

Instructional Guide
Grade 1 – Mathematics
September 2022 through January 2023

Grade 1 Overview

| Module | Standards |
|--|---|
| M1: Sums and Differences to 10 | 1.OA.1, 1.OA.3, 1.OA.4, 1.OA.5, 1.OA.6 ^F , 1.OA.7, 1.OA.8 |
| M2: Introduction to Place Value through Addition and Subtraction Within 20 | 1.OA.1, 1.OA.2, 1, 1.OA.3, 1.OA.4, 1.OA.6 ^F , 1.NBT.2a, 1.NBT.2b. |
| M3: Ordering and Comparing Length Measurements as Numbers | 1.OA.1, 1.MD.1, 1.MD.2, 1.MD.4, |
| M4: Place Value, Comparison, Addition and Subtraction to 40 | 1.OA.1, 1.NBT.1, 1.NBT.2a, 1.NBT.2c, 1.NBT.3, 1.NBT.4, 1.NBT.5, 1.NBT.6, |
| M5: Identifying, Composing, and Partitioning Shapes | 1.MD.3a, 1G.1, 1G.2, 1G.3 |
| M6: Place Value, Comparison, Addition and Subtraction to 100 | 1.OA.1, 1.NBT.1, 1.NBT.2a, 1.NBT.2c, 1.NBT.3, 1.NBT.4, 1.NBT.5, 1.NBT.6, 1.MD.3b, 1.MD.3c* |

See PAGE 9 for your September to January PACING

K-8 MATHEMATICS - DIGITAL RESOURCES

| | Zearn | Moby Max | i-Ready | First in Math (K-5) | IXL |
|------------------------------------|--|--|---|---|--|
| Purpose | Zearn Math instructional resources are designed to mirror teacher instruction with Eureka/EngageNY. | Moby Max is designed to find and fix learning gaps using the power of personalized learning. | i-Ready provides teachers with individualized data and suggested differentiated instruction to support student learning. | First In Math provides self-paced activities to help students strengthen fact fluency, automaticity, computational thinking, and other critical skills that support STEM readiness. | IXL is a targeted learning tool used to provide personalized action plans and links related to the academic progress and areas of need for each student |
| District Expectations | <p>Zearn will be used to support grade level instruction. The independent digital lessons will be assigned following teacher instruction.</p> <p>Zearn may also be used for re-teach, in cases where students need review of previous grade level content.</p> | <p>Moby Max will be used to provide intervention in the areas where individual students are struggling.</p> <p>Every student will take the Moby Max diagnostic at the start of the year; providing each student with an individualized plan for learning.</p> <p>Moby Max may also be used to support grade level instruction.</p> | <p>i-Ready will be used as the district's math screener for grades K-8.</p> <p>Every student will take the digital math screener during the three identified testing windows: BOY, MOY and EOY.</p> | <p>First In Math will be used for fluency practice; to master facts, practice procedural skills and engage in problem-solving.</p> | <p>IXL will be used as a district benchmark for all high school math courses <u>and</u> grade 8 Algebra during three identified testing windows: BOY (diagnostic), MOY (snapshot) and EOY (snapshot).</p> <p>Students must also work in IXL diagnostic arena for 10 minutes <u>each week</u> in order to keep their levels and recommendations up to date.</p> |
| Available supports/webinars | about.zearn.org/school-account-resources password: Zearn2020 | https://vimeo.com/mobymax | https://login.i-ready.com/educator/help | https://explore.firstinmath.com/program-content/educator-questions/?cc=us | https://www.ixl.com/userguides |

Instructional Guide
Grade 1 – Mathematics
 September 2022 through January 2023

IMPORTANT Module 1 Notes:

Based on the **Next Generation Math Standards (to be implemented THIS YEAR)**, please be aware of the following:

- 1.OA.1 Use addition and subtraction within 20 to solve **one-step** word problems involving situations of adding to, taking from, putting together, taking apart, **and/or** comparing, with unknowns in all positions. (Problems should be **represented/solved** using objects, drawings or equations with a symbol for the unknown)
- 1.OA.4 Understand subtraction as an unknown-addend problem **within 20**.
- Fluency Standard **1.OA.6** is divided into two separate and distinct skills
 - 6a. Add and subtract within 20.
 - 6b. Fluently add and subtract within 10.
- 1.OA.8 Determine the unknown whole number in addition or subtraction equation **with the unknown in all positions**. (For example $8 + ? = 11$, $_ - 3 = 5$, $6 + 6 = \square$.)

