

SESSION : 11
CLASS : 3
SUBJECT : MATHEMATICS
CHAPTER NUMBER: 3
CHAPTER NAME : ADDITION
SUBTOPIC : ESTIMATION (NEAREST 100)

CHANGING YOUR TOMORROW

LEARNING OBJECTIVE :

Children will learn :

- *To find a value that is close enough to the right answer**
- *To find an answer which is broadly correct, say to the nearest 100, if you are working with bigger numbers.**
- * To calculate on quantities of various works & their expenditure, done by the experts of the relevant field before it is executed.**

ADDITION

ESTIMATION (NEAREST 100)

ESTIMATION MEANS.....

To find something close to the correct answer. Estimation of numbers is the process of approximating or rounding off the numbers in which the value is used for some other purpose in order to avoid the complicated calculations.

When it comes to estimating in math, there is a general rule for you to follow. This general rule tells you to look at the digit to the right of the digit you want to estimate, and if it is less than 5 then you round down, and if it is greater than 5 or equals to 5, you round up.

ADDITION

ESTIMATION (NEAREST 100)

RULE TO ROUND OFF TO NEAREST 100 :

1ststep: See the next place to the right of the hundreds place.

2ndstep: See the digit in the tens place of the given number.

3rdstep: Check whether it is more than or equals to 5 or less than 5.

ADDITION

ESTIMATION (NEAREST 100)

4thstep: If it is more than or equals to 5, then add 1 to the hundreds place and put 0 in tens and ones place. That means Round up.

5thstep: If it is less than 5, there will be no change to the hundreds place and put 0 in tens and ones place. That means Round down.

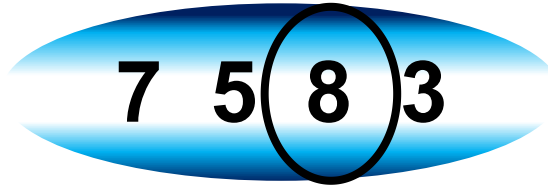
6thstep: There will be no change to the digits on the left of hundreds place both in round up or round down.

ADDITION

ESTIMATION (NEAREST 100)

Now let us understand

Let the number be 7583 and let us round off to nearest 100.



See the next place to the right of the hundreds place that is the tens place.

It is $8 > 5$, So we have to add 1 to the hundreds place and write 0 in tens and ones place to round up.

5 is in the hundreds place, so $5 + 1 = 6$

7583 after round off it becomes 7600.

ADDITION

ESTIMATION (NEAREST 100)

Now let us understand to **ROUND UP** when there is 9 in hundreds place.

Let the number be 3967 and let us round off to nearest 100.



See the next place to the right of the hundreds place that is the tens place.

It is 6. $6 > 5$, So we have to add 1 to the hundreds place and write 0 in tens and ones place to round up.

When 9 is in hundreds place, add 1 to 39, $39+1=40$, put 0 in the tens and ones place.

3967 after round off it becomes 4000.

ADDITION

ESTIMATION (NEAREST 100)

Now let us understand through examples:

Round off the following numbers to the nearest 100

i) 765

ii) 2957

iii) 1382

Since tens digit in 765 is 6, we round up. So, it will be 800.

Since tens digit in 2957 is 5, we round up. $29 + 1 = 30$ and 0 in tens and ones place, So, it will be 3000 .

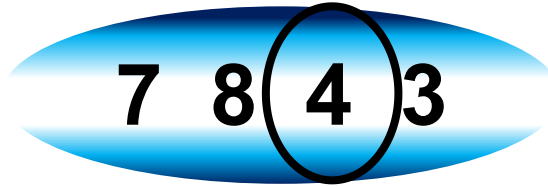
Since tens digit in 1382 is 8, we round up. So, it will be 1400.

ADDITION

ESTIMATION (NEAREST 100)

Now let us understand

Let the number be 7843 and let us round off to nearest 100.



See the next place to the right of the hundreds place that is the tens place.

It is 4. $4 < 5$, So there will be no change in the hundreds place.

We have to write only 0 in tens and once place and the digits on the left from the hundreds place remains the same.

So, 7843 after round off it becomes 7800.

