

# Numbers- Money handling

## Grade 3-Rupees and Paisa

### Learning objective:

- Knowledge about rupees and Paisa.
- Addition and subtraction of Rupees and Paisa.
- Making of rate charts and Bills.
- Word problems on money

**Learning Objective 1:** Introducing Indian Currencies- denominations upto 100. (Grade 3)

### Activity: Money album:

**Book Page no: 191-192**

**Introducing (Paisa and rupees till 100)**

Make two-member team of students, who will make a money album of paisa and rupees. The activity helps the students to familiarize the currencies used and money value.

### Instruction:

- The heap of money is given to the students in common.
- The students will collect each currency and paste in their album and write below it.
  - The students can use the textbook for reference.



### Discussion after the activity:

- 1) What are the currencies you used in your album?
- 2) Which currency has more value? How do you say it?
- 3) Can you arrange the money in increasing order of value?
- 4) Paisa is lesser or greater than rupee?
- 5) Why do we need money?

**Activity: Money exchange (CRA)**

It could be a continuation of money album. Pair of students could make the money exchange album.

Teach:

One rupee =100 paisa

One student takes one currency or coin another child takes the equivalent sum of amount.

**Step 1: Concrete** Student collect the currency and its equivalent place it in the paper with “equal to” symbol

**Step 2: Representation** Student should narrate the equation in words.

**Step 3: Abstract** Student use addition symbol to write the equation

## MONEY EXCHANGE

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1 rupee equals 4 coins of 25 paisa

**1 rupee = 25 paisa+ 25 paisa+ 25 paisa +25 paisa**

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5 rupees equals 5 coins of 1 rupee

**5 rupee = 1 rupee+ 1 rupee+  
1 rupee+ 1 rupee+ 1 rupee**

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10 rupees equals 5 coins of 1 rupee and 1 note of 5 rupee

**10 rupee = 1 rupee+ 1 rupee+  
1 rupee+ 1 rupee+ 1 rupee + 5 rupee**

**Learning Objective 2 :** Handling Money in shopping-Making of rate charts and Bills.

**Book Page no: 194-196**

### **Game: Shopping**

Starting open ended discussion teacher could ask: What do you shop for? Why do you go for shopping? What do you need to shop? Do you barter objects or use money?. The teacher could try the introductory game of handling money.

One of the interesting games in classroom would be making students to play shopping game.

The objective of the game:

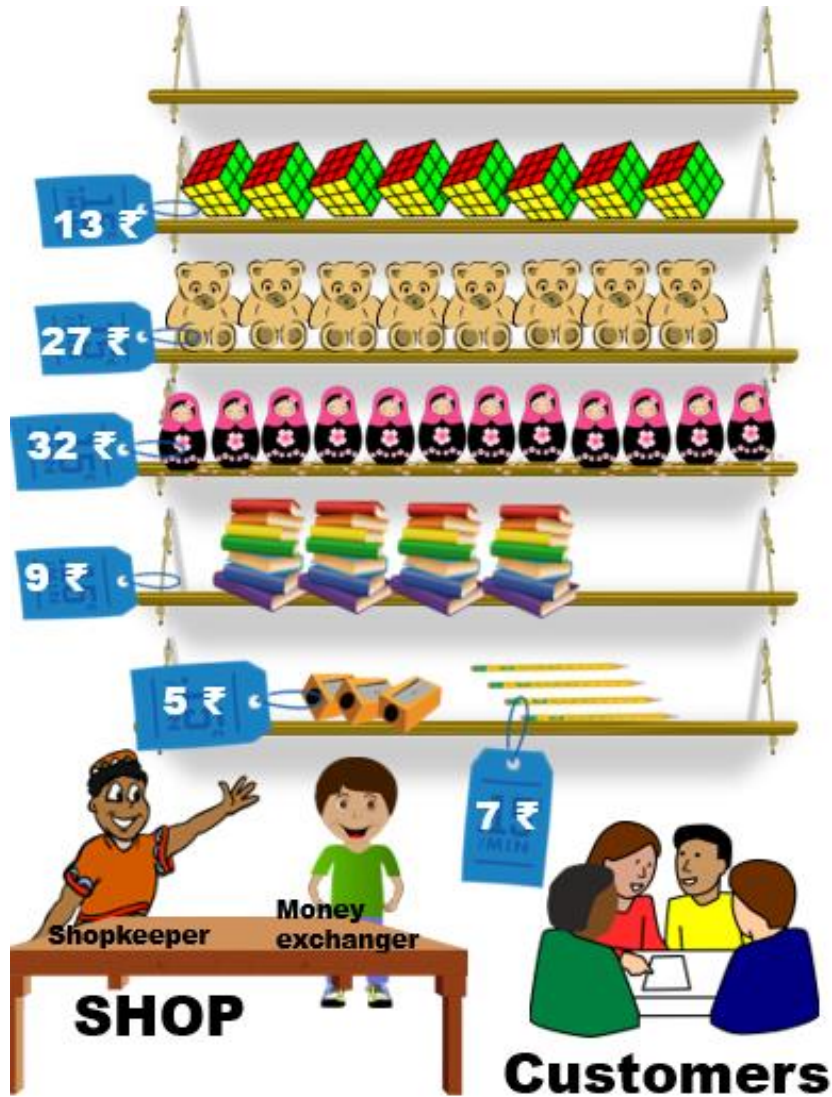
- Students visualise the money and the math involved in shopping.
- Seeing the items and valuing them depending on price.
- Making rate chart and Bill

