

## Multiplication

#### We'll cover the following key points:

- → Multiplication Table of 2
- → Multiplication Table of 3
- → Multiplication Table of 4
- → Multiplication Table of 5
- → Combined multiplication Table Chart





Still curious? Talk to me by scanning the QR code.

#### **Learning Outcomes**

#### By the end of this chapter, students will be able to:

- Understand the concept of multiplication as repeated addition.
- Learn and recall the multiplication table of 2 (e.g., 2, 4, 6, 8, 10).
- Learn and recall the multiplication table of 3 (e.g., 3, 6, 9, 12, 15).
- Learn and recall the multiplication table of 4 (e.g., 4, 8, 12, 16, 20).
- Learn and recall the multiplication table of 5 (e.g., 5, 10, 15, 20, 25).
- Use the multiplication tables of 2, 3, 4, and 5 to solve simple multiplication problems.
- Identify and use patterns in the multiplication tables to help with calculations.
- Combine the multiplication tables of 2, 3, 4, and 5 in a chart for easy reference.

#### **Guidelines for Teachers**

Start by introducing the multiplication table of 2, explaining it as doubling groups of objects or pairs. Once students are confident with the table of 2, move on to the table of 3, using real-life examples like groups of three objects to make it relatable. Teach the table of 4 by grouping objects in sets of four and showing how it works with counting. Introduce the table of 5 through visual aids like counting by fives using fingers or groups of five items.









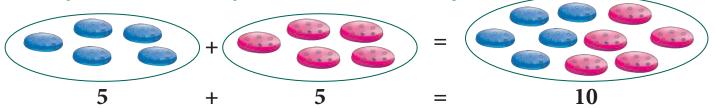


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## Repeated Addition

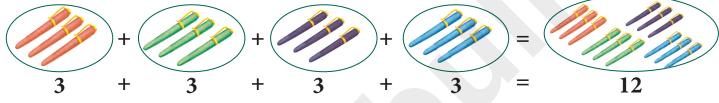
Multiplication is a repeated addition only.



2 times 5 is 10. We write it as  $5 \times 2 = 10$ .

× is the symbol of multiplication.

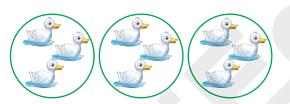
Let us take an another example.



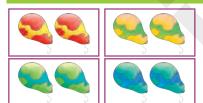
4 times 3 is 12. We write it as  $4 \times 3 = 12$ .

## **Exercise 7.1**

Fill in the boxes. One has been done for you.



$$3 + 3 + 3 = 9$$
  
 $3 \times 3 = 9$ 



























Objects	How to read?	How to write?
	1 me 2 is 2`	
<b>₩</b>	or	$2 \times 1 = 2$
2	2 one is 2	
	2 mes 2 is 4`	
• •	or	$2 \times 2 = 4$
2 + 2	2 two's are 4	
	3 times 2 is 6	
• • •	or	$2 \times 3 = 6$
	2 three's are 6	
	4 mes 2 is 8	
0 0 0 0	or	$2 \times 4 = 8$
2 + 2 + 2 + 2	2 four's are 8	
	5 mes 2 is 10`	
0 0 0 0	or	$2 \times 5 = 10$
2+2+2+2+2	2 five's are 10	
	6 mes 2 is 12`	
	or	$2 \times 6 = 12$
2+2+2+2+2+2	2 six's are 12	
	7 times 2 is 14	
	or	$2 \times 7 = 14$
2+2+2+2+2+2+2	2 seven's are 14	
	8 times 2 is 16	
	or	2 × 8 =16
2+2+2+2+2+2+2	2 eight's are 16	
0 0 0 0 0 0 0 0	9 mes 2 is 18`	
	or	$2 \times 9 = 18$
2+2+2+2+2+2+2+2	2 nine's are 18	
	10 times 2 is 20	2 × 10 = 20
2+2+2+2+2+2+2+2+2	or 2 ten's are 20	2 ^ 10 - 20
2+2+2+2+2+2+2+2+2	2 ten's are 20	