ADDITION

ESTIMATION (NEAREST 100)

Now let us understand through examples:

Round off the following numbers to the nearest 100

i) 512

ii) 3621

iii) 9542

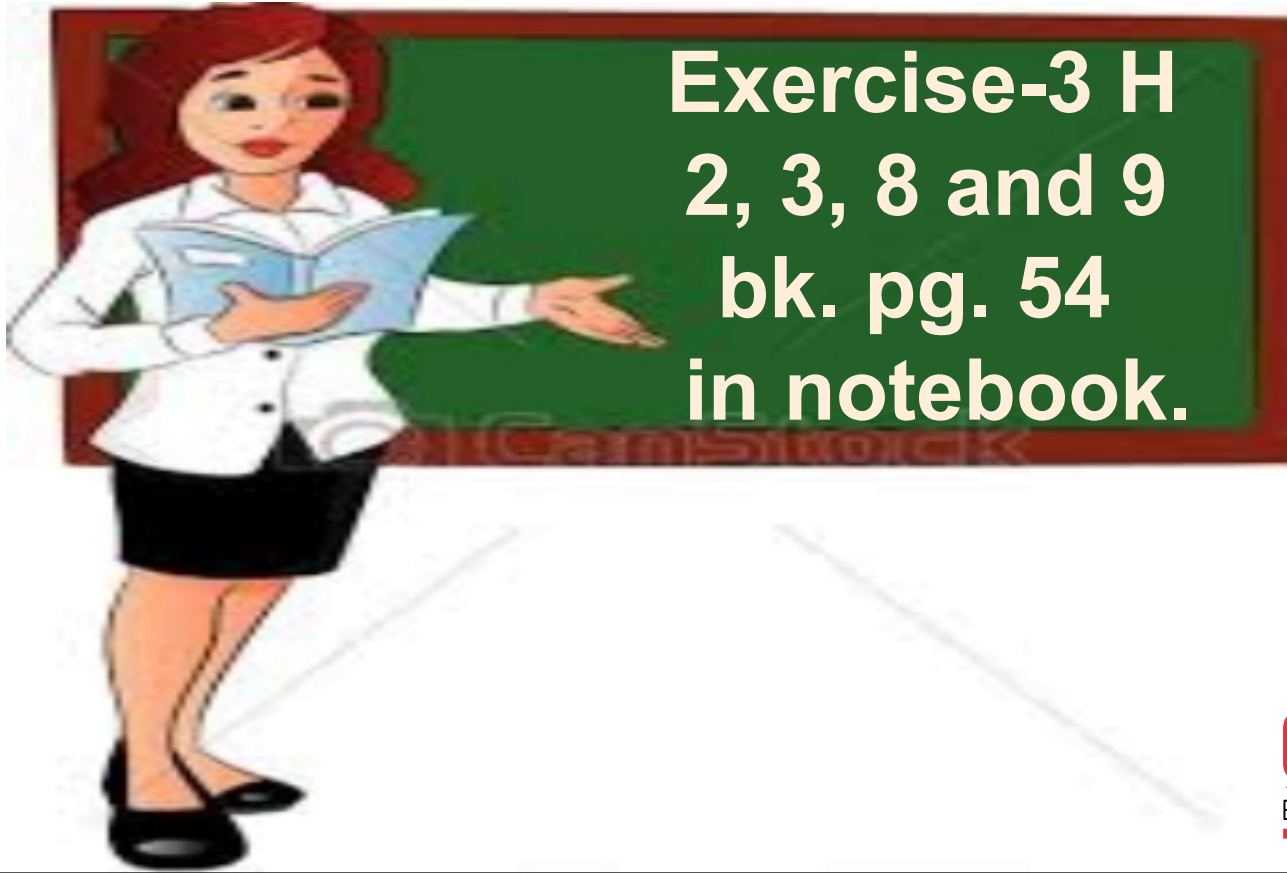
Since tens digit in 512 is 1, we round down. So, it will be 500.

Since tens digit in 3621 is 2, we round down. So, it will be 3600.

Since tens digit in 9542 is 4, we round down. So, it will be 9500.

