on computational fluency, added practice, and new resources like the Student Math Handbook.

To find out more, please watch the other Investigations tutorials on MyPearsonTraining.com.