The students are divided into:

**-SHOPKEEPER group**






















**-MONEY EXHANGER group**

-CUSTOMERS group



**RULES of the GAME:**

<p>The illustration shows the shopkeeper in an orange shirt standing behind the counter labeled 'SHOP'. A price tag of 5 ₹ is visible on the shelf above him.</p>	<p>1. The <b>SHOPKEEPER</b> arranges the shop items visible to customers and writes the price of each item in the price tags.</p>
<p>The illustration shows the money exchanger in a green shirt standing behind a counter with various Indian currency notes and coins on it.</p>	<p>2. The <b>MONEY EXCHANGER</b> has all denominations of rupees and paisa which is given in exchange of rupees.</p>

 <p><b>EXCHANGE</b></p> <p>2 notes of 20 rupees = 40₹  3 notes of 10 rupees= 30₹  10 coins of 1 rupee= 10₹  3 coins of 5 rupees= 15₹  10 coins of 50 paisa= 5₹  Total =100₹</p>	<p>3. The <b>CUSTOMER</b> is given 100 rupees. they should make changes depending on the need from the <b>MONEY EXCHANGER</b>. (the money exchanger accepts only if the correct rupees denomination and quantity of the rupees for 100 rupees is written and given to him)</p>																								
 <p><b>Customers</b></p> <table border="1" data-bbox="343 548 566 884"> <thead> <tr> <th>Item</th> <th>QTY</th> <th>Amount</th> </tr> </thead> <tbody> <tr> <td></td> <td>1</td> <td>₹ 9</td> </tr> <tr> <td></td> <td>1</td> <td>₹ 7</td> </tr> <tr> <td></td> <td>1</td> <td>₹32</td> </tr> <tr> <td></td> <td>1</td> <td>₹13</td> </tr> <tr> <td></td> <td>1</td> <td>₹27</td> </tr> <tr> <td></td> <td>1</td> <td>₹5</td> </tr> <tr> <td><b>Total</b></td> <td></td> <td><b>₹93</b></td> </tr> </tbody> </table>	Item	QTY	Amount		1	₹ 9		1	₹ 7		1	₹32		1	₹13		1	₹27		1	₹5	<b>Total</b>		<b>₹93</b>	<p>4. The customer groups are instructed to buy atleast 6 different items. The <b>CUSTOMER</b> sees the shop's price listing and makes a list of items and quantity to be purchased in the and estimate the total amount.</p>
Item	QTY	Amount																							
	1	₹ 9																							
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	1	₹27																							
	1	₹5																							
<b>Total</b>		<b>₹93</b>																							
 <p><b>SHOP</b></p>	<p>5. The <b>SHOPKEEPER</b> checks the item list and pricing and checks the money given by the customers (the shopkeeper accepts only if the item and purchase estimation is correct).</p>																								
<p>6. END OF PURCHASE. The purchase bill is shown to the teacher. The teacher gives another amount (say 50 rupees) to repeat the shopping to the customer groups.</p>																									

**WINNER:** The team with more purchased item in the end of the planned time is the winner.

**ASSESSMENT:** (Observation)

The teacher supervises the game and make correction in between wherever necessary.

The amount of purchase and exchanging of money is overseen by the teacher.

