

A Correlation of

INVESTIGATIONS 
IN NUMBER, DATA, AND SPACE®



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To the
**Indiana Academic Standards
for Mathematics (2014)
Grade 2**

**A Correlation of Investigations 3 in Number, Data, and Space © 2017
to the Indiana Academic Standards for Mathematics (2014)**

Introduction

This document demonstrates how *Investigations 3* in Number, Data, and Space, ©2017, aligns to the Indiana Academic Standards for Mathematics (2014), Grade 2. Correlation references are to the Sessions of Investigations 3.

Investigations in Number, Data, and Space® 3rd Edition, known as Investigations 3, maintains the standard of excellence as a focused and coherent program that supports students to make sense of mathematical ideas and supports their teachers to make sense of both mathematics content and student thinking.

The guiding principles from *Investigations 2*nd Edition are maintained in *Investigations 3*. These guiding principles are:

- 1) Students have mathematical ideas and are given the opportunity to learn in an environment that focuses on making sense of mathematics. Students build on the ideas they already have and learn about new mathematics they have never encountered.
- 2) Teachers are engaged in ongoing learning about mathematics content, pedagogy, and student learning.
- 3) Teachers collaborate with the students and use the curriculum to maintain a clear, focused, and coherent agenda for mathematics teaching.

Investigations 3 ensures that its instructional approach works in a wide variety of classrooms. It maintains full availability for classrooms that use print materials and provides access to digital enhancements for both teachers and students in classrooms with regular or periodic access to those technologies.

Investigations 3 offers digital tools and technologies to enhance its research-based, field tested, and proven instructional model. These tools provide teachers with easy access to the professional development materials that are a hallmark of the program, support classroom management tasks, and help students capture and share their work.

Core program resources for teaching and learning will be made available on Savvas' latest learning management system, Savvas Realize™.

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Grade 2 Units

Unit 1 - Coins, Number Strings, and Story Problems

Unit 2 - Attributes Of Shapes and Parts Of A Whole

Unit 3 - How Many Stickers? How Many Cents?

Unit 4 - Pockets, Teeth and Guess My Rule

Unit 5 - How Many Tens? How Many Hundreds?

Unit 6 - How Far Can You Jump?

Unit 7 - Partners, Teams, and Other Groups

Unit 8 - Enough for the Class? Enough for the Grade?

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Indiana Academic Standards for Mathematics (2014) Grade 2	Investigations 3 in Number, Data, and Space Grade 2, ©2017
PROCESS STANDARDS FOR MATHEMATICS	
PS.1: Make sense of problems and persevere in solving them.	Unit 1: 1.1, 1.2, 1.4, 2.1, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 4.1, 4.2 Unit 8: 1.1, 1.3, 1.5, 1.6, 1.7, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8
PS.2: Reason abstractly and quantitatively.	Unit 3: 1.2, 1.5, 1.6, 1.7, 1.8, 2.3, 2.4, 2.6, 2.7, 2.8, 3.1, 3.2, 3.3, 3.4, 3.7 Unit 7: 1.1, 1.2, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6
PS.3: Construct viable arguments and critique the reasoning of others.	Unit 2: 1.1, 1.2, 1.3, 2.2, 3.1, 3.2, 3.4, 3.5 Unit 7: 1.2, 1.3, 1.4, 2.1, 2.3, 2.6
PS.4: Model with mathematics.	Unit 4: 1.1, 1.4, 1.5, 1.6, 2.3, 2.4, 2.5, 2.6 Unit 5: 1.3, 1.5, 1.6, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7
PS.5: Use appropriate tools strategically.	Unit 3: 1.1, 1.2, 1.4, 1.5, 1.6, 1.7, 1.8, 2.3, 2.4, 2.6, 2.7, 2.8, 3.1, 3.2, 3.3, 3.4, 3.7 Unit 6: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 2.4
PS.6: Attend to precision.	Unit 4: 1.1, 1.4, 1.5, 1.6, 2.4, 2.6 Unit 6: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.4
PS.7: Look for and make use of structure.	Unit 2: 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.5, 3.5 Unit 5: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7
PS.8: Look for and express regularity in repeated reasoning.	Unit 1: 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.6, 2.7, 2.8, 3.2, 3.5, 4.2 Unit 8: 1.2, 1.3, 1.5, 1.6, 1.7, 1.8, 1.9, 1.10, 1.11, 2.4, 2.5, 2.7, 2.8
Mathematics Standards for Grade 2	
NUMBER SENSE	
2.NS.1: Count by ones, twos, fives, tens, and hundreds up to at least 1,000 from any given number.	Unit 1: 1.2, 1.3, 1.4, 1.5, 1.6, 2.4, 3.1, 3.3, 3.4, 3.5, 3.6, 3.7 Unit 3: 2.4, 3.4, 3.5, 3.6, 3.7 Unit 4: 1.5, 2.2 Unit 5: 2.2, 2.6, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8 Unit 7: 1.2, 1.4, 2.1, 2.2, 2.3, 2.4

