

**SESSION: 10** 

CLASS: 3

**SUBJECT: MATHEMATICS** 

**CHAPTER NUMBER: 3** 

**CHAPTER NAME: ADDITION** 

**SUBTOPIC: ESTIMATION (NEAREST 10)** 

#### **CHANGING YOUR TOMORROW**

Website: www.odmegroup.org Email: info@odmps.org Toll Free: **1800 120 2316**Sishu Vihar, Infocity Road, Patia, Bhubaneswar- 751024

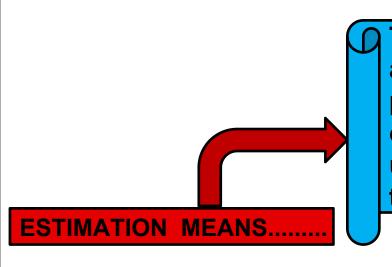
## **LEARNING OBJECTIVE:**

# **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 10, 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.



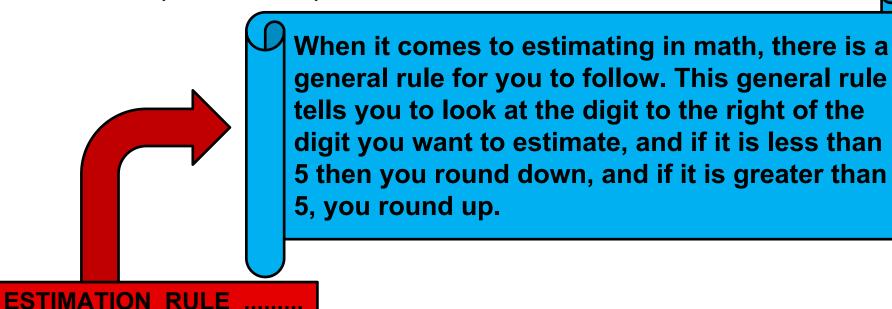
## **ESTIMATION (NEAREST 10)**



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.



## **ESTIMATION (NEAREST 10)**



If it is less than 5, you round down and if it is more than 5, you round up







**ESTIMATION (NEAREST 10)** 

## **RULE TO ROUND OFF TO NEAREST 10:**

1st step: See the next place to the right of the tens place.

2<sup>nd</sup> step: See the digit in the ones place of the given number.

3<sup>rd</sup> step: Check whether it is more than or equals to 5 or less than 5.



**ESTIMATION (NEAREST 10)** 

4<sup>th</sup> step: If it is more than or equals to 5, then add 1 to the tens place and put 0 in ones place. That means Round up.

5<sup>th</sup> step: If it is less than 5, there will be no change to the tens place and put 0 in ones place. That means Round down.

6<sup>th</sup> step: There will be no change to the digits on the left of tens place both in round up or round down.



**ESTIMATION (NEAREST 10)** 

### Now let us understand to ROUND UP

Let the number be 3786 and let us round off to nearest 10.

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

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

8 is in the tens place, so 8 + 1 = 9





## **ESTIMATION (NEAREST 10)**

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

Let the number be 2697 and let us round off to nearest 10.



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

It is 7. 7 > 5, So we have to add 1 to the tens place and write 0 in ones place to round up.

When 9 is in tens place, add 1 to 269, 269+1=270, put 0 in the ones place.

2697 after round off it becomes 2700.



**ESTIMATION (NEAREST 10)** 

## Now let us understand through examples:

Round off the following numbers to the nearest 10

i) 85 ii) 398 iii) 2437

Since ones digit in 85 is 5, we round up.So, it will be 90.

Since ones digit in 398 is 8, we round up. 39 + 1 = 40 and 0 in ones place, So, it will be 400.

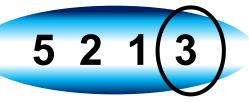
Since ones digit in 2437 is 7, we round up. So, it will be 2440.



**ESTIMATION (NEAREST 10)** 

Now let us understand

Let the number be 5213 and let us round off to nearest 10.



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

It is 3. 3 < 5, So there will be no change in the tens place to round down.

We have to write only 0 in once place

So, 5213 after round off it becomes 5210.



