# **Star Public School**

Dear Parents'

Today's assignment

Maths - Chapter 4

English - Reading practice

Home assignment

Maths - Learn tables

English - Do reading practice

Edited 12:58 PM **///** 

# Multiplication

# Learning Objectives

The learners will be able to

- learn about multiplication.
- multiply without carry over.
- learn how to multiply by 10s and 100s.
- estimate product.

- learn about multiplication tables,
- multiply with carry over.
- multiply using expanded form.
- solve word problems.

# We Will Learn About

- Multiplication
- Multiplication Facts
- Multiplication (With Carry Over)
- Multiplication Using Expanded Form
- Solving Word Problems

- Multiplication Tables
- Multiplication (Without Carry Over)
- Multiplication by 10s and 100s ...
- Estimating Products

Help Peeku to solve the following multiplication sums to find the products. The products denote the number of apples Peeku has. Then answer the questions that follow.

denote the number of		TO	T 0
3 2 × 3 9 6	1 9 × 3 5 7	4 1 × 2	× 8 9 6
T 0	T O	T 0	T 0
× 4 9 2	× 7	× 4	× 3

- 1. How many sets of apples as even numbers does Peeku have?
- 2. How many sets of apples as odd numbers does Peeku have?
- 3. How many total apples does Peeku have?

Think and Answer I am a number. When multiplied by 148, change. Which number

 $175 \times 0 = 0$ 



## Tryout 1

1. Complete the following.

Complete the following.

(a)  $12 \times 4 = 48$  (b)  $14 \times 6 = 98$  (c)  $13 \times 9 = 117$  (d)  $15 \times 7$ 

- 2. Match the multiplication sums with their products. Column E -(i) 70 Column A (ti) 77 (a) 13 × 4-(ffi) 135 (b) 15 × 9 (c) 14 × 5
  - (iv) 52 (d) 11 × 7\_



# **Apply Your Learning**

### **Environment Day**

World Environment Day is celebrated on 5th June every year to spread awareness about environmental issues.

Students of classes 1 to 3 are going to plant some trees on Environment Day. The number of trees to be planted is mentioned in the given table.



Class	Number of Plants per Student
Class 1	2
Class 2	5
Class 3	3

Calculate the number of trees planted by all 3 classes as per the total number of stuff in each class.

Class	Number of Students	Number of Trees Planted
1	45	45 × 2 = 90
2	37	37 × 5 = 185
3	56	56 × 3 = 168

Skills Covered: Observation, Environmental awareness, Critical and logical thinking, Brainstorming

Example 4: Find the product of 64 and 32.

**Step 1:** Multiply the multiplicand by the digit at the ones place of the multiplier.

$$64 \times 2 = 128$$

Solution:

	Н	T	0
		6	4
×		3	2
	1	2	8

**Step 2:** Put 0 in the ones column as shown. Multiply the multiplicand by the digit at the tens place of the multiplier.

Write the result to the left of 0.

$$64 \times 3 = 192$$

	Th	Н	T	0
			60	4
×			3	2
		1	2	8
	1	9	2	0

**Step 3:** Add the two products obtained in steps 1 and 2.

Therefore,  $64 \times 32 = 2048$ .

		Th	Н	Т	0
				6	4
,	X			3	2
-		1	1	2	8
-	+	1	9	2	0
-		2	0	4	8



### Tryout 2

1. Find the following products.

(a)		Н	Т	0
		2	1	1
	×			3
	-	19	13	3

)		Th	Н	Т	0
			3	1	2
	×			1	4
		1	2	4	8
	+	- 3		12	.X
		14	13	16	8

	Th	Н	T	0
		4	1	3
×			2	3
	1	2	3	9
1	- 8	12	6	X
1	10	14	d	19

(d)		Th	Н	T	0
			3	6	2
	×			2	7
		2	5	3	4
	+	7	2	4	X
		9	7	7	4

	Th	Н	T	0
		5	5	8
×			3	5
	1	2	9	0
+	7	7	4	X
	9	0	3	0

	Н	7
		4
×		1
	3	6
+	4	5
	8	T

2. Find the following products.

(a) .468 × 7 (b) 217 × 4

(c) 476 × 9

(d) 85 x 43

= 3276

868

(e)

4284



#### **Apply Your Learning**

#### Architectural Wonders of the Modern World









Look at the names of the given buildings. Use the Internet to find the missing information about these buildings to complete the table.

