Year Group: Year 3

Strand: Number

Topic: Multiplication

Learning Objective: understand and apply the idea that multiplication is commutative and repeated addition.

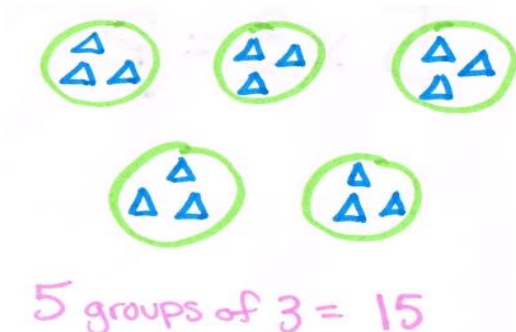# Multiplication Strategies

Strategy 1:

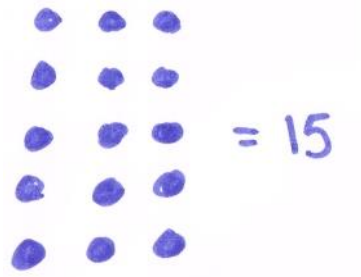**Repeated addition: 3×5=15**

$$5+5+5=15$$

$$or$$

$$3+3+3+3+3=15$$

Strategy 2:

Groups

5 groups of 3 = 15

Strategy 3:

Array

Objective: multiplying 2 digit numbers by one digit number

Strategy 1:

32 x 6 = ?

① **Open Array.**

	30	2
6	180	12

$6 \times 2 = 12$

$30 \times 6 =$

$3 \times 6 = 180$

$180 + 12 = 192$

② **Repeated Addition**

$$
\begin{array}{r}
30 \\
30 \\
30 \\
30 \\
30 \\
+ 30 \\
\hline
180
\end{array}
\qquad
\begin{array}{r}
2 \\
2 \\
2 \\
2 \\
2 \\
+ 2 \\
\hline
12
\end{array}
\qquad
\begin{array}{r}
180 \\
+ 12 \\
\hline
192
\end{array}
$$

or
$$
\begin{array}{r}
32 \\
32 \\
32 \\
32 \\
32 \\
+ 32 \\
\hline
192
\end{array}
$$