
Maths
Specimen

## copy

Year 21-22

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## Chapter - 1 The Fish tale



## Key Points To Remember

- Introduction
- Write the numbers in Indian system.
- Write the number names in international system
- Write the place value of the underlined digits according to Indian style.
- Solve the following and estimate the sum to nearest hundred.
- Fill in the blanks.
- Look at the table and calculate the following.
- Word problem
- Activity



## Introduction

- Grouping of number is always done from right to left.
- Indian style -

| Crores |  | Lakhs |  | Thousands |  |  | Ones |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Period |  |  |  |  |  |  |  |  |  |
| TC | C | TL | L | TTH | Th | H | T | O | Place |

17,25,60,568 - Seventeen crores twenty five lakhs sixty thousands five hundreds sixty eight.

- The international system can have upto three digits in each group, namely, the ones group, thousands group, the millions group, etc.


## International place value chart

| Millons |  |  | Thousands |  |  | Ones |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hundred Million | Ten Million | Million | Hundred Thousands | Ten Thousands | Thousands | Hundred | Tens | Ones |
| 100,000,000 | 10,000,000 | 1,000,000 | 100.000 | 10.000 | 1,000 | 100 | 10 | 1 |

- Example: $253,068,896$

Two hundreds fifty three millions sixty eight thousand eight hundreds ninety six.

## * Write the numbers in Indian system:

1) Eighty crores forty eight lakhs fifty thousands seven hundreds four. $\mathbf{8 0 , 4 8 , 5 0 , 7 0 4}$
2) Seven crores nineteen lakhs one thousand eight hundreds twenty nine. $\mathbf{7 , 1 9 , 0 1 , 8 2 9}$
3) Four crores fifty lakhs thirty one thousands sixty five. $\mathbf{4 , 5 0 , 3 1 , 0 6 5}$
4) Two crores eighty nine lakhs ninet thousands four hundreds twenty. $\mathbf{2 , 8 9 , 9 0 , 4 2 0}$
5) Forty five lakhs ninety five thousands and eighty two. $\underline{\mathbf{4 5 , 9 5}, 082}$

## * Write the number name in international system:

a) $52,738,206$ - Fifty two millions seven hundreds thirty eight thousands two hundreds six.
b) 290,220,540 - Two hundreds ninety millions two hundreds twenty thousands five hundreds forty.
c) $\mathbf{6 6 0 , 0 0 1 , 9 7 3} \mathbf{- S i x}$ hundreds sixty millions one thousand nine hundreds seventy three.
d) 833,074,006 - Eight hundreds thirty three millions seventy four thousands and six.
e) 345,697- Three hundreds forty five six hundreds ninety seven.

* Write the place values of the underlined digits on the base of Indian system:
a) $8, \underline{5} 2,61,962=\mathbf{5 0 0 0 0 0 0}$ or $\mathbf{5}$ ten lakhs.
b) $4,92,06,598=\underline{\mathbf{2 0 0 0 0 0}}$ or $\mathbf{2}$ lakhs.
c) $1 \underline{17,04,92,580=\underline{\mathbf{7 0 0 0 0 0 0 0}} \text { or } \mathbf{7} \text { crores. } . ~ . ~ . ~}$
d) $7,41, \underline{82,098}=\underline{\mathbf{8 0 0 0 0}}$ or $\mathbf{8}$ ten thousands.
e) $\underline{36}, 89,75,617=\underline{\mathbf{3 0 0 0 0 0 0 0 0} \text { or } \mathbf{3} \text { ten crores. }}$


## Solve the following and estimate the sum to nearest hundred :

a) $68945+20108=\underline{\mathbf{8 9 0 5 3}}$

Estimated sum= $\underline{\mathbf{8 9 1 0 0}}$.
b) $78294+21374=\underline{\mathbf{9 9 6 6 8}}$

Estimated sum $=\underline{99700}$.
c) $24427+22061=\underline{\mathbf{4 6 4 8 8}}$
d) $(93216+7814)$ and $36245=\underline{\mathbf{1 3 7 2 7 5}}$
e) 142254 and $80618=\underline{\mathbf{1 5 0 2 8 7 2}}$

Estimated sum $=\underline{46500}$.
Estimated sum $=\underline{\mathbf{1 3 7 3 0 0}}$.
Estimated sum $=\underline{\mathbf{1 5 0 2 9 0 0}}$.

