

Title: Distributive Property of Multiplication Over Addition -“Add The Spread, Please”

Brief Overview:

Add The Spread, Please! is an instructional unit consisting of three modules, Finding Factor Facts, Multiple Focus -10, and The First-Outer-Inner-Last (F.O.I. L.) Investigation. Through the Fundamental Law of Distributive, the students investigate the multiplication connection beyond repeated addition. With symbolism and representation, the students communicate how multiplication spreads across addition. While building upon conceptual and procedural knowledge of whole number computation, the students apply the distributive property as a mental math tool or strategy.

NCTM Content Standard: Number and Operations

- Understand numbers, ways of representing numbers; relationships among numbers, and number systems;
- Understand meaning of operations and how they relate to one another;
- Compute fluently and make reasonable estimations

Grades/Level:

Grades 4-6

Duration/Length:

5-day/ 55-minute Class Sessions

Student Outcomes:

Students will:

- recognizes equivalent representations for the same number and generate them by decomposing numbers;
- use expanded form to express whole numbers and parenthesis to evaluate the numeric expression;
- apply the place-value structure of the base-ten number system to represent whole numbers
- develop fluency with basic number combinations for multiplication and addition; use these combinations to mentally compute related problems, such as 30×50
- understand the distributive property of multiplication over addition.
- apply the distributive property as a mental math tools for computing whole numbers.