

Lesson 5 (13th June)

8:45 - Lohit
9:45 - D.E
11 → 10th GM
1:30 → Submissi

classmate

Date _____
Page _____

Objective: Explain the meaning and need of operations (+, -, √, ×, ÷)

Outcomes

↳ St. will understand what add, subtract means.

↳ Let that mult. means grouping things together. (2×3 is $\boxed{2 \text{ times } 3}$)
→ 2 groups of 3.

Address misconceptions

↳ Understand meaning of tables

↳ Why multiplication came in the first place.

→ Understand that $(a \div b)$ means "How many b's are contained in a?"

$$\boxed{5 \times 6}$$

↳ 5 times 6

$$5 \times 12$$

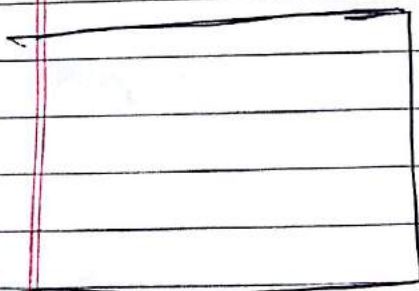
means

5 times 12

$$\begin{matrix} \circ \circ \\ \circ \circ \\ \circ \circ \end{matrix}$$

* St. should know tables upto. 9

(2) (3s) are 6.



Idea

Multiplicatⁿ: If I had the count kids in class

$$\begin{matrix} \circ \circ \circ \\ \circ \circ \circ \end{matrix}$$

$$\underline{15 \div 3}$$

Multiplicatⁿ → We have 4 groups of 5 ~~see~~ apples each.

[4 times 5]

Division → 20 apples are divided into groups of 5. Total? → 20

or How many groups of 5 can be contained in a?

Plan

Opening (10 min)

Need for operations in past.

There was a farmer. He had 20 sheep, 12 goat, 3 bundles of sticks and 15 stones.

2nd farmer gave him 12 sheep.	2nd farmer took away 3 goats died.	Each bundle has 4 sticks	Stones are not kept in groups of 5
How many sheep?	How many goats?	How many sticks?	How many groups?
↳ 32	↳ 9	↳ 15	↳ 3

What you did was add, subtract, mult, div.

In ^{Subansiri} class, there 33 students: 18 boys and 3 groups of girls.

Need for operations in present.

<u>Case I</u>) Two more joined from Teesta	II) 3 went to Lolik	III) There are 5 girls in each group	IV) Boys were divided into groups of 6
Total?	Total?	Total girls?	How many groups?

* Why do we need to add and subtract?

(There are lot of scenarios). ∴ →

Q. Some students were reading, and ~~some~~ 6 more joined in. Then, there are 9. How many at the start?

Q: A herder has 12 horses and 24 cows? How many total animals?

~~Q: Dave and Sam have~~

Q: You have Rs 578. You spent Rs 342. How much is remaining.

Q: You walked 20 in out of then ^{total dist. of} 130m? How much is left?

* Why do we need to multiply? (15 min)

If we have ~~lots of~~ ^{lots of} students in our ~~class~~ school.

↳ Very diff. to count.

"Consider in the hall" (full) "I start and forget"

Q: What is the way I can count them?

↳ Start dividing into groups.

→ I make groups of ~~25~~ 5 each and make them stand separately.

→ I count the no. of groups.

How many students? I get 23.

— 115

So, this is the purpose of multiplication.

↳ "grouping of objects"

How will we represent this?

23×5

or \rightarrow means 23 times 5 ✓

5×23

\rightarrow 5 times 23 ✗

"All must know tables upto 9"

Practice (Reference: stones)

① 2×3	2 times 3	2 groups of 3 stones	<u>Total</u>
② 23×4	23 times 4	23 groups of	
③ 4×23			
④ 5×6			
⑤ 7×8			
⑥ 10×3			
⑦ 4×9			
⑧ 12×13			
⑨			

* Division (15 min)

We have a group of 124 students.

a) We want to find how many groups of 4 stu. can we make?

b) How many groups of 3 students can we make?

So, purpose of division is to find the no. of groups.

				Remaining
①	$124 \div 4$	How many groups can we make	How many 4's are there in 124?	→
②	$124 \div 3$ (students)	No. of groups of students.	No. of 3's in 124	→

H.W

- ③ $36 \div 4$ (sticks)
- ④ $45 \div 9$ (boys)
- ⑤ $96 \div 5$
- ⑥ ~~128~~ $27 \div 9$
- ⑦ $150 \div 10$
- ⑧ $103 \div 10$