# Multiplication Strategies

## Repeated Addition

### Example: 7 x 4 =

- $4 + 4 + 4 + 4 + 4 + 4 + 4 = 28$
- $8 + 8 + 8 + 4 = 28$
- $16 + 12 = 28$

## Decomposing Strategy

### Example: 6 x 7 =

- $3 x 7 = 21$
- $3 x 7 = 21$
- $21 + 21 = 42$

## Skip Counting Strategy Using 1s, 2s, and 5s

### Example: 4 x 6 =

- Skip count by 5s and then count by 1s: 5, 10, 15, 20, 21, 22, 23, 24 so $4 \times 6 = 24$

## Add a Group

### Example: 6 x 8 =

- 5 groups of 8 is 40, so if I add a group of 8 to make 6 groups, it will be 48.

## Take Away a Group

### Example: 9 x 7 =

- 10 groups of 7 is 70, so if I take away a group of 7 to make 9 groups, it will be 63.
WHICH MULTIPLICATION STRATEGY DID YOU USE?

- Known Fact
- Repeated Addition
- Decomposing Strategy
- Skip Counting Strategy
- Using 1s, 2s, and 5s
- Add a Group
- Take Away a Group

WHICH MULTIPLICATION STRATEGY DID YOU USE?

- Known Fact
- Repeated Addition
- Decomposing Strategy
- Skip Counting Strategy
- Using 1s, 2s, and 5s
- Add a Group
- Take Away a Group
MULTIPLICATION STRATEGIES: REPEATED ADDITION

$6 \times 3 = \frac{3+3+3+3+3+3+3}{groups \quad of \quad in \quad each \quad group} = 6 + 6 + 6 = 12 + 6 = 18$

$6 \times 3 = 18$
MULTIPLICATION STRATEGIES: DECOMPOSING STRATEGY

\[ 4 \times 4 = \]

\[ 2 \times 4 = 8 \quad \text{circles} \]

\[ 2 \times 4 = 8 \quad \text{circles} \]

\[ 8 + 8 = 16 \]

\[ 4 \times 4 = 16 \]
MULTIPLICATION STRATEGIES: USING SKIP COUNTING

4 x 5 =

4 groups of 5
Skip count by 5 to get your answer.

5, 10, 15, 20

6 x 7 =

6 groups of 7 (5 + 2)
Skip count by 5 and then by 2 to get your answer.

5, 10, 15, 20,
25, 30
32, 34, 36, 38,
40, 42
MULTIPLICATION STRATEGIES: USING 1S, 2S, AND 5S

8 \times 4 = 32

8 \text{ groups of 3} = 5 + 2 + 1 \text{ groups of 4}

\begin{align*}
5 \times 4 &= 20 \\
2 \times 4 &= 08 \\
1 \times 4 &= 04
\end{align*}

\begin{align*}
20 + 08 + 04 &= 32
\end{align*}

6 \times 7 = 42

6 \text{ groups of 7} = 5 + 1 \text{ groups of 7}

\begin{align*}
5 \times 7 &= 35 \\
1 \times 7 &= 07
\end{align*}

\begin{align*}
35 + 07 &= 42
\end{align*}
MULTIPLICATION STRATEGIES: ADD A GROUP

6 × 6 =

5 × 6 or 5 groups of 6 = 30

Add another group of 6 to solve 6 groups of 6.

30 + 6 = 36

6 × 6 = 36

3 × 8 =

2 × 8 or 2 groups of 8 = 16

Add another group of 8 to solve 3 groups of 8.

16 + 8 = 24

3 × 8 = 24

WORKS BEST WITH 3S AND 6S (USING 2S AND 5S)
MULTIPLICATION STRATEGIES:
TAKE AWAY A GROUP

9 \times 6 =

10 \times 6 \text{ or } 10 \text{ groups of } 6 = 60

\text{Take away a group of 6 to solve 9 groups of 6.}

60 - 6 = 54

9 \times 6 = 54

4 \times 8 =

5 \times 8 \text{ or } 5 \text{ groups of } 8 = 40

\text{Take away a group of 8 to solve 4 groups of 8.}

40 - 8 = 32

4 \times 8 = 32

WORKS BEST WITH 4S AND 9S (USING 5S AND 10S)
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Thanks!
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