

Activity 32 Assessment

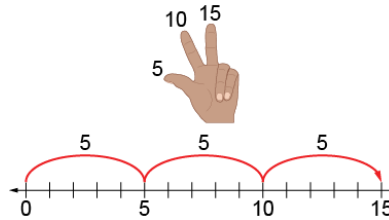
Building Fluency: The Games Room

Developing Fluency with Multiplication and Division

Models with concrete materials and counts by 1s



Uses skip-counting forward and backward



Works flexibly with numbers (e.g., uses repeated addition or subtraction, familiar facts, commutative property)

$$5 + 5 + 5 = 15$$

I know $2 \times 5 = 10$ and one more group of 5 is 15, so $3 \times 5 = 15$.

I know $5 \times 3 = 15$, so 3×5 also equals 15."

Observations/Documentation

Activity 32 Assessment

Building Fluency: The Games Room

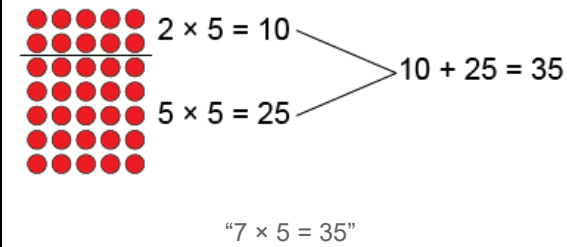
Developing Fluency with Multiplication and Division (con't)

Uses familiar facts to solve ratios

1	2	3	4	5
$\times 5$	$\times 5$	$\times 5$	$\times 5$	$\times 5$
5	10	15	20	25

"The ratio is 1:5. That means I multiply by 5. $2 \times 5 = 10$, so 2:10. $3 \times 5 = 15$, so 3:15."

Uses distributive property to help with unfamiliar facts



Fluently multiplies and divides

"I just know that $7 \times 5 = 35$."

Observations/Documentation