

# Stage 1

*Using objects to represent groups*

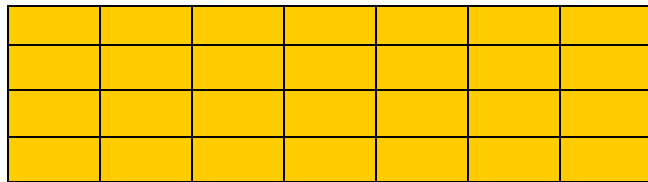
$$4 \times 3 = 12$$



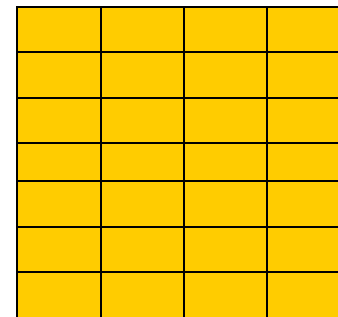
## Stage 2

*Knowing times  
tables facts*

$$4 \times 7 = 28$$



$$7 \times 4 = 28$$



Stage 3 *Partitioning into  
tens and units*

$$14 \times 7 = 98$$

$$10 \times 7 = 70$$

$$4 \times 7 = 28$$

$$70 + 28 = 98$$

# Stage 4    *Grid Method*

$$34 \times 5 = 170$$

X	30	4		
5	150	20	=	170

# Stage 5

# Grid Method

$$65 \times 43 = 2795$$

X	60	5		
40	2400	200	=	2600
3	180	15	=	195
			=	2795

# Stage 6

## *Formal Short Multiplication*

$$\begin{array}{r} 34 \\ \times 5 \\ \hline 170 \\ \hline \end{array}$$

$$34 \times 5 = 170$$

# Stage 7

## Formal Long Multiplication

$$\begin{array}{r} 65 \\ \times 43 \\ \hline 195 \\ 2600 \\ \hline 2795 \end{array}$$

$$65 \times 43 = 2795$$

# Early Stage Pre-requisite *skills*

Practically with objects



Arrays with objects



Understanding of the  
number system

Language

times  
lots of  
groups of  
multiply