ADDITION

ESTIMATION (NEAREST 100)

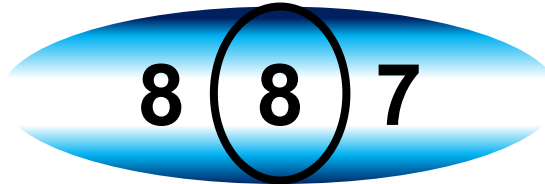


ADDITION

ESTIMATION (NEAREST 100)

2. Estimate the following by rounding off to the nearest 100.

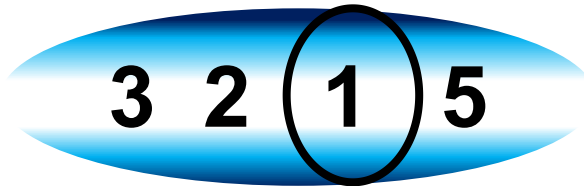
(i)



$$8 > 5$$

$$887 \longrightarrow 900$$

(ii)



$$1 < 5$$

$$3215 \longrightarrow 3200$$

ADDITION

ESTIMATION (NEAREST 100)

(iii)



$$3 < 5$$

$$8432 \rightarrow 8400$$

(iv)



$$4 < 5$$

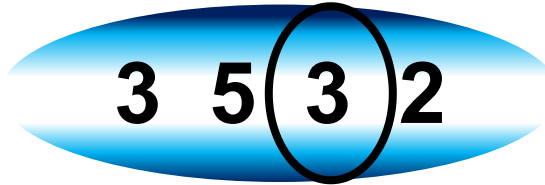
$$3245 \rightarrow 3200$$

ADDITION

ESTIMATION (NEAREST 100)

3. Estimate the following numbers to the nearest 100.

(i)



$$3 < 5$$

$$3532 \longrightarrow 3500$$

(ii)



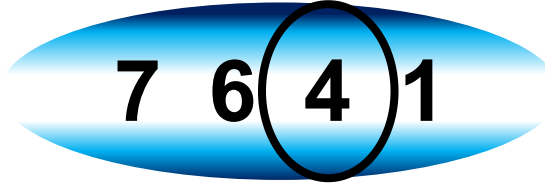
$$4 < 5$$

$$4442 \longrightarrow 4400$$

ADDITION

ESTIMATION (NEAREST 100)

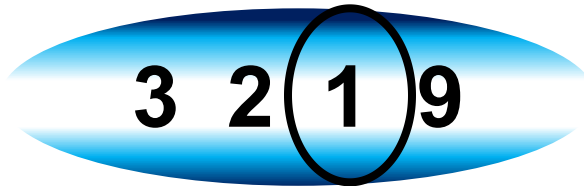
(iii)



$$4 < 5$$

$$7641 \rightarrow 7600$$

(iv)



$$1 < 5$$

$$3219 \rightarrow 3200$$

ADDITION

ESTIMATION (NEAREST 100)

8. On Friday, Saturday and Sunday, 1356, 2518 and 3186 people attended a magic show. Estimate the total number who attended the show on the three days. (Round off to the nearest 100). Find its difference with the actual number of people who attended the show.

ADDITION

ESTIMATION (NEAREST 100)

ANS. Magic show attended on Friday,
Saturday and Sunday
1356, 2518 and 3186 respectively

Rounding off to nearest 100, we get
1400, 2500 and 3200

$$\bullet\bullet\bullet 1400 + 2500 + 3200 = 7100$$

$$\text{Actual sum} = 1356 + 2518 + 3186 \\ = 7060$$

$$\text{The difference} = 7100 - 7060 = 40$$

	1	1	2			1				
	1	3	5	6		1	4	0	0	
	2	5	1	8		2	5	0	0	
+	3	1	8	6		+	3	2	0	0
<hr/>					<hr/>					
	7	0	6	0		7	1	0	0	
	Actual sum					Sum to the nearest 100				

ADDITION

ESTIMATION (NEAREST 100)

9. The classes I, II and III of a school have 2348, 3183 and 2891 students respectively. Estimate the total number of students of these classes by rounding off to the nearest 100.

ADDITION

ESTIMATION (NEAREST 100)

ANS. Number of students in classes I, II and III are 2348, 3183 and 2891 respectively