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2.NS.2: Read and write whole numbers up to 1,000. Use words, models, standard form and expanded form to represent and show equivalent forms of whole numbers up to 1,000.	Unit 1: 1.4, 1.5, 1.6, 2.6, 3.2 Unit 2: 2.3 Unit 3: 1.1, 1.2, 1.3, 1.5, 1.6, 1.7, 1.8, 2.1, 3.3, 3.5 Unit 5: 1.2, 2.2, 2.3, 2.4, 2.5, 2.6, 3.2, 3.5, 3.6, 3.7, 3.8 Unit 6: 1.1, 1.2, 1.4, 1.5, 2.2 Unit 7: 1.1, 2.1 Unit 8: 2.1, 2.2, 2.3, 2.4, 2.5, 2.9
2.NS.3: Plot and compare whole numbers up to 1,000 on a number line.	Unit 1: 1.1, 1.6, 2.1, 4.5 Unit 3: 1.8, 2.2 Unit 5: 2.1, 2.2, 2.5 Unit 7: 1.3 Unit 8: 1.1, 1.2, 1.3, 1.7, 1.8
2.NS.4: Match the ordinal numbers first, second, third, etc., with an ordered set up to 30 items.	This standard is met in Investigations 3 Grade 4. Please see: Unit 3: 3.1
2.NS.5: Determine whether a group of objects (up to 20) has an odd or even number of members (e.g., by placing that number of objects in two groups of the same size and recognizing that for even numbers no object will be left over and for odd numbers one object will be left over, or by pairing objects or counting them by 2s).	Unit 7: 1.1, 1.2, 1.3, 1.4, 2.5
2.NS.6: Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones (e.g., 706 equals 7 hundreds, 0 tens, and 6 ones). Understand that 100 can be thought of as a group of ten tens — called a “hundred.” Understand that the numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).	Unit 1: 1.4 Unit 3: 1.4, 1.5, 1.6, 1.7, 1.8, 3.2, 3.3, 3.5, 3.6 Unit 5: 2.2, 2.3, 2.4, 2.5, 2.6, 3.2, 3.3, 3.7, 3.8 Unit 6: 1.1, 1.2, 1.4, 1.5, 2.2 Unit 7: 1.1, 2.1, 2.3 Unit 8: 1.11, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9

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<p align="center">Indiana Academic Standards for Mathematics (2014) Grade 2</p>	<p align="center">Investigations 3 in Number, Data, and Space Grade 2, ©2017</p>
<p>2.NS.7: Use place value understanding to compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.</p>	<p>Unit 3: 3.3, 3.5 Unit 5: 1.3, 1.4, 1.5, 1.6, 2.2, 2.3, 2.4, 2.5, 2.6, 3.5, 3.8 Unit 6: 1.1, 1.4 Unit 7: 1.1, 2.1 Unit 8: 2.1</p>
<p align="center">COMPUTATION AND ALGEBRAIC THINKING</p>	
<p>2.CA.1: Add and subtract fluently within 100.</p>	<p>Unit 1: 2.4, 2.7, 3.6 Unit 3: 1.1, 1.4, 1.5, 1.8, 2.4, 2.6, 2.7, 3.1, 3.3, 3.4, 3.5, 3.6, 3.7 Unit 4: 1.1, 2.5 Unit 5: 1.3, 1.5, 1.6, 2.2, 2.4, 2.5, 3.1, 3.5, 3.7 Unit 6: 1.1, 1.3, 1.4, 1.6, 2.1, 2.2, 2.4, 2.5, 2.6 Unit 7: 1.1, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6 Unit 8: 1.1, 1.2, 1.3, 1.5, 1.6, 1.7, 1.8, 1.11, 2.6</p>
<p>2.CA.2: Solve real-world problems involving addition and subtraction within 100 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). Use estimation to decide whether answers are reasonable in addition problems.</p>	<p>Unit 1: 2.3, 2.4, 3.1, 3.3, 3.4, 3.7, 4.1, 4.2, 4.5 Unit 2: 1.3, 1.4, 2.1, 3.1, 3.3 Unit 3: 1.2, 1.4, 1.6, 1.7, 1.8, 2.3, 2.6, 2.8, 3.1, 3.3, 3.4, 3.6, 3.7 Unit 4: 1.1, 1.2, 1.3, 1.5, 1.6, 2.1, 2.2, 2.6 Unit 5: 1.3, 1.5, 1.6, 3.1, 3.2, 3.3, 3.4, 3.5, 3.8 Unit 6: 1.2, 1.3, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 2.6 Unit 7: 1.1, 1.3, 1.4, 2.3, 2.5 Unit 8: 1.1, 1.3, 1.5, 1.6, 1.8, 1.11, 2.1, 2.3, 2.5, 2.6, 2.7</p>
<p>2.CA.3: Solve real-world problems involving addition and subtraction within 100 in situations involving lengths that are given in the same units (e.g., by using drawings, such as drawings of rulers, and equations with a symbol for the unknown number to represent the problem).</p>	<p>Unit 6: 1.2, 1.3, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6</p>
<p>2.CA.4: Add and subtract within 1000, using models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; describe the strategy and explain the reasoning used. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones, and that sometimes it is necessary to compose or decompose tens or hundreds.</p>	<p>Unit 8: 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9</p>