## Fill in the blanks.

i. One lakh $=1$ hundred thousand.
ii. 100 lakhs = one crore.
iii. $\quad 10$ lakhs is the same as ten thousand hundred.
iv. $\quad \underline{1000}$ should be added to 99000 to get one lakh.
v. Five zeroes are there in one lakh.
vi. Half of two lakh = one lakh.

## Study the given table and answer the questions asked below.

| Boat type | Number of fish caught in one trip <br> (in $\mathbf{k g}$ ) | Distance covered in one trip <br> (in km) |
| :---: | :---: | :---: |
| Log boat | 20 | 4 km per hour |
| Long tail boat | 600 | 12 km per hour |
| Motor boat | 800 | 20 km per hour |
| Machine boat | 6000 | 22 km per hour |

1) About how much fish in all will each type of boat bring in seven trips?

Solution - Quantity of fish a log boat brings in 1 trip $=20 \mathrm{~kg}$
$\therefore$ Quantity of fish a log boat brings in 7 trips $=20 \times 7=140 \mathrm{~kg}$
Quantity of fish a long tail boat brings in 1 trip $=600 \mathrm{~kg}$
$\therefore$ Quantity of fish a long tail boat brings in 7 trips $=600 \times 7=4200 \mathrm{~kg}$
Quantity of fish a motor boat brings in 1 trip $=800 \mathrm{~kg}$
$\therefore$ Quantity of fish a motor boat brings in 7 trips $=800 \times 7=5600 \mathrm{~kg}$
Quantity of fish a machine boat brings in 1 trip $=6000 \mathrm{~kg}$
$\therefore$ Quantity of fish a machine boat brings in 7 trips $=6000 \times 7=42000 \mathrm{~kg}$.
2) About how far can a motor boat go in six hours?

Solution - Distance covered by motor boat in 1 hour $=20 \mathrm{~km}$
$\therefore$ Distance covered by motor boat in 6 hours $=20 \times 6=120 \mathrm{~km}$.
3) If a long tail boat has to travel 60 km how long will it take?

Solution - Distance covered by long tail boat in 1 hour $=12 \mathrm{~km}$
To cover $60 \mathrm{~km}=($ ? ) hours. $60 / 12=5$ hours.
Thus long tail boat takes 5 hours to cover 60 km .

## There are different types of fish in a fish shop. The rates of all fish are given below.

| Fish type | Rate |
| :---: | :---: |
| Eel | Rs $50 / \mathrm{kg}$ |
| Red Snapper | Rs $80 / \mathrm{kg}$ |
| Parrot Fish | Rs $50 / \mathrm{kg}$ |
| Dry Fish | Rs $25 / \mathrm{kg}$ |

i. Maya has Rs 200. She spends one - fourth of the money on buying Eel and another three fourth on buying dry fish.
a) How many kilograms of Eel did she buy?

Solution - In Rs 200 One - fourth money is used for buying Eel fish.
$200 \times \frac{1}{4}=50 \times 1=$ Rs 50
In Rs $50,1 \mathrm{~kg}$ of Eel can we buy.
b) How many kilograms of Dry fish did she buy?

Solution - In Rs 200 three - fourth money is used for buying Dry fish.

$$
200 \times \frac{3}{4}=50 \times 3=\text { Rs } 150
$$

In Rs 150 , we can buy $=150 / 25=6 \mathrm{~kg}$ of dry fish.
ii. When a fresh fish is dried, it becomes $1 / 3$ of its weight. If Rahul spent Rs 6000 to buy Eel fish and then dry it, then how many kilograms of dried Eel fish will be left with him?

Solution - For Rs 6000 Rahul can buy Eel fish $(6000 / 50)=120 \mathrm{Kg}$
After dried the Eel fish $120 \times \frac{1}{3}=40 \times 1=40 \mathrm{Kg}$.
Rahul got 40 kg of Eel fish after getting it dried.