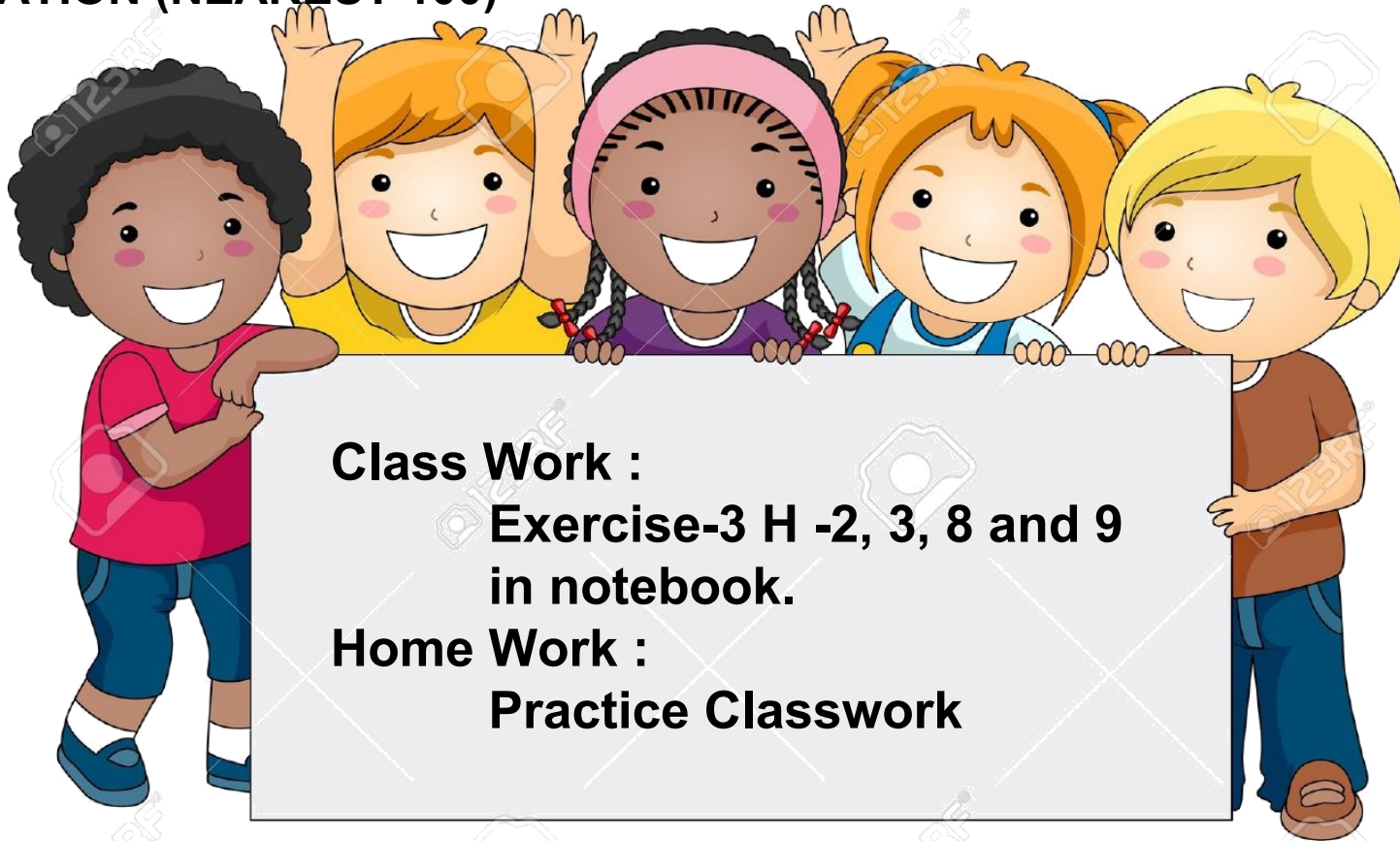
Rounding off to nearest 100, we get 2300, 3200 and 2900

$$\bullet\bullet\bullet 2300 + 3200 + 2900 = 8400$$

$$\begin{array}{r} 1 \\ 2\ 3\ 0\ 0 \\ 3\ 2\ 0\ 0 \\ + 2\ 9\ 0\ 0 \\ \hline 8\ 4\ 0\ 0 \\ \text{Sum to the} \\ \text{nearest 100} \end{array}$$

ADDITION

ESTIMATION (NEAREST 100)



Class Work :

**Exercise-3 H -2, 3, 8 and 9
in notebook.**

Home Work :

Practice Classwork

LEARNING OUTCOME:

Students will be able to find a value that is close enough to the right answer, to find an answer which is broadly correct, say to the nearest 100, if you are working with bigger numbers and to calculate on quantities of various works & their expenditure, done by the experts of the relevant field before it is executed.



THANKING YOU
ODM EDUCATIONAL
GROUP