



G3.17 | CARRY OVER TO ADD 3-DIGIT NO.S VERTICALLY

Number Operations Concepts - NCERT Chapter 3: Give and Take (sum upto 999)

Students will learn to add 3-digit numbers vertically with carry over

40- 50 min

PRE REQUISITES:

g2.31 Know and have a good understanding of place values and addition facts

TLM



Blue, Red and Yellow counters

MISCONCEPTIONS

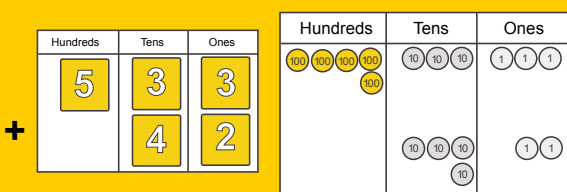
Students tend to make a mistake in carrying over numbers

KEY VOCABULARY

None



PLAY



Addition of numbers using counters of hundreds, tens, and ones

○ Divide students in groups of 4. Distribute 30 counters (10 each of red, green, & yellow colours) to each group

○ Ask students to divide a sheet of paper into 3 parts and write "Hundreds", "Tens", and "Ones" at the top of each part

○ Tell the students that green counters represent 100s, yellow counters represent 10s, and red represent 1s

○ Explain that 10 red counters can be exchanged for a yellow counter

○ 10 yellow counters can be exchanged for a green counter

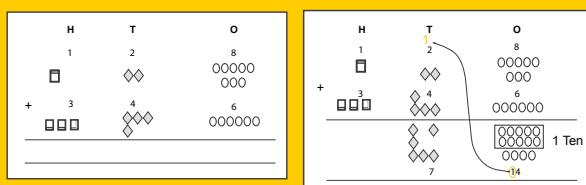
○ Ask students to represent 533 & 22 using the counters & place the counters under correct columns on the paper

○ Ask students to add the counters and tell how many red, yellow, and green counters do they have in all

○ Repeat the activity with different numbers



PROCESS



Addition by carrying over digits

○ Write $128 + 346$. Ask the students how many Hundreds, Tens and Ones are there in 128 and 346

○ Make three columns on the blackboard to show Hundreds, Tens and Ones. Draw small shapes to show the two no.s as ones

○ Show circles in Ones column. $8+6$ is 14 & can't be written at Ones place. Explain 10 red counter were exchanged for yellow

○ Just as $\Rightarrow$ as 10 red counters represented a yellow counter, a group of 14 ones forms 1 Tens & 4 Ones

○ Remove 10 circles & write 1 in tens column. Write 4 in the ones column as shown. Point to Tens column & tell $1+2+4$ is 7

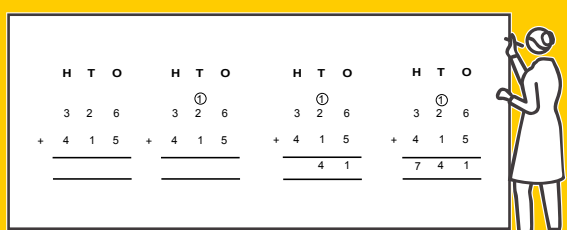
○ Write 7 in the tens column. Point to the hundreds column & tell $1+3$ make 4. Write 4 in the hundreds column

○ If the sum of no.s in Ones column is more than 10 then Tens digit is carried forward to Tens column

○ If sum of no.s in Tens column is more than 10, its Tens digit is carried forward to hundreds column

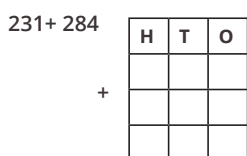


PRACTICE



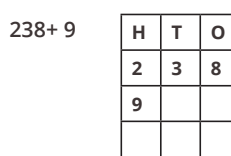
Write the question on the black board and ask the students to solve

○ Help the students solve question 4a from the worksheet. Ask the students to write the numbers as Hundreds, Tens, Ones and add them



○ Ensure that students carry forward the numbers to the correct column. Remind students that 10 tens make a hundred. Therefore, 11 tens can be written as 1 hundred and one ten

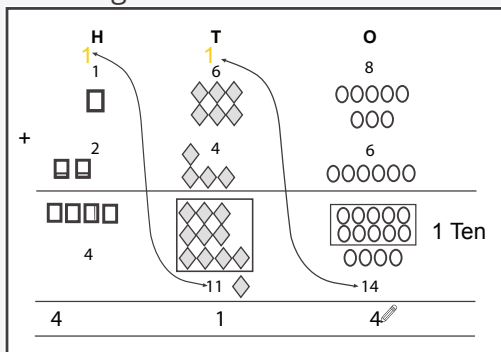
○ Help the students solve question 4 from the worksheet. Ask the students to identify the error in the addition problem



○ Emphasize that number 9 has no tens and no ones therefore it must be written in the ones column



① SOLVED EXAMPLE : Add the following:



② Complete the addition

a.

	H	T	O
	2	7	8
+		1	5
=			

b.

	H	T	O
		1	
	2	7	8
+		1	5
=	—	—	3

③ Complete the addition

a.

	H	T	O
	6	5	7
+	2	9	0
=			

b.

	H	T	O
	6	5	7
+	2	9	0
=	—	—	7

④ Write the numbers in columns and add:

a. 231 + 284

	H	T	O
+			

b. 203 + 100

	H	T	O
+			

c. 299 + 201

	H	T	O
+			

⑤ Find the error and correct it
238 + 9 =

	H	T	O
	2	3	8
+	9		
=			



Suraj read 227 pages in a book. He has to read 128 more pages.
How many pages are there in total?