# DELHI PUBLIC SCHOOL JAMMU <br> SESSION 2021-22 <br> FOUNDATION WORKSHEET 

CLASS: IV
SUBJECT: MATHS

## Topic: Numbers and Numeration

## Explanation

- Greatest 2-digit number $=99$

Smallest 3-digit number $\quad=\quad \underline{+1}$

- Greatest 3-digit number $=999$

Smallest 4-digit number $\quad=\frac{+1}{1000}$
a) $3,436=$ Three thousand four hundred thirty six.
b) 7,302 -Seven thousand three hundred two.
Q. Write the number names
a) 5,480
b) 5,614
c) 4,232
d) 7,513
II) Write the numerals:
a) Five thousand five hundred nine.
b) Nine thousand seven hundred ten
c) Three thousand one hundred forty
d) Five thousand two hundred thirty nine

## Face Value and Place Value

The face value of a digit is the value of the digit itself irrespective of its place in the number.
The place value of a digit depends on its position in the number.

## Practice:

1) Find the face value and place value of underlined digit:
a) $6, \underline{7} 08$
b) 1,508
c) 4,089
d) $7,4 \underline{3} 0$
e) $5, \underline{2} 31$
f) $4,2 \underline{6} 5$
2) Find sum of the place values of two 8 s in 8,805

## Explanation:

Expanded Notation of a Number
e.g. $-7,298=7,000+200+90+8$
$3,245=3,000+200+40+5$

## Practice

I) Write the expanded form:
a) 4,167
b) 4,195
c) 7,192
d) 5,142
II) Write the short form:
a) $2,000+400+50+8$
b) $4,000+600+60+9$
c) $7,000+70+7$
d) $8,000+300+50+9$

## Successor and Predecessor of a number

The successor of a number is 1 more than the number. 4293

$$
+1=4294
$$

The predecessor of a number is 1 less than the number. 4897

$$
-1=4896
$$

## Practice:

I) Write the successor of:
a) 3,400
b) 3,441
c) 2,584
d) 1,216
II) Write the predecessor of:
a) 5,816
c) 4,100
b) 1,009
d) 3,905

Comparison of Numbers:
a) 3,284 $\qquad$ 5,234
d) 1,404 $\qquad$ 5,369
b) 5,417 $\qquad$ 5,407
e) 2,916 $\qquad$ 7,081
c) 8,999 $\qquad$ 9,799
f) 4,203 $\qquad$ 4,203

## Explanation:

## Ascending and Descending Order:

Ascending order means arranging numbers from smallest to biggest.
Descending order means arranging numbers from biggest to smallest.

## Practice

1) Arrange in ascending order:
a) 2,$480 ; 2,820 ; 2,028 ; 2,082$
b) 7,$230 ; 7,320 ; 7,540 ; 7,218$
2) Arrange in descending order:
a) 5,$508 ; 5,950 ; 5,480 ; 5,182$
b) 3,$107 ; 9,206 ; 5,203 ; 7,328$

## Explanation:

Forming Numbers:
To write the smallest number using the given digits only once
$1,2,0,7=1027$
To write the greatest number using the given digits only once, we simply arrange the digits in descending order.

$$
9,6,5,4=9654
$$

## Practice:

I) Write the smallest and greatest 4-digit numbers by using each digit only once.
a) $5,0,3,9$
b) $4,1,7,8$
c) $5,6,7,2$
II) Form the smallest 4-digit number using the digits 3,5,7 repeating 7 twice.
III) Form the greatest 4-digit number using the digits 4,3,1 repeating 4 twice.

## Explanation:

Rounding Numbers

- Rounding numbers are approximate numbers.
- To round off nearest tens always check ones place, whether it is greater than 5 or not.
- To round off nearest hundreds, check last two digits, whether it is greater than or equal to 50 or not.
- To round off nearest thousands, check last three digits, whether it is greater than or equal to 500 or not.


## Practice:

I) Round off to the nearest tens
a) 75
b) 42
c) 57
d) 81
II) Round off to the nearest hundreds
a) 528
b) 472
c) 735
d) 432

Roman
Numerals

## Explanation

The Romans used only seven symbols to form numbers.

| Hindu-Arabic Numeral | 1 | 5 | 10 | 50 | 100 | 500 | 1000 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Roman Numeral | 1 | V | X | L | C | D | M |

## Rules for Writing Roman Numerals

- The symbols I and $X$ can be used upto to three times in a number and the values are added.
- A Roman numeral of smaller value written on the right of a roman numeral of greater value is added to the numeral of greater value is added to the numeral of greater value.

$$
\begin{aligned}
& \text { VII }=5+1+1=7 \\
& \mathrm{XII}=10+1+1=12
\end{aligned}
$$

- A Roman numeral of smaller value written on the left of a roman numeral of greater value is subtracted from the numeral of greater value.

$$
\begin{aligned}
& I X=10-1=9 X L \\
& =50-10=40
\end{aligned}
$$

- V, L, D are never subtracted.
- $\quad X$ can be subtracted from $L$ and $C$ only once.
- When a Roman numeral of smaller value is placed between two roman numerals of greater values, its value is always subtracted from the value of the symbol on its right.

$$
\begin{array}{rlc}
\text { XIV } & = & 10+(5-1) \\
& = & 10+4 \\
& & \\
& = & 14
\end{array}
$$

## Practice

I) Write the Roman numeral:
a) 57
b) 43
c) 35
d) 15
e) 24
f) 33
II) Write the Hindu-Arabic numeral
a) XIX
e) XIV
b) XXXV
f) $\quad X X$
c) XLII
g) XIV