**ESTIMATION (NEAREST 10)** 

# Now let us understand through examples:

Round off the following numbers to the nearest 10

i) 63 ii) 454 iii) 3591

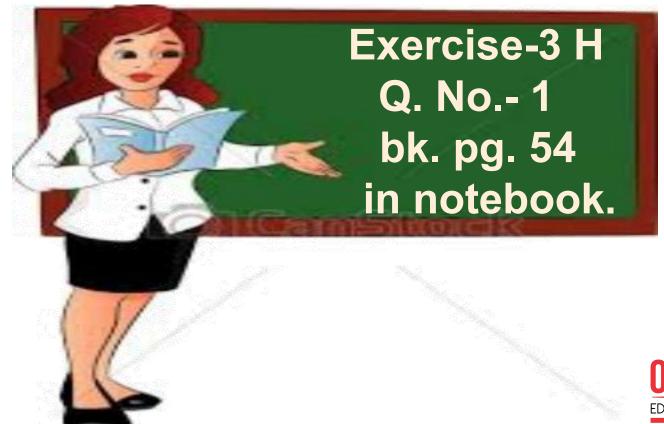
Since ones digit in 63 is 3, we round down. So, it will be 60.

Since ones digit in 454 is 4, we round down. So, it will be 450.

Since ones digit in 3591 is 1, we round down. So, it will be 3590.



# **ESTIMATION (NEAREST 10)**





**ESTIMATION (NEAREST 10)** 

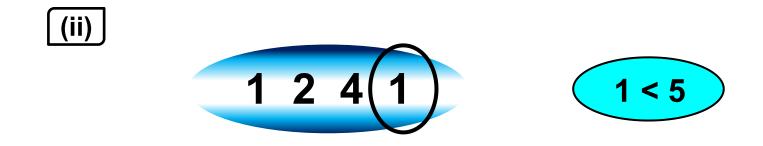
Estimate the following by rounding off to the nearest 10.



Since ones digit in 837 is 7, we round up. So, it will be 840.



## **ESTIMATION (NEAREST 10)**

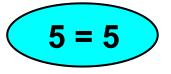


Since ones digit in 1241 is 1, we round down. So, it will be 1240.



## **ESTIMATION (NEAREST 10)**

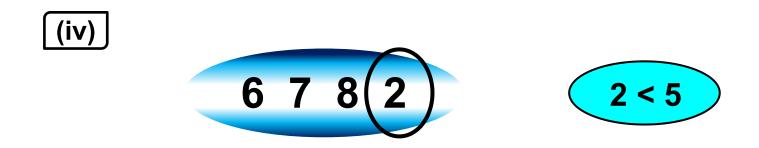




Since ones digit in 8345 is 5, we round up. So, it will be 8350.

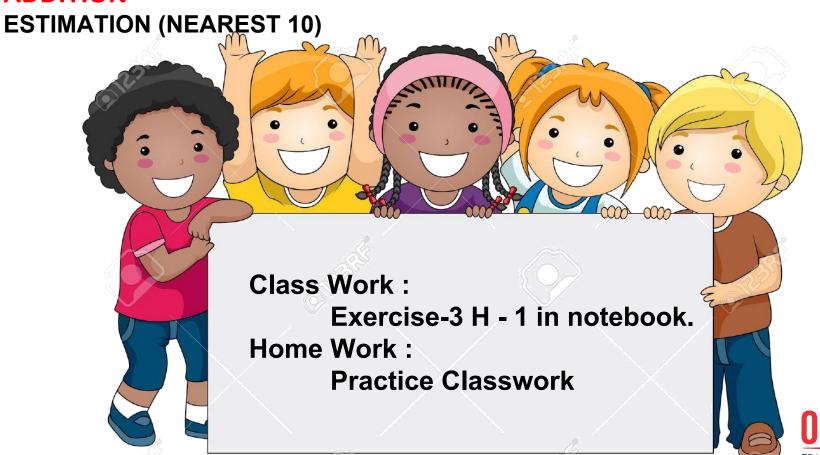


## **ESTIMATION (NEAREST 10)**



Since ones digit in 6782 is 2, we round down. So, it will be 6780.





### **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 10, 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.