## * Word problems.

1) Rajesh took a loan of Rs 9850 from the bank. He paid back Rs 12240 to the bank in one year giving equal amount in each month. How much interest did he return? How much did he pay back every month?

Solution: Rajesh took a loan from bank $=$ Rs 9850
No of amount he pay back in 1 year $=12240-9850=$ Rs 2390
He pay back every month $=12240 \div 12=$ Rs 1020
2) In a school, there are ten classes. Each class has four sections and each section has equal number of students. If altogether there are 1600 students in the school, then how many students are there in each section of a class?

Solution: No. of classes $=10$
No of sections in each class $=4$
No of students in school $=1600$
Total no. of classes $=10 \times 4=40$
No. of students in each section $=1600 \div 40=40$ students.

## Activity

* Use different shapes to draw a fish.

For example.

* Jincy used these shapes to make drawings of fish. Now you also use some shapes to draw the different sea animals shown below.



## Chapter - 2 Shapes and Angles



## Key points to remember

- Introduction
- Fill in the blanks.
- Identify the angles as right angle, acute angle, obtuse angle or straight angle.
- Count the number of angles in the given figure.
- Draw angle using protractor
- Activity



## * Introduction:

- A Point has no shape or size.
- A line segment AB , has two end points, A and B . Its length can be measured.

- A ray has only one end point.

- A line may be extended in both directions.

- Different Types of Shapes.
i. Hexagon

ii. Octagon

iii. Pentagon

iv. Quadrilaterals - A figure which have four sides closed edges are called quadrilateral. For eg.

- Define Angle - An angle is a figure formed by two rays meeting at a common end point.

- Types of Angles - There are six types of angle.

1. Acute angle - An angle whose measure is less than $90^{\circ}$ is known as acute angle. For example: $60^{\circ}$

2. Right angle - An angle whose measure is exactly $90^{\circ}$ is known as right angle.

3. Obtuse angle - An angle whose measure is more than $90^{\circ}$ and less than $180^{\circ}$ is known as obtuse angle. For example: $120^{\circ}$

4. Straight angle - An angle whose measure is exactly $180^{\circ}$ is known as straight angle.

5. Reflex angle - An angle whose measure is more than $180^{\circ}$ and less than $360^{\circ}$ is known as reflex angle. For eg - $225^{\circ}$

## $225^{\circ}$


6. Complete angle - An angle whose measure is exactly $360^{\circ}$ is known as complete angle.


## Fill in the blanks.

1) The unit for measuring angle is degree.
2) A right angle measures $\underline{\mathbf{9 0}^{\circ}}$.
3) A zero angle measures $\underline{\mathbf{0}^{\circ}}$.
4) A complete angle measures $\mathbf{3 6 0}$.
5) An obtuse angle measures more than $\underline{90^{\circ}}$ and less than $\underline{180^{\circ}}$.
6) An angle measuring $180^{\circ}$ is called a straight angle.
7) An angle measuring more than $180^{\circ}$ but less than $\mathbf{3 6 0 ^ { \circ }}$ is called reflex angle.
8) We use protractor to measure angles.
9) One third of a right angle $=30^{\circ}$.
10) Half of a right angle $=\underline{45^{\circ}}$.
11) Two times of a right angle $=180^{\circ}$.
12) 3 times of a right angle $=\underline{\mathbf{1 8 0}^{\circ}}$.

Identify the angles as right angle, acute angle, obtuse angle or straight angle.
a) $45^{\circ}=$ Acute Angle.
b) $165^{\circ}=$ Obtuse Angle.
c) $180^{\circ}=$ Straight Angle.
d) $75^{\circ}=$ Acute Angle.
e) $90^{\circ}=$ Right Angle.
f) $35^{\circ}=$ Acute Angle.
g) $240^{\circ}=$ Reflex Angle.
h) $360^{\circ}=$ Complete Angle.

* Draw angle using protractor. (https://www.youtube.com/watch?v=Gzd IsNwTOI)
a) $75^{\circ}$

b) $45^{\circ}$ (https://youtu.be/qXU7ZY1i9Sk)
c) $160^{\circ}$
d) $90^{\circ}$
e) $135^{\circ}$

Activity
Make a degree clock. (Page no. 31)