Module 1 Vocabulary

| | | |
|--|---------------------------------------|------------|
| Addend | Addition, subtraction and equal signs | Count on |
| Doubles | Doubles plus one | Expression |
| Label | Number bond | Part |
| Total/ whole | Track the count | 5 group |
| Equation/Number Sentence (use interchangeably) | | |

Instructional Guide
Grade 1 – Mathematics
September 2022 through January 2023

ENRICHMENT EMBEDDED WITHIN MODULE 1

Pattern

- Lessons 21 - 24: Identify patterns in addition (i.e. doubles)

Reasoning

- Lesson 2: Reason about embedded numbers in varied configurations using number bonds.
- Lesson 38: Look for and make use of repeated reasoning and structure, using the addition chart to solve subtraction problems

Logic

- Lesson 10: Solve put together word problems with results unknown math stories by drawing and using 5-group cards

Think Tank Module 1: Enrichment for All Learners by Lesson

| Lesson | Box | Topic and Card Number |
|--------|---|--------------------------|
| 1 | Thinking Mathematically and Problem Solving | Brain Boosters, Card 1 |
| 2 | Thinking Mathematically and Problem Solving | Prickly Problems, Card 6 |
| 3 | Computation and Number Sense | Speedy Starters, Card 17 |
| 4 | Thinking Mathematically and Problem Solving | Wise Wizards, Card 7 |
| 5 | Thinking Mathematically and Problem Solving | Cool Heads, Card 16 |
| 6 | Computation and Number Sense | Speedy Starters, Card 4 |
| 7 | Computation and Number Sense | Mental Teasers, Card 7 |

Instructional Guide
Grade 1 – Mathematics
September 2022 through January 2023

| | | |
|----|---|---------------------------|
| 8 | Thinking Mathematically and Problem Solving | Cool Heads, Card 2 |
| 9 | Computation and Number Sense | Speedy Starters, Card 5 |
| 10 | Computation and Number Sense | Speedy Starters, Card 2 |
| 11 | Thinking Mathematically and Problem Solving | Super Sleuths, Card 7 |
| 12 | Computation and Number Sense | Speedy Starters, Card 15 |
| 13 | Computation and Number Sense | Brain Builders, Card 5 |
| 14 | Thinking Mathematically and Problem Solving | Prickly Problems, Card 12 |
| 15 | Thinking Mathematically and Problem Solving | Cracker Jacks, Card 8 |
| 16 | Thinking Mathematically and Problem Solving | Cool Heads, Card 14 |
| 17 | Thinking Mathematically and Problem Solving | Mental Matters, Card 3 |
| 18 | Thinking Mathematically and Problem Solving | Thorough Thinkers, Card 9 |
| 19 | Computation and Number Sense | Mental Teasers, Card 6 |
| 20 | Computation and Number Sense | Mind Benders, Card 15 |
| 21 | Computation and Number Sense | Fast Figurers, Card 5 |
| 22 | Computation and Number Sense | Speedy Starters, Card 7 |
| 23 | Computation and Number Sense | Brain Builders, Card 8 |
| 24 | Computation and Number Sense | Brain Builders, Card 7 |
| 25 | Computation and Number Sense | Brain Builders, Card 18 |
| 26 | Thinking Mathematically and Problem Solving | Brain Boosters, Card 9 |