Teacher notes whether the students have followed the rules

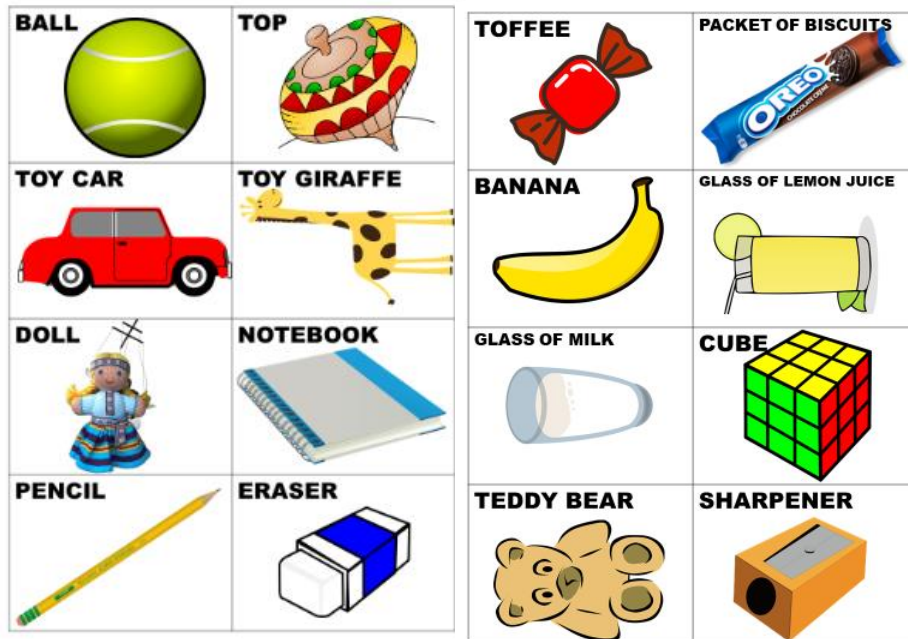
Teacher notices the handling of currency by students. Are they careful or careless?

**BOOK activity: (pg.194-197)**

**Preparation for the book activity:**

**Material required:**

-The picture cards in the image (pg.194) are kept for each team. The cards have clear name on the top as given in the textbook. This helps the students to identify the name on their own.

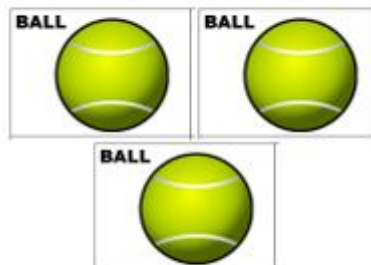


**Instruction for the students:**

Student should be made into equal group. Each group can have 3-5 students.

Ask the students to observe the picture in page 194.

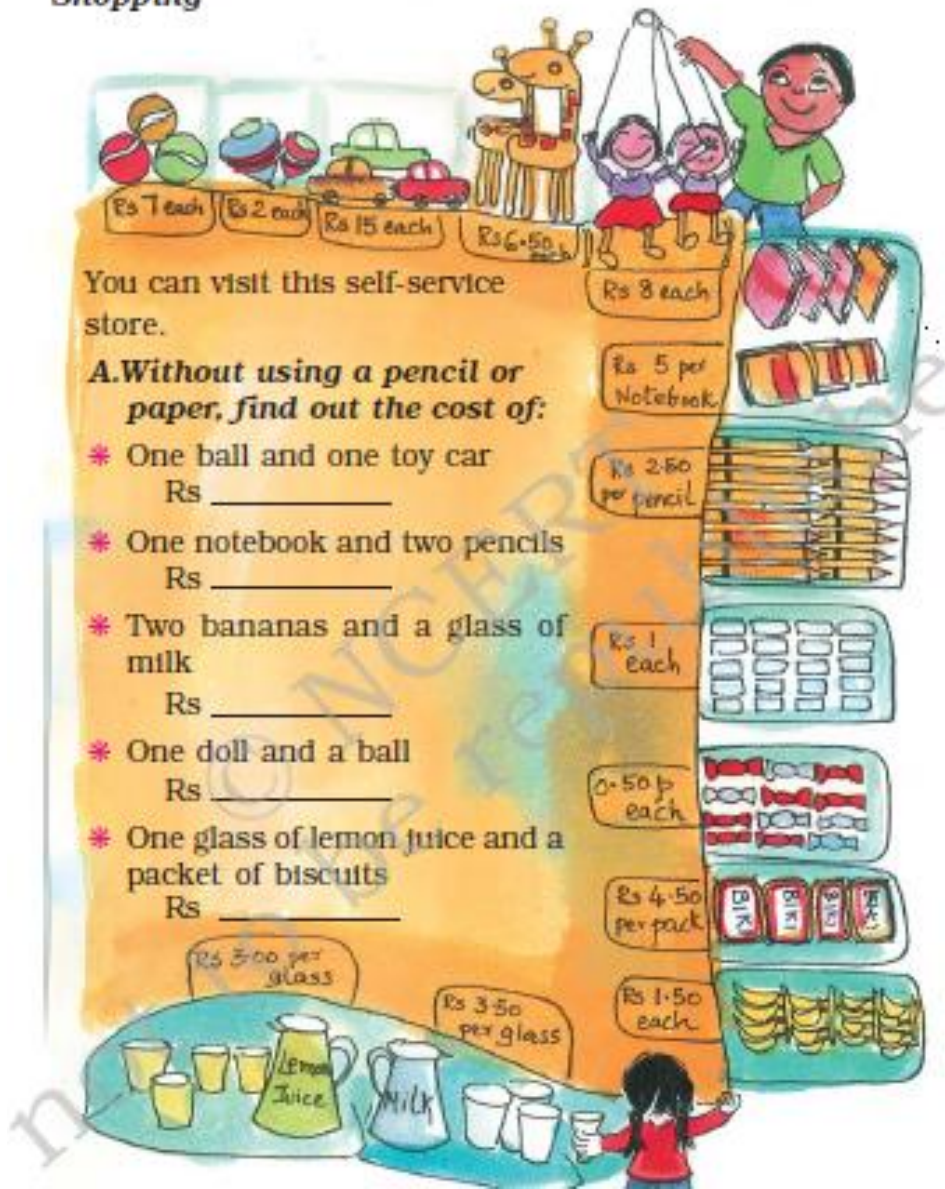
Given a heap of picture cards to each team, the group is asked to identify the object in the picture and collect the corresponding items (pg. 194). The students are also instructed to write the price given in the picture on each card.



