CLASS VI **MATHS (WORKSHEET)**

2. OPERATIONS ON NUMBERS

KEY POINTS:

■ The four basic math operations are Addition, Subtraction, Multiplication and Division.

Estimation:

■ In estimation of nearest tens, if ones digit is greater than or equal to 5, tens digit is changed to next higher digit and ones digit to zero else if it is less than 5, tens digit remains unchanged and ones digit is changed to zero.

■ Similarly, in estimation of hundreds, tens digit is changed to next higher digit and in estimation of thousands, hundreds digit is changed to next higher digit and the rest is followed.
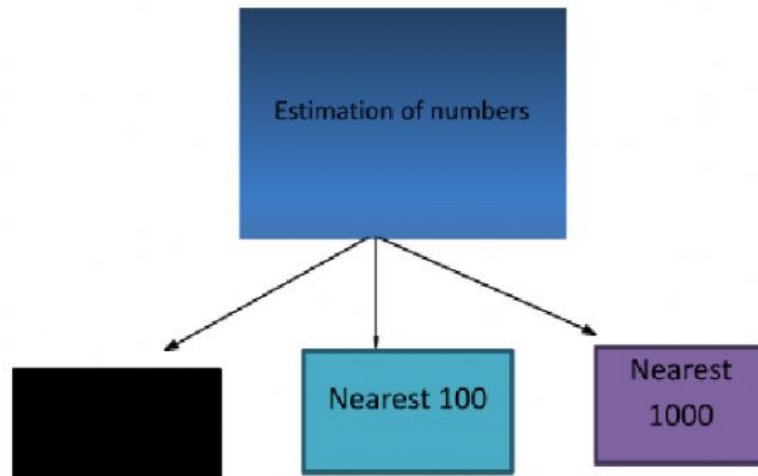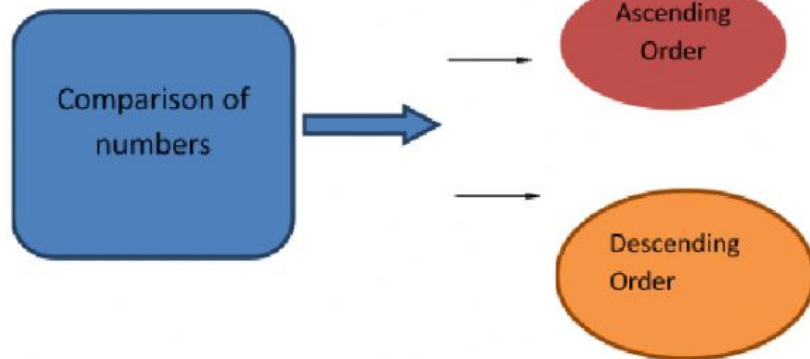
Estimation in products:Rules:

■ Round each factor to its greatest place, if a factor contains 2 digits, round it off to nearest ten and if it contains 3 digits round it off to nearest hundred and so on.

■ Do not round off any-one-digit factor.

Estimation in quotients:

■ We round off the dividend and divisor before the process of estimation

■ Remainder is ignored.

Mind Map

```
┌──────────────┐                    ┌─────────────┐
│              │                    │  Ascending  │
│ Comparison of│  ━━━━▶              │    Order    │
│   numbers    │                    └─────────────┘
│              │
└──────────────┘              ┌──────────────┐
                              │  Descending  │
                              │    Order     │
                              └──────────────┘
```

```
        ┌────────────────────┐
        │                    │
        │ Estimation of numbers│
        │                    │
        └────────────────────┘
         ╱        │        ╲
    ┌────────┐ ┌──────────┐ ┌──────────┐
    │        │ │Nearest 100│ │ Nearest  │
    │        │ │          │ │   1000   │
    └────────┘ └──────────┘ └──────────┘
```

EXERCISE 2.1

1. Add and write the number sentence for 357619 and 1953454

    A
    TL L TTH TH H   T   O
    1953454
    +0357619
    _____
     2   3 11073

    Number sentence = Twenty three lakh eleven thousand seventy three

2. Find the difference between the given numbers.(Hint: Subtract the smaller number from the bigger number)
a) 4317019 and 5028068

    A   TL   L   TTH   TH   H   T   O
         5   0   2   8   0   6   8
    -4 317019
    _____
     0   7   1   1   0   4   9

3. Add and write the number sentence
(a) 343719   and   1809393

(b) 2580948, 4279634 and 3829609

4. Find the difference between the given numbers and write the number sentence.
   (a) 4317019   and   5028068
   (b) 988762   and   1201338
   (c) 2527053   and   2725350

5. A vegetable seller sold 437819 kg potatoes and 319983 kg tomatoes. Find the total weight of vegetables sold.

Exercise – 2.2

1. Multiply 213 x 80

```
    2  1  3
  x 8  0
    0  0  0
1   7  0  4  x
1   7  0  4  0
```

2. Divide and find the quotient and remainder

```
        2 ) 7500 ( 3750
             -6
             15
            -14
             10
-10
0
```

3. Multiply and express the product in words
   (a) 10853 x 403   (b) 7892 x 1326

4. Divide and find the quotient and remainder
   (a) 8319506 by 792

5. The distance between two cities is 42 km 875m. A bus makes 6 round trips everyday. How much distance does it cover in the month of May?

6. A tank contains 975L 800 ml water. Find the maximum number of jugs that can be filled if each jug can hold 3 L 500 ml water.

Exercise – 2.3

1. Round off each of the following numbers to the nearest tens
   (a) 257   (b) 9579

A

   Rounding off the above numbers to nearest tens, we have

   (a) 257 ——→260

(b) 9579   9580 ——→

2. Round off each of the following numbers to the nearest thousands

   (a) 213625   (b) 108894

A

   Rounding off the above numbers to nearest thousands, we have

   (a) 213625 ——→ 214000
   (b) 108894 ——→109000

3. Round off each of the following numbers to the nearest ten:

   (a) 827   (b) 1506

4. Round off each of the following number to the nearest hundred and thousand:
   (a) 2351   (b) 873

5. Round off 62835 to the nearest ten thousand and lakh.

Exercise - 2.4

1. Estimate the product of 595 x 261

   A

   595 rounds off to nearest hundreds as 600   600

   261 rounds off to nearest hundreds as 300   x 300

   1,80,000

   Estimated product is 1,80,00.

2. Estimate 1,08,735 – 48,231 by rounding off to nearest tens.

   A

   1,08,7<u>3</u>5 rounds off to nearest tens as 1,08,740   1,08,740

   48,2<u>3</u>1 rounds off to nearest tens as 48230   - 48230

   60,510

   Estimated difference is 60,51 to nearest tens.

3. Estimate: 5290 + 17986

4. Give a rough estimate and also a closer estimate: 210319 + 55830

5. Estimate: 5673 – 436

6. Give a rough estimate and also a closer estimate: 535806 - 189390

Exercise - 2.5

1. Estimate the following products:
   (a) 42 x 195   (b) 4395 x 7   (c) 5 x 683

2. Estimate the following quotients:
   (a) 82 ÷ 18   (b) 939 ÷ 36   (c) 8706 ÷ 293