



# Multiplication Strategies



factor      factor      product

$$8 \times 4 = 32$$

FOUNDATIONAL FACTS	<b>Twos</b>	Multiplying by 2 is doubling the number. Doubles $2 \times 7$ . Think double 7. Think $7 + 7$
	<b>Tens</b>	Multiplying by 10 increases a number tenfold. Think ten-frames and base ten blocks. $10 \times 2 = 20$
	<b>Fives</b>	Think <b>skip counting</b> by 5's or think half of multiplying by 10. $5 \times 2 = 10$
	<b>Ones</b>	Multiplying by 1 equals the number because it is 1 group. $6 \times 1 = 6$
	<b>Zeros</b>	If you multiply a number by 0 the product is always 0. $9 \times 0 = 0$
BUILDING ON THE FOUNDATION	<b>Threes</b>	Multiplying by 3 can be thought of as doubling the number and then adding 1 more group, or as tripling the number. $4 \times 3$ . Think $4 \times 2$ and add one more group of 4.
	<b>Fours</b>	Double the number, and then double it again. Double Double $4 \times 7$ . Think $(2 \times 7) + (2 \times 7)$
	<b>Sixes</b>	Multiplying by 6 can be thought of as doubling a multiple of 3. $6 \times 7$ . Think $(3 \times 7) + (3 \times 7)$
	<b>Nines</b>	Think of the 9 as a 10, then subtract one group. See 9. Think 10. $8 \times 9$ . Think $8 \times 10 - 8$
	<b>Eights</b>	Multiplying by 8 is double multiplying by 4. Double Double Double $7 \times 8$ . Think $(7 \times 2) + (7 \times 2) + (7 \times 2) + (7 \times 2)$ or $(7 \times 4) + (7 \times 4)$
<b>Sevens</b>	Decompose the 7 and multiply in smaller steps (Distributive Property) Multiplying Small Steps $4 \times 7$ . Think $(4 \times 2) + (4 \times 5)$	
<b>Commutative Property</b>	Order doesn't matter when multiplying. $4 \times 6 = 24$ and $6 \times 4 = 24$	

# Key Words

factor

factor

product

$$8 \times 4 = 32$$

Tools for

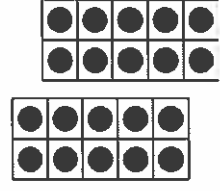
Multiplication

# Times 10

Multiplying by 10 increase the number tenfold.

Think ten-frames and base ten blocks.

10X2



Tools for

Multiplication











Tools for

# Multiplication

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# Times 2-Doubles

Multiplying by 2 is the same as doubling.

1X2 	2X2 	3X2 	4X2 	5X2 
6X2 	7X2 	8X2 	9X2 	10X2 

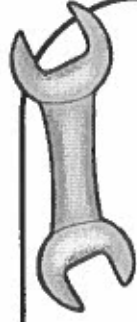
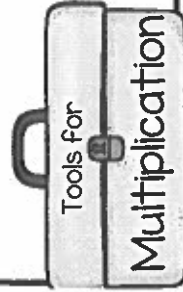
Tools for

Multiplication

# Times 5

Think skip counting by 5's or think half of multiplying by 10.

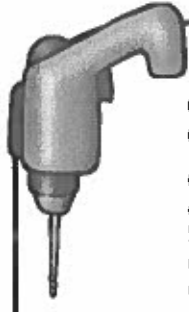
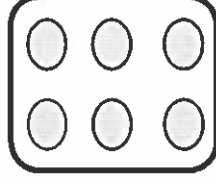
5 10 15 20 25 30 35 40 45 50 ...



# Times 1

Multiplying by 1 is the same as the number because it is 1 group.

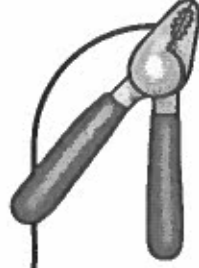
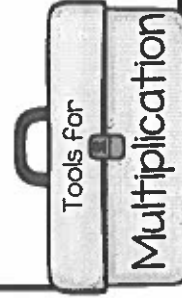
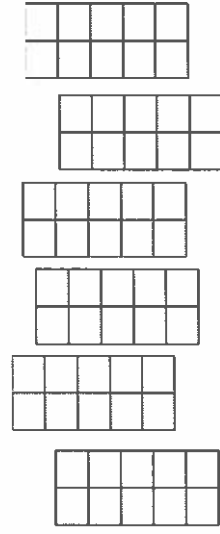
$$6 \times 1 = 6$$



# Times 0

When you multiply a number by 0 the product is always 0.

$$6 \times 0 = 0$$



# Times 3

Multiplying by 3 can be thought of as doubling the number and then adding 1 more group, or as tripling the number.

4 x 3. Think 4x2 and add one more group of 4.



## Times 4-Double, Double

Double the number then *double* it again.

$$6 \times 4$$

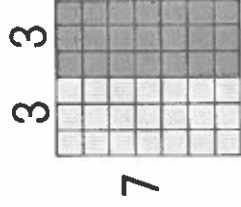
$$\text{Think } (6 \times 2) + (6 \times 2)$$



## Times 6

Multiplying by 6 is the same as doubling a multiple of 3.