Objects	How to read?	How to write?
•	1 time 3 is 3	
•	or	$3 \times 1 = 3$
3	3 one is 3	
• •	2 times 3 is 6	
	or	$3 \times 2 = 6$
3 + 3	3 two's are 6	
• • •	3 times 3 is 9	
	or	$3 \times 3 = 9$
3+3+3	3 three's are 9	
	4 times 3 is 12	
	or	$3 \times 4 = 12$
3+3+3+3	3 four's are 12	
	5 times 3 is 15	
	or	3 × 5 = 15
3+3+3+3+3	3 five's are 15	
	6 times 3 is 18	
	or	$3 \times 6 = 18$
3+3+3+3+3+3	3 six's are 18	
	7 times 3 is 21	
	or	$3 \times 7 = 21$
3+3+3+3+3+3+3	3 seven's are 21	
<b>9 9 9 9 9 9</b>	8 times 3 is 24	
	or	$3 \times 8 = 24$
3+3+3+3+3+3+3+3	3 eight's are 24	
0 0 0 0 0 0 0	9 times 3 is 27	
	or	$3 \times 9 = 27$
3+3+3+3+3+3+3+3	3 nine's are 27	
	10 times 3 is 30	
	or	$3 \times 10 = 30$
3+3+3+3+3+3+3+3+3	3 ten's are 30	





















Objects	How to read?	How to write?
•	1 time 4 is 4	
	or	$4 \times 1 = 4$
4	4 one is 4	
9 9	2 times 4 is 8	
3 3	or	$4 \times 2 = 8$
4 + 4	4 two's are 8	
2 2 2	3 times 4 is 12	
3 3 3	or	$4 \times 3 = 12$
4 + 4 + 4	4 three's are 12	
2 2 2 2	4 times 4 is 16	
3 3 3 3	or	4 × 4 = 16
4 + 4 + 4 + 4	4 four's are 16	
2 2 2 2 2	5 times 4 is 20	
	or	$4 \times 5 = 20$
4 + 4 + 4 + 4 + 4	4 five's are 20	
2 2 2 2 2 2	6 times 4 is 24	
	or	$4 \times 6 = 24$
4+4+4+4+4	4 six's are 24	
2 2 2 2 2 2 2	7 times 4 is 28	
	or	$4 \times 7 = 28$
4+4+4+4+4+4	4 seven's are 28	
2 2 2 2 2 2 2	8 times 4 is 32	
3 3 3 3 3 3 3	or	$4 \times 8 = 32$
4+4+4+4+4+4+4	4 eight's are 32	
	9 times 4 is 36	
	or	4 × 9 = 36
4+4+4+4+4+4+4+4	4 nine's are 36	
	10 times 4 is 40	
4+4+4+4+4+4+4+4	or 4 ten's are 40	$4 \times 10 = 40$
4 7 4 7 4 7 4 7 4 7 4 7 4 7 4 7 4	4 (6)13 die 40	





















Objects	How to read?	How to write?
	1 time 5 is 5	
3	or	5 × 1 = 5
5	5 one is 5	
<b>3 3</b>	2 times 5 is 10	
3 3	or	$5 \times 2 = 10$
5 + 5	5 two's are 10	
2 2 2	3 times 5 is 15	
3 3 3	or	5 × 3 = 15
5 + 5 + 5	5 three's are 15	
	4 times 5 is 20	
3 3 3 3	or	$5 \times 4 = 20$
5+5+5+5	5 four's are 20	
	5 times 5 is 25	
3 3 3 3 3	or	5 × 5 = 25
5+5+5+5+5	5 five's are 25	
3 3 3 3 3	6 times 5 is 30	
3 3 3 3 3	or	5 × 6 = 30
5+5+5+5+5+5	5 six's are 30	
3 3 3 3 3 3	7 times 5 is 35	
3 3 3 3 3 3 3	or	$5 \times 7 = 35$
5+5+5+5+5+5	5 seven's are 35	
3 3 3 3 3 3 3	8 times 5 is 40	_
3 3 3 3 3 3 3 3	or	$5 \times 8 = 40$
5+5+5+5+5+5+5	5 eight's are 40	
	9 times 5 is 45	
	Or	5 × 9 = 45
5+5+5+5+5+5+5+5	5 nine's are 45	
	10 times 5 is 50 or	F 40 F2
5+5+5+5+5+5+5+5+5	5 ten's are 50	5 × 10 = 50