Instructional Guide
Grade 1 Mathematics
September 2022 - January 2023

| | | |
|----|---|--------------------------|
| 27 | Computation and Number Sense | Speedy Starters, Card 16 |
| 28 | Thinking Mathematically and Problem Solving | Prickly Problems, Card 9 |
| 29 | Computation and Number Sense | Brain Builders, Card 1 |
| 30 | Computation and Number Sense | Head Sharpeners, Card 7 |
| 31 | Thinking Mathematically and Problem Solving | Brain Boosters, Card 16 |
| 32 | Thinking Mathematically and Problem Solving | Head Polishers, Card 8 |
| 33 | Thinking Mathematically and Problem Solving | Mental Matters, Card 5 |
| 34 | Thinking Mathematically and Problem Solving | Cool Heads, Card 6 |
| 35 | Computation and Number Sense | Mind Benders, Card 4 |
| 36 | Computation and Number Sense | Mental Teasers, Card 12 |
| 37 | Computation and Number Sense | Head Sharpeners, Card 1 |
| 38 | Computation and Number Sense | Pace Setters, Card 5 |
| 39 | Thinking Mathematically and Problem Solving | Cracker Jacks, Card 17 |

Instructional Guide
Grade 1 Mathematics
September 2022 - January 2023

IMPORTANT Module 2 Notes:

Based on the **Next Generation Math Standards (to be implemented THIS YEAR)**, please be aware of the following:

- 1.OA.1 Use addition and subtraction within 20 to solve **one-step** word problems involving situations of adding to, taking from, putting together, taking apart, **and/or** comparing, with unknowns in all positions. (Problems should be **represented/solved** using objects, drawings or equations with a symbol for the unknown)
- 1.OA.4 Understand subtraction as an unknown-addend problem **within 20**.
- Fluency Standard **1.OA.6** will be divided into two separate and distinct skills
 - 6a. Add and subtract within 20.
 - 6b. Fluently add and subtract within 10.
- 1.OA.8 Determine the unknown whole number in addition or subtraction equation **with the unknown in all positions**. (For example $8 + ? = 11$, $_ - 3 = 5$, $6 + 6 = \square$.)
- 1.NBT.2a **Understand** the number 10 can thought of as a bundle of ten ones, called a “ten”
- 1.NBT.2b **Understand** the numbers from 11 to 19 are composed of a ten and some ones.

Module 2 Vocabulary

A ten

Ones

Teen Numbers

ENRICHMENT EMBEDDED WITHIN MODULE 2

Reasoning

- Lesson 11: Share and critique peer solution strategies for put together with total unknown word problems.
- Lesson 21: Share and critique peer solution strategies for take from with the result unknown and take apart with addend unknown word problems from the teens.
- Lesson 25: Strategize and apply understanding of the equal sign to solve equivalent expressions.

Instructional Guide
Grade 1 Mathematics
 September 2022 - January 2023

Think Tank Module 2: Enrichment for All Learners by Lesson

| Lesson | Box | Topic and Card Number |
|--------|---|---------------------------|
| 1 | Thinking Mathematically and Problem Solving | Wise Wizards, Card 11 |
| 2 | Thinking Mathematically and Problem Solving | Super Sleuths, Card 17 |
| 3 | Thinking Mathematically and Problem Solving | Prickly Problems, Card 15 |
| 4 | Thinking Mathematically and Problem Solving | Mental Matters, Card 1 |
| 5 | Thinking Mathematically and Problem Solving | Mega Minds, Card 9 |
| 6 | Thinking Mathematically and Problem Solving | Quick Quizzes, Card 11 |
| 7 | Thinking Mathematically and Problem Solving | Cranium Crackers, Card 3 |
| 8 | Thinking Mathematically and Problem Solving | Head Polishers, Card 7 |
| 9 | Thinking Mathematically and Problem Solving | Mental Matters, Card 18 |
| 10 | Thinking Mathematically and Problem Solving | Head Polishers, Card 20 |
| 11 | Thinking Mathematically and Problem Solving | Mental Matters, Card 17 |
| 12 | Thinking Mathematically and Problem Solving | Super Sleuths, Card 14 |
| 13 | Thinking Mathematically and Problem Solving | Quick Quizzes, Card 19 |
| 14 | Thinking Mathematically and Problem Solving | Thorough Thinkers, Card 6 |
| 15 | Thinking Mathematically and Problem Solving | Crackers Jacks, Card 10 |
| 16 | Thinking Mathematically and Problem Solving | Wise Wizards, Card 12 |
| 17 | Thinking Mathematically and Problem Solving | Mental Matters, Card 8 |

