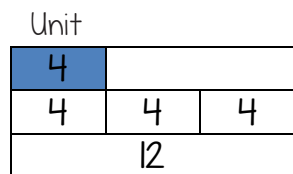


Math Module 3: Multiplication and Division with Units of 0, 1, 6-9, and Multiples of 10

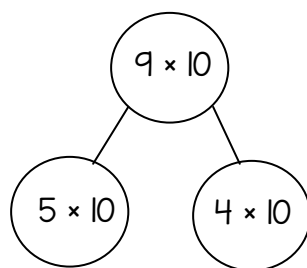
Vocabulary

- Even: 0, 2, 4, 6, 8
- Odd: 1, 3, 5, 7, 9
- Multiple: specifically with reference to naming multiples of 9 and 10, e.g., 20, 30, 40, etc.
- Multiplier: the factor representing the number of units
- Product: the quantity resulting from multiplying two or more numbers together
- Array: a set of numbers or objects that follow a specific pattern
- Commutative Property: The order doesn't matter; e.g., $2 \times 3 = 3 \times 2$
- Distribute: with reference to the distributive property; e.g., in $12 \times 3 = (10 \times 3) + (2 \times 3)$, the 3 is multiplier for each part of the decomposition
- Divide, division: partitioning a total into equal groups to show how many equal groups add up to a specific number, e.g., $15 \div 5 = 3$
- Equal groups: with reference to multiplication and division; one factor is the number of objects in a group and the other is a multiplier that indicates the number of groups
- Equation: a statement that two expressions are equal, e.g., $3 \times 4 = 12$
- Factors: numbers that are multiplied to obtain a product
- Multiply, multiplication: an operation showing how many times a number is added to itself, e.g., $5 \times 3 = 15$
- Number bond: model used to show part-part-whole relationships (See Below)
- Parentheses: the symbols () used around a fact or numbers within an equation
- Quotient: the answer when one number is divided by another
- Tape diagram: a method for modeling problems (see below)
- Unit: one segment of a partitioned tape diagram (see below)
- Unknown: the "missing" factor or quantity in multiplication or division
- Value: how much

Visuals:



Tape (Bar) Diagram



Number Bond



$3 \times 5 = 15$
Array