## Combined multiplication Table Chart

×	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50



## Exercise 7.2

#### Fill in the blanks. One has been done for you. 1.

### Repeated Addion`

c. 
$$3+3+3$$

d. 
$$7+7+7+7+7+7$$

e. 
$$5+5+5+5$$

### Multiplicaon`

X

### Multiplicaon`

### **Repeated Addition**

a. 
$$5 \times 3 =$$

$$5 + 5 + 5$$

2

b. 
$$4 \times 4$$

d. 
$$2 \times 6$$

e. 
$$3 \times 7$$



e. 
$$3 \times 7$$















3. Fill the boxes using multiplication tables.

$$3 \times 3 = 9$$

×

5



## Exercise 7.3

### **Word Problems.**



**Problem Solving** 

1. A cow has 2 eyes. How many eyes does 5 cows have?



2 ×5 10

2. A tiger has 4 legs. How many legs does 3 tigers have?



ave?

3. An auto - rickshaw has 3 wheels. How many wheels does 4 auto - rickshaws have?





















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### 1. Tick ( $\checkmark$ ) the correct answer.

- (a) 5 mes` 5 is \_\_\_\_\_\_.
  - (i) 30



(ii) 25



(iii) 45



(b) 5+5+5+5=

(i) 
$$5 \times 4$$



(ii)  $5 \times 6$ 



(iii)  $1 \times 5$ 



- (c)  $4 \times 8 =$ 
  - (i) 32



(ii) 84



(iii) 48



- (d) 7 mes 3 is` \_\_\_\_\_
  - (i) 24



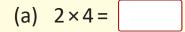
(ii) 21



(iii) 30



### 2. Fill in the blanks.









- (b)  $\times 4 = 20$
- (f)  $\times 5 = 15$  (g)  $4 \times$  = 32
- (c) 3×3=

(d)  $2 \times 9 =$ 

(h) 3× = 18



#### As Per NEP 2020

### **Problem Solving**

## Fill in the empty square using 2 and 3 numbers.

= 8 2 X X X X X = 12 × × X X X = 12 X X 12 12 8







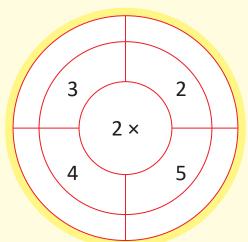




Each girl wants to look into all the mirrors. Draw a line from each girl to each mirror. How many lines did you draw? So,  $3 \times 5 =$ 







Code	4	6	8	10
Colour	Red	Green	Yellow	Blue





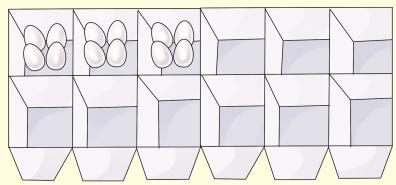
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Learning objective: Understanding the concept of multiplication.

Materials required: Empty egg trays/paper plates and beads/buttons.

#### **Procedure:**

- The class is divided into groups of 4 with a leader to conduct the activity. 1.
- Each group is given an empty egg tray and number of beads. 2.
- Each group makes 3 sets of 4 beads each and puts them in 3 sections of the 3. egg tray.















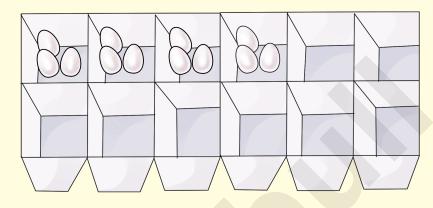




4. The group leader counts the beads in 4s and writes each total on the blackboard, e.g., 4, 8, 12. Try to find the answer with the help of the beads in the egg tray:

3 × 4 groups = \_\_\_\_\_

5. Now, count the beads in 3s like 3, 6, 9, 12 and reverse the expression as  $^{1}4 \times 3$  = \_\_\_\_\_ ' and find the answer. Make 4 sets of 3 beads each and put them in the egg try.



6. This can be repeated with other simple multiplication problems.

**Note:** Paper plates and buttons can also be used instead of empty egg trays and beads respectively.



1. If a bus has 4 wheels, find the total number of wheels of 4 buses.

Answer = wheels

2. If one scooter has 2 wheels, find the total number of wheels of 5 scooters.

Answer = wheels