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2.CA.5: Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal groups.	Unit 7: 2.1, 2.2, 2.3, 2.4, 2.5, 2.6
2.CA.6: Show that the order in which two numbers are added (commutative property) and how the numbers are grouped in addition (associative property) will not change the sum. These properties can be used to show that numbers can be added in any order.	Unit 1: 2.2, 2.3, 3.2, 4.1, 4.5
2.CA.7: Create, extend, and give an appropriate rule for number patterns using addition and subtraction within 1000.	Unit 1: 1.4, 1.6, 2.1, 3.3, 3.4, 3.5, 3.6, 3.7
GEOMETRY	
2.G.1: Identify, describe, and classify two- and three-dimensional shapes (triangle, square, rectangle, cube, right rectangular prism) according to the number and shape of faces and the number of sides and/or vertices. Draw two-dimensional shapes.	Unit 1: 1.4, 1.5 Unit 2: 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1
2.G.2: Create squares, rectangles, triangles, cubes, and right rectangular prisms using appropriate materials.	Unit 2: 1.1, 1.2, 1.3, 1.4, 1.5, 2.2, 2.3, 2.4, 2.5, 2.6
2.G.3: Investigate and predict the result of composing and decomposing two- and three-dimensional shapes.	Unit 2: 1.1, 1.2, 1.4, 1.5
2.G.4: Partition a rectangle into rows and columns of same-size (unit) squares and count to find the total number of same-size squares.	Unit 2: 2.3, 2.4, 2.5, 2.6 Unit 7: 2.2, 2.4, 2.6
2.G.5: Partition circles and rectangles into two, three, or four equal parts; describe the shares using the words halves, thirds, half of, a third of, etc.; and describe the whole as two halves, three thirds, four fourths. Recognize that equal parts of identical wholes need not have the same shape.	Unit 2: 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8
MEASUREMENT	
2.M.1: Describe the relationships among inch, foot, and yard. Describe the relationship between centimeter and meter.	Unit 6: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6

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2.M.2: Estimate and measure the length of an object by selecting and using appropriate tools, such as rulers, yardsticks, meter sticks, and measuring tapes to the nearest inch, foot, yard, centimeter and meter.	Unit 6: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6
2.M.3: Understand that the length of an object does not change regardless of the units used. Measure the length of an object twice using length units of different lengths for the two measurements. Describe how the two measurements relate to the size of the unit chosen.	Unit 6: 1.1, 1.2, 2.3, 2.4, 2.5, 2.6
2.M.4: Estimate and measure volume (capacity) using cups and pints.	For supporting content, please see: Unit 6: 2.2, 2.3, 2.5
2.M.5: Tell and write time to the nearest five minutes from analog clocks, using a.m. and p.m. Solve real-world problems involving addition and subtraction of time intervals on the hour or half hour.	Unit 1: 1.6, 2.1, 2.5, 2.7, 3.1, 4.1, 4.3, 4.4 Unit 2: 1.3, 2.2, 3.7, 3.8 Unit 3: 2.4, 2.9, 3.4, 3.6 Unit 4: 1.3, 1.6, 2.3 Unit 5: 1.1, 1.6, 3.1 Unit 6: 1.1, 1.3, 2.5 Unit 7: 1.2, 1.4, 2.3, 2.4, 2.6 Unit 8: 1.1, 1.4, 1.7, 1.8
2.M.6: Describe relationships of time, including: seconds in a minute; minutes in an hour; hours in a day; days in a week; and days, weeks, and months in a year.	Unit 1: 1.6 Unit 3: 3.4, 3.6
2.M.7: Find the value of a collection of pennies, nickels, dimes, quarters and dollars.	Unit 1: 1.3, 1.4, 1.5, 2.3, 2.4, 3.3, 3.4, 3.5, 3.6, 3.7 Unit 2: 1.1 Unit 3: 1.3, 1.5, 2.5, 2.7, 2.8, 2.9, 3.1, 3.2 Unit 4: 2.6 Unit 5: 1.4, 1.5, 1.6, 2.2 Unit 8: 1.4, 1.5, 1.6, 1.7, 1.9, 1.10, 1.11, 2.6, 2.9
DATA ANALYSIS	
2.DA.1: Draw a picture graph (with single-unit scale) and a bar graph (with single-unit scale) to represent a data set with up to four choices (What is your favorite color? red, blue, yellow, green). Solve simple put-together, take-apart, and compare problems using information presented in the graphs.	Unit 4: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4