# Understanding the Major Work of the 3–5 Grade Band

## Time | Agenda | Description
--- | --- | ---
**Zoom Session 1**
2 hours | Developing Conceptual Understanding of Multiplication and Division
Understanding and Applying Unit Form | During the first virtual PD session, participants will
- experience the development of the meanings of factors,
- study the array model as an efficient tool to represent equal groups,
- use the meanings of factors to interpret division as an unknown-factor problem,
- establish the unit as a big idea spanning Grades K–5, and
- use place value units and the array model to multiply and divide multi-digit numbers.

Interim Work and Lunch Break
2 hours | Professional Reading — K–5 Number and Operations in Base Ten Progressions
Protocol — Digging into a Vignette: Question the Author
Protocol — Analyzing Complexities | To prepare for the second virtual PD session, participants will
- read about the progression of place value units in Grades K–5,
- read the Question the Author protocol and practice it with the Grade 3 Module 3 Lesson 19 Concept Development, and
- read the Analyzing Complexities protocol and practice it with the Grade 3 Module 3 Lesson 19 Problem Set.

**Zoom Session 2**
2 hours | Understanding and Applying the Distributive Property
Multiplying Fractions and Decimals | During the second virtual PD session, participants will
- study the progression of the distributive property through concrete, pictorial, and symbolic representations,
- apply the distributive property to multiply by using the area model,
- apply previous understandings of multiplication to multiply a whole number by a fraction by using repeated addition,
- compare models representing multiplication of a whole number by a fraction and multiplying a fraction by a whole number,
- study the progression of finding a fraction of a whole number to finding a fraction of a fraction and relate that understanding to multiply decimals, and
- apply the area model to find the area of rectangles with fractional side lengths.