(e.g. Three balls are given in the picture, so three cards of balls are taken by the group, since the price of one ball is Rs. 7, students will write seven in each card)

From this, all the students would be knowing all the objects given in the picture and its prices, which would help the students to attempt the book questions.





You can visit this self-service store.

**A. Without using a pencil or paper, find out the cost of:**

- \* One ball and one toy car  
Rs \_\_\_\_\_
- \* One notebook and two pencils  
Rs \_\_\_\_\_
- \* Two bananas and a glass of milk  
Rs \_\_\_\_\_
- \* One doll and a ball  
Rs \_\_\_\_\_
- \* One glass of lemon juice and a packet of biscuits  
Rs \_\_\_\_\_

**Discussion and solving of book questions**

Ask the students to take Book Page no: 194

**Exercise A: Without using a pencil or paper, find out the cost of:**

**Question:** How much will it cost, if you buy one ball and one toy car?

Students should take the cards of ball and toy card and guess the price.



Probing question to be asked:

- What operation should use to know "how much in total"? (expected answer: to add)
- What numbers need to be added to find the price?

Similarly, the other questions are discussed and solved.

**B. Find out the total cost of:**

Ask the students to take Book Page no: 195

### B. Find out the total cost of:

- \* One toy giraffe, one copy and a glass of lemon juice Rs \_\_\_\_\_
- \* One glass of milk, one packet of biscuits and a banana Rs \_\_\_\_\_
- \* One notebook, two pencils and two erasers \_\_\_\_\_
- \* Two tops, three toffees and two bananas \_\_\_\_\_

Students are asked to pick up the cards given in the question and asked to find the total cost of the objects. (Students are expected to add the items on their own, without teacher's help)

E.g:



$\text{₹ } 3.00 + \text{₹ } 4.50 + \text{₹ } 1.50 = \text{₹ } 9.00$

The students are expected to the cards of glass of milk, packet of biscuit and banana, and then add and write in the book.

### C. What can you buy if you have a twenty-rupee note? (pg. 195)

Finding objects that could be bought with 20 rupees

Make the students pick up cards and check whether its sum comes around twenty.

Instruct them to write once they have found right answers.

### D. You need to make a Cash memo for the things you bought:



$\text{₹ } 3.00 + \text{₹ } 4.50 + \text{₹ } 1.50 = \text{₹ } 9.00$

Cash Memo Self Service Store			
Item	Rate per item	Rs	Paise
1 Glass of milk	₹3.00	₹ 3	00
1 Packet of biscuit	₹4.50	₹ 4	50
1 Banana	₹1.50	₹ 1	50
Total		₹ 9	00

Picking up few cards, students are asked to estimate the total amount and write in the notebook.