Instructional Guide
Grade 1 Mathematics
September 2022 - January 2023

| | | |
|----|---|----------------------------|
| 18 | Thinking Mathematically and Problem Solving | Thorough Thinkers, Card 5 |
| 19 | Thinking Mathematically and Problem Solving | Mental Matters, Card 4 |
| 20 | Thinking Mathematically and Problem Solving | Super Sleuths, Card 5 |
| 21 | Thinking Mathematically and Problem Solving | Wise Wizards, Card 3 |
| 22 | Thinking Mathematically and Problem Solving | Thorough Thinkers, Card 11 |
| 23 | Thinking Mathematically and Problem Solving | Thorough Thinkers, Card 7 |
| 24 | Thinking Mathematically and Problem Solving | Super Sleuths, Card 9 |
| 25 | Thinking Mathematically and Problem Solving | Wise Wizards, Card 13 |
| 26 | Thinking Mathematically and Problem Solving | Mega Minds, Card 5 |
| 27 | Thinking Mathematically and Problem Solving | Cranium Crackers, Card 15 |
| 28 | Thinking Mathematically and Problem Solving | Mega Minds, Card 20 |
| 29 | Thinking Mathematically and Problem Solving | Cracker Jacks, Card 10 |

Instructional Guide
Grade 1 Mathematics
 September 2022 - January 2023

PACING Plan for September 2022 - January 2023

| Grade 1 | | | | | |
|--|-------------------|-----------------------|--|--|--|
| Quarter 1 - weeks | Quarter 1 - dates | Sept - Jan PACING | Zearn Digital Independent Lessons | Think Tanks | Instructional Notes |
| Week 1 | 9/6 - 9/9 | | | | |
| Week 2 | 9/12 - 9/16 | M1: Lesson 1, 3, 4 | Mission 1: L1 Mission 1: L3 Mission 1: L4 | Brain Boosters 1 Speedy Starters 17 Wise Wizards 7 | Omit lesson 2 – it reviews # bonds Combine lesson 5 with 4 as needed- same objective Lessons 1-13 align to Next Gen Standard NY-1.OA.1 *Full Module aligns to Next Gen Standard NY-1.OA.6 |
| Week 3 | 9/19 - 9/23 | M1: Lesson 6, 8, 9 | Mission 1: L6 Mission 1: L8 Mission 1: L9 | Speedy Starters 4 Cool Heads 2 Speedy Starters 5 | Combine lesson 7 with 6 as needed –same objective Omit lesson 10, follow up of lesson 9 Lesson 9 align to Next Gen Standard NY-1.OA.1 |
| Week 4 | 9/26 - 9/30 | M1: Lesson 11, 13, 14 | Mission 1: L11 Mission 1: L13 Mission 1: L14 | Super Sleuths 7 Brain Builders 5 Prickly Problems 12 | Omit lesson 12, follow up of lesson 11 Lessons 14-16 align to Next Gen Standard NY-1.OA.8 |
| i-Ready BOY SCREENING WINDOW (10/3-10/28) | | | | | |
| Week 5 | 10/3 - 10/7 | M1: Lesson 15, 16, 19 | Mission 1: L15 Mission 1: L16 Mission 1: L19 | Cracker Jacks 8 Cool Heads 14 Mental Teasers 6 | Omit lessons 17 and 18-repeated in later modules. |
| Week 6 | 10/11 - 10/14 | M1: Lesson 20, 25 | Mission 1: L20 Mission 1: L25 | Mind Benders 15 Brain Builders 18 | Mid-module assessment recommended after Lesson 20 Omit lessons 21-24- covers doubles and doubles + 1 which is picked up in lesson 25 Lessons 25 - 37 align to Next Gen Standard NY-1.OA.4 |
| Week 7 | 10/17 - 10/21 | M1: Lesson 26, 27, 28 | Mission 1: L26 Mission 1: L27 Mission 1: L28 | Brain Boosters 9 Speedy Starters 16 Prickly Problems 9 | Make use of an addition chart Lessons 28-32 align to Next Gen Standards NY-1.OA.1 & NY-1.OA.8 |

