BIE Suggested Grade 7 12-Week Pacing Guide – Interim 1

Unit 1: Rational Number Operations

(Foundation for the Year)

Weeks 1–3: Adding & Subtracting Rational Numbers (7.NS.A.1)

Week 1 – Integers with Models

Use number lines and integer chips to build conceptual understanding of addition and subtraction.

Explore "adding is moving right/left," "subtracting is taking away/adding the opposite."

Week 2 – Fractions & Decimals with Addition/Subtraction

Connect visual fraction models and area models to operations.

Review least common denominators and place value alignment with decimals.

Week 3 – From Models to Algorithms

Transition from visual/concrete strategies to formal algorithms for adding/subtracting rational numbers.

Mixed practice with integers, fractions, and decimals.

Weeks 4–6: Multiplying & Dividing Rational Numbers (7.NS.A.2)

Week 4 – Multiplying Integers

Patterns (positive × positive, negative × positive, etc.) with number line and counters.

Connect to "opposites" and repeated addition.

Week 5 – Multiplying & Dividing Fractions/Decimals

Use area models for multiplication of fractions and decimals.

Connect fraction multiplication to scaling.

Division: "how many groups?" and "sharing" interpretations.

Week 6 – Fluency with All Rational Numbers

Extend to mixed numbers, terminating/repeating decimals.

Emphasize connections: integers ↔ fractions ↔ decimals.

Begin applying operations in short word problems.

Weeks 7–9: Integrating Operations in Context (7.NS.A.3)

Week 7 – Two-Step Word Problems

Contexts: money, temperature, elevation, sports.

Emphasize sense-making and estimation before solving.

Week 8 – Multi-Step & Mixed Operations

Problems requiring sequencing of all four operations.

Introduce order of operations review in context.

Week 9 – Rich Tasks & Applications

Culminating performance tasks (e.g., budgeting, designing a trip, recipe scaling).

Students explain reasoning, not just compute.

Weeks 10–12: Bridging to Expressions & Equations (Preview Unit 2)

(These weeks strengthen the transition from operations to algebraic thinking.)

Week 10 – Numeric to Algebraic Connections

Use variable expressions to represent rational number operations.

Begin writing equivalent expressions (ties into 7.EE.A.2).

Week 11 – Problem Solving with Expressions

Solve multi-step real-world problems (discounts, taxes, etc.) with rational numbers and expressions.

Week 12 – Unit Review & Assessment

Review all rational number operations.

Culminating assessment task requiring integration of all standards.

Preview next unit: rewriting and solving equations in context.