Take height from floor to ceiling in each storey of the building to be 15 feet. For Burj Khalifa, take this height to be 16 feet. Then, calculate the approximate height of each building.

Building Name	Number of Floors/Store
Burj Khalifa	
Makkah Royal Clock Tower	
Lotte World Tower	
Shanghai Tower	

[Hint: Number of storeys × Height of one storey = Height of building]

Skills Covered: Observation, Critical and logical thinking, Brainstorming, Research skills

# ultiplication by 10s and 100s ...

• To multiply a number by 10, 20, 30, ..., we multiply the number by 1, 2, 3, ... respectively and put 0 to the right of the product obtained.

Example:  $32 \times 40 = 32 \times 4 \times 10 = 128 \times 10 = 1280$ 

• To multiply a number by 100, 200, 300, ..., we multiply the number by 1, 2, 3, ... respectively and put two 0s to the right of the product obtained.

**Example:**  $28 \times 300 = 28 \times 3 \times 100 = 84 \times 100$ 

= 8400

### Learn More

Any number can be multiplied by higher powers of 10 like 1000, 10000, ... by putting the same number of 0 at the end of number as there are zeros in the power of 10.

# **Multiplication Using Expanded Form**

Ve can multiply numbers using the expanded form.

Example 5: Multiply 148 by 3.

Write 148 in the expanded form, 148 = 100 + 40 + 8. Multiply 100, 40 and 8 by 3 separately.  $100 \times 3 = 300$   $40 \times 3 = 120$   $8 \times 3 = 24$ 

$$100 \times 3 = 300$$

$$40 \times 3 = 120$$

$$8 \times 3 = 24$$

Add the products to get the answer.

Therefore,  $148 \times 3 = 444$ .

H	T	O
3	0	0
1	2	0
	2	4
4	4	4
	3 1	<ul><li>3 0</li><li>1 2</li><li>2</li></ul>



Solution:

#### Tryout 3

1. Fill in the blanks,

(a) 
$$46 \times 10 = 460$$

ill in the blanks.  
(a) 
$$46 \times 10 = 460$$
 (b)  $15 \times 10 = 150$  (c)  $98 \times 100 = 9800$ 

(c) 
$$98 \times 100 = 9800$$

2. Put the correct sign >, < or = in the blanks.

- 3. Find the products using expanded form,
  - (a) 64 × 6
- (b)  $74 \times 8$
- (c)  $125 \times 3$
- (d) 416 × 4
- (e) 528 × 5



### Apply Your Learning

#### **Birthday Presents**

On her birthday, Ananya got some gifts from her friends and some cash from elders. Let's find out what all she got. Then answer the questions that follow.

# Time to Perform

1. Find the following products.

ind the len						
	Th	Н	T	0		
			6	1		
×			4	3		
		I	8	3		
+	2	4	4	X		
	12	6	2	3		
		Th	Th H	Th H T		

(c) (b) 8 4 3 U

	Th	Н	T	0
			3	6
×			8	5
		1	8	0
+	2	8	8	X
1	3	0	6	0

2. Multiply the following using the expanded form.

(c) 
$$357 \times 5$$

(d) 
$$523 \times 7$$

- (b)  $619 \times 2$  (c)  $357 \times 5$ 3. Anisha bought 14 packets of paper balls each of that contained 14 balls. How many (a)  $428 \times 3$ paper balls are there in all?
- 4. Anu purchased 4 notebooks, each costing ₹ 50. She also purchased 2 coloured notebooks, each costing ₹ 45. How much total money did she pay?
- 5. Aman and his friends have 8 puzzles. Each puzzle has 128 pieces. How many pieces
- 6. On a roadside, 13 plants were planted in a straight line. The distance between any two are there in all? adjacent plants was 3 m. What is the distance between the first and the last plant?

## Let's Crack These Problems

- 1. Write the product of the largest 3-digit and the smallest 2-digit number.
- 2. Arrange the products given in the figure below in increasing order.

 $17 \times 10$ 

othe

oly 15

12 × 8

 $7 \times 14$ 

19 × 7

**Skills Covered:** Critical and logical thinking, Problem-solving, Brainstorming, Applicative thinking