Then they should add and make check out the right answers

This is repeated for a few rounds, depending on students understanding.

### Bill analysis (pg. 196)

**Each group of students should check other's bill is right or not.**

Additionally, in the end of the activity, **Ask the students to take Book Page no: 196**

The group is asked to check whether the price bill given in the book is right or not.

### **8: Introducing subtraction in Money** Ask the students to take Book Page no: 196

**Emphasising the significance of subtraction:** Students confuse which operations to use in between problems

The examples of using subtraction in money is talked with students.

Given some situation like, “**you have 20 rupees and somebody takes way 5 rupees, how much will you have?**”, “**what math will you do?**”

$$\begin{array}{r} \text{a) Rs } 25.50 \\ - \text{Rs } 11.50 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{b) Rs } 103.50 \\ - \text{Rs } 62.00 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} \text{c) Rs } 19.50 \\ - \text{Rs } 7.00 \\ \hline \\ \hline \end{array}$$

#### **Given the subtraction in pg.196**

-Could you tell me a story seeing this math?

-Ask them to compute after they are able to make stories using the numbers.

**These questions help the student to understand the significance of subtraction in money handling.**

**E. You have 30 rupees with you. Find out how much money will be left after buying the following items** Ask the students to take Book Page no: 196

The students are expected to solve the problem. The question is explained to students.

**They are asked to find two things,**

- **Total expenses**
- **Money left**

Each team makes a role play and finds the answer. And demonstrate the operation they used.



E. You have 30 rupees with you. Find out how much money will be left after buying the following items:

\* One ball, one doll and one toy giraffe

Total cost \_\_\_\_\_. Money left \_\_\_\_\_.

\* Two bananas, one pack of biscuits and two



$$\text{Total cost} = ₹ 7 + ₹ 8 + ₹ 6.50$$

30 rupees minus cost is the money left

$$₹ 30 \quad - \quad ₹ 21.50 \quad = \quad ₹ 8.50$$

**Learning Objective 3:** Solving Word Problem related to money. (pg.197)

Ask the students to take Book Page no: 197

### Teaching word problem

Often the fastest and easiest way to solve a problem is to write an equation that matches the problem.

As equation is a math sentence, that says that 'A' is equal to 'B'.

Students should be asked to estimate 'what' equal 'what'?

### Converting words into equation:

**Word sentence:** Six plus a number is eleven

$$\text{Equation} \quad : \quad 6 \quad + \quad n \quad = \quad 11.$$

**Word sentence:** A number minus 1 equals 4.

$$\text{Equation} \quad : \quad n \quad - \quad 1 \quad = \quad 4.$$

### Problems in addition:

Word problem contain key words that tell you what type of operation to perform. Many word in a word problem indicate addition.

E.g.: **total, sum of, how many together.**

### Step 1: Read the problem

Find the key words used in the problem. The word sum tells you that this is an addition problem. The phrase the sum of tells you that what comes next is added.

E.g.: Ram is 15 years old. The sum of Ram's age and Sam's age is 32 years. What is Sam's age?

**Step 2: Write the sentence in words**

Write the sentence in words that shows what the problem is saying

e.g:

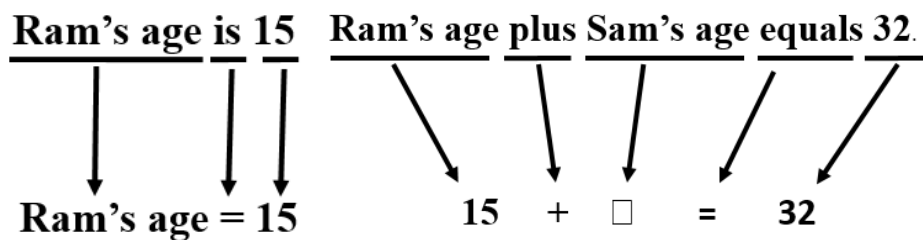
Ram's age is 15

Ram's age plus Sam's age equals 32.

**Step 3: Change the words sentence into an equation.**

Change the word sentence to an equation. Use a variable for the number you don't know (which you are trying to find). Replace the words with values that you are given.

e.g:

**Problems in Subtraction:**

Word problem contain key words that tell you what type of operation to perform. Many word in a word problem indicate subtraction.

E.g.: **take away, difference, left away, gone away.**

**Step 1: Read the problem**

Find the key words used in the problem. The word sum tells you that this is an addition problem. The phrase the sum of tells you that what comes next is added.

**E.g.: Sara had few puppies. Three puppies have been sold