Instructional Guide
Grade 1 Mathematics
September 2022 - January 2023

| | | | | | |
|------------------------------|------------------------------|----------------------------|--|--|---|
| Week 8 | 10/24 - 10/28 | M1: Lesson 29, 31, 32 | Mission 1: L29 Mission 1: L31 Mission 1: L32 | Brain Builders 1 Brain Boosters 16 Head Polishers 8 | Omit lesson 30 concept covered in lesson 29 Lessons 28-32 align to Next Gen Standard NY-1.OA.1 & NY-1.OA.8 |
| Week 9 | 10/31 - 11/4 | M1: Lesson 33, 34, 36 | Mission 1: L33 Mission 1: L34 Mission 1: L36 | Mental Matters 5 Cool Heads 6 Mental Teasers 12 | Combine lesson 35 with 34 as needed-similar objective |
| Week 10 | 11/7 - 11/10 | M1: Lesson 37 | Mission 1: L37 | Head Sharpeners 1 | Omit lessons 38-39 they are reinforcement of subtraction End of Module Assessment recommended after Lesson 37 |
| Quarter 2 - weeks | Quarter 2 - dates | Sept - Jan PACING | Zearn Digital Independent Lessons | Think Tanks | Instructional Notes |
| Week 11 | 11/14 – 11/18 | M2: Lesson 1/2, 3/4, 6 | Mission 2: L1 Mission 2: L3 Mission 2: L6 | Wise Wizards 11 Prickly Problems 15 Quick Quizzes 11 | Combine lesson 2 with 1 as needed-similar objectives Combine lesson 4 with 3 as needed-same objectives Omit lesson 5 *Full Module aligns to Next Gen Standards NY-1.OA.1 & NY-1.OA.6 |
| Week 12 | 11/21 – 11/23 | M2: Lesson 7, 10 | Mission 2: L7 Mission 2: L10 | Cranium Cards 3 Head Polishers 20 | Combine lesson 8 with 7 as needed-same objectives Omit lessons 9 and 11 |
| Week 13 | 11/28 - 12/2 | M2: Lesson 12/13, 14/15 | Mission 2: L12 Mission 2: L14 | Super Sleuths 14 Thorough Thinkers 6 | Mid-Module assessment recommended before starting lesson 12 Combine lesson 13 with 12 as needed-same objectives Combine lesson 15 with 14 as need-same objectives Lessons 12-25 align to Next Gen Standard NY-1.OA.4 |
| Week 14 | 12/5 - 12/9 | M2: Lesson 16, 17, 18 | Mission 2: L16 Mission 2: L17 Mission 2: L18 | Wise Wizards 12 Mental Matters 8 Thorough Thinkers 5 | Omit lesson 19-skill covered in lesson 16 |
| Week 15 | 12/12 - 12/16 | M2: Lesson 20, 22, 23 | Mission 2: L20 Mission 2: L22 Mission 2: L23 | Super Sleuths 5 Thorough Thinkers 11 Thorough Thinkers 7 | Omit lessons 21 |
| Week 16 | 12/19 -12/23 | M2: Lessons 24, 25 | Mission 2: L24 Mission 2: L25 | Super Sleuths 9 Wise Wizards 13 | Lessons 26-29 align to Next Gen Standards NY-1.NBT.2a & NY-1.NBT.2b |

Instructional Guide
Grade 1 Mathematics
September 2022 - January 2023

| | | | | | |
|---|-------------|--------------------|---|---|--|
| Week 17 | 1/3 - 1/6 | M2: Lesson 26, 27 | Mission 2: L26 Mission 2: L27 | Mega Minds 5 Cranium Crackers 15 | End of module assessment recommended after lesson 29 |
| Week 18 | 1/9-1/13 | M2: Lesson 28, 29 | Mission 2: L28 Mission 2: L29 | Mega Minds 20 Cracker Jacks 10 | |
| Week 19 | 1/17 – 1/20 | M3: Lesson 1, 2, 3 | Mission 3: L1 Mission 3: L2 Mission 3: L3 | Prickly Problems 5 Brain Boosters 19 Cranium Crackers 8 | Emphasizes measuring rules |
| i-Ready MOY SCREENING WINDOW (1/23-2/17) | | | | | |
| Week 20 | 1/23 – 1/27 | M3: Lesson 4, 5, 6 | Mission 3: L4 Mission 3: L5 Mission 3: L6 | Quick Quizzes 3 Head Polishers 9 Mental Matters 6 | |