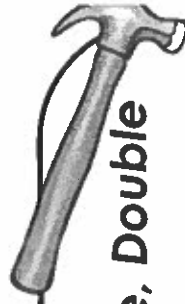
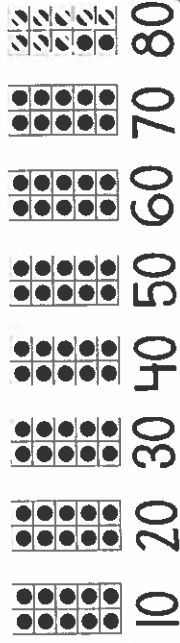
$$6 \times 7 \text{ Think } (3 \times 7) + (3 \times 7)$$



## Times 9 - See 9. Think 10

Think of the 9 as a 10, then subtract one group.

$$8 \times 9 \text{ Think } 8 \times 10 - 8$$

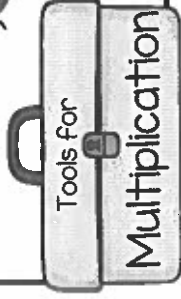
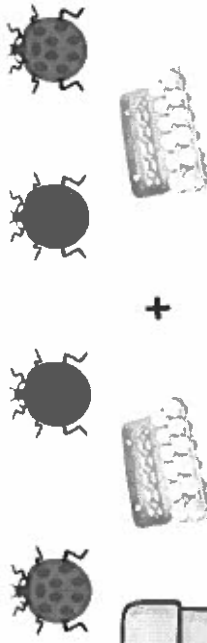


## Times 8-Double, Double, Double

Multiplying by 8 is *double* multiplying by 4.

$$3 \times 8$$

$$\text{Think } (3 \times 2) + (3 \times 2) + (3 \times 2) + (3 \times 2)$$



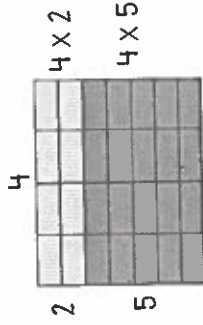
# Times 7 - Small Steps

*Chunking Strategies*

Decompose the 7 and multiply in smaller steps.

*Distributive Property*

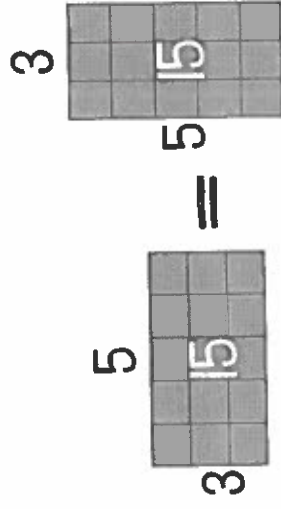
$4 \times 7$ . Think  $(4 \times 2) + (4 \times 5)$



# Commutative Property

*Turn Arounds*

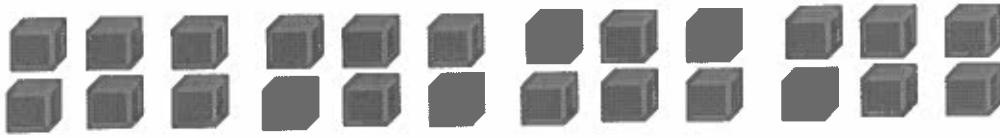
Order doesn't matter when multiplying.



## 1.4 Multiplication (4 and 5 Times Tables)

### 4 TIMES TABLE

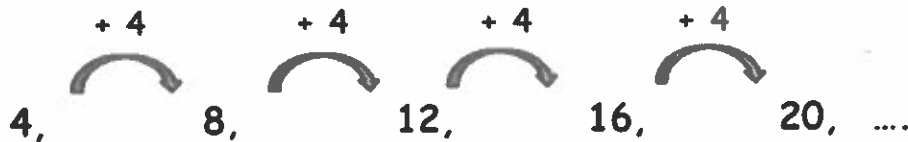
$4 \times 6$  is the total number of objects in 4 sets of 6.



$$4 \times 6 = 24$$

There are 24 blocks.

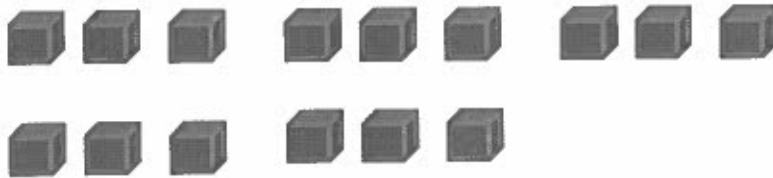
Use skip counting to write out the 4 times table on your mini white boards.



$$4 \times 1 = 4 \quad 4 \times 2 = 8 \quad 4 \times 3 = 12 \quad 4 \times 4 = 16 \quad 4 \times 5 = 20$$

### 5 TIMES TABLE

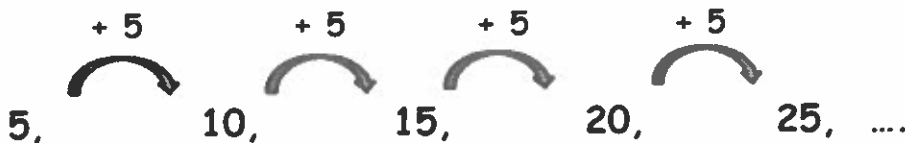
$5 \times 3$  is the total number of objects in 5 sets of 3.



$$5 \times 3 = 15$$

There are 15 blocks.

Use skip counting to write out the 5 times table on your mini white boards.



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

Fill in your multiplication fact sheet for the 4 and 5 times table.

When doing the 0-5 Times Table Assignment, do not use your fact sheet. When we correct the assignment, you will black out the ones you know!