## in Number, Data, and Space ${ }^{\text {® }}$

## Using Investigations to Teach the Common Core State Standards at Grade 2

Investigations is a focused and coherent K-5 curriculum, intentionally designed and sequenced to promote a deep understanding of mathematics. The curriculum units at each grade level represent a cohesive whole, not separate parts. Each successive unit builds on the previous unit, both within and across strands, and across grades. The geometry and measurement, data, and patterns and functions units focus on foundational mathematical ideas and practices and also support work in the number and operations units. By teaching the Investigations curriculum as written, students go deeply into mathematical practices and content.

The CCSS in Grade 2. Most of the CCSS content standards are met by teaching the second grade units, in order, as is. Investigations and the Common Core State Standards at Grade 2 provides new content so that all standards are covered. ${ }^{1}$ In most cases, these Standards are also addressed by existing material in the Investigations curriculum. New activities and Sessions build on what is in the curriculum to introduce new ideas or extend existing ones. New Math/Teaching Notes, Classroom Routines, and pages for additional practice address language, vocabulary, notation, or levels of fluency specific to the CCSS.

Additional Content That Extends the Mathematics in Investigations Grade 2

| Math Idea(s) ${ }^{\mathbf{2}}$ | CCSS <br> Standard | Additional Content | Unit |
| :---: | :---: | :---: | :---: |
| Solve addition and subtraction problems with unknowns in all positions. | 2.OA.1 | 1 Session <br> MW Activity <br> Activity adapted (Tell a Story) <br> Daily Practice/Homework | $\begin{aligned} & \hline 3 \\ & 3 \\ & 3 \\ & 3,5-6 \\ & \hline \end{aligned}$ |
| Subtract within 20 fluently. | 2.OA. 2 | 2 Sessions <br> Teaching Notes <br> Daily Practice/Homework | $\begin{aligned} & \hline 2,9 \\ & 3-7 \\ & 2,3,8,9 \\ & \hline \end{aligned}$ |
| Recognize that multiples of 100 are composed of hundreds and that 3-digit numbers are composed of $100 \mathrm{~s}, 10 \mathrm{~s}$, and 1 s . Use a place value model, and notation ( $>,<$ ), to represent and compare 3 digit numbers "based on the meanings of $\ldots 100 \mathrm{~s}, 10 \mathrm{~s}$ and $1 \mathrm{~s} "$. | $\begin{aligned} & \text { 2.NBT.1, 1b } \\ & \text { 2.NBT.4 } \end{aligned}$ | 1 Investigation (5 Sessions) Classroom Routine: How Many Pockets? Tens and Ones Classroom Routine: Today's Number <br> Math Note <br> Daily Practice/Homework | $\begin{aligned} & \hline 6 \\ & 3,6 \\ & 5,6,8 \\ & 3 \\ & 6,8-9 \end{aligned}$ |
| "Count within 1000; skip-count by $5 \mathrm{~s}, 10 \mathrm{~s}$, and 100s." | 2.NBT. 2 |  |  |
| Read and write 3-digit numbers; use expanded form. | 2.NBT. 3 |  |  |
| Add and subtract 10 or 100 to/from a given number and describe what part of the number changes. | 2.NBT. 8 |  |  |

[^0]| Math Idea(s) ${ }^{2}$ | CCSS <br> Standard | Additional Content |
| :--- | :--- | :--- | :--- |
| "Add up to four two-digit numbers using strategies based on place value and <br> properties of operations." | 2. NBT.6 | Classroom Routine: How Many Pockets? <br> Daily Practice/Homework |
| "Add and subtract within 1000." | 2. NBT.7 | 1 Investigation (4 Sessions) <br> Daily Practice/Homework |
| Tell and write time to the half hour to the nearest 5 minutes. | 2. MD.7 | Classroom Routine: What Time Is It? <br> Daily Practice/Homework |
| Represent measurement data on a line plot. | $2 . \mathrm{MD.9}$ | Adapted activity <br> Teaching Note |
| Use a bar graph to represent data. | 2. MD.10 | Activity <br> Daily Practice/Homework |
| Identify pentagons. | $2 . G .1$ | Classroom Routine: Drawing Shapes <br> Teaching Notes <br> Math Note |
| Partition a rectangle into an (up to 5 x 5) array. Count or add to find the <br> total. Use an addition equation to express the total amount. <br> Daily Practice/Homework |  |  |
| Work with halves, thirds, and fourths of circles and rectangles. | $2 . \mathrm{G.2}$ | Math Workshop Activity <br> Teaching Note <br> Daily Practice/Homework |

Pacing in Grade 2. Most of the CCSS content standards are met by teaching the second grade units, in order, as written. Investigations and the Common Core State Standards at Grade 2 includes 13 new Sessions which are incorporated into the nine original units. In order to keep the total number of Sessions manageable, omit the 12 Sessions listed in the table below. While they do not focus explicitly on CCSS content, they broaden the mathematics experience for second graders and can be taught if time permits.

| Unit | Original \# <br> of Sessions | New Sessions | Sessions to be Omitted | Total \# of <br> Sessions |
| :--- | :--- | :--- | :--- | :--- |
| 1 | 27 |  |  | 27 |
| 2 | 19 | 1 (2.OA.2) | 4 (Symmetry, 3.1-3.4) | 16 |
| 3 | 26 | 1 (2.OA.1) |  | 27 |
| 4 | 15 |  | 2 (Data Project, $1.5-1.6)$ | 13 |
| 5 | 11 |  |  | 11 |
| 6 | 20 | (2.NBT.1, 1b, 2.NBT.2, 2.NBT.3, <br> 2.NBT.4, 2.NBT.8) |  | 25 |
| 7 | 10 | 1 (2.G.3) |  | 11 |
| 8 | 16 | 4 (2.NBT.7) | 6 (Timelines, 4.1-4.6) | 20 |
| 9 | 21 | 1 (2.OA.2) | $\mathbf{1 2}$ | 16 |
|  | $\mathbf{1 6 5}$ | $\mathbf{1 3}$ | $\mathbf{1 6 6}$ |  |


[^0]:    ${ }^{1}$ All the necessary information and materials are included in Investigations and the Common Core State Standards. For more information, see: http://assets.pearsonschool.com/asset mgr/current/20119/InvestigationsCCBrochure.pdf.
    ${ }^{2}$ These ideas, which paraphrase the CCSS Standards, may reflect only a portion of one standard, or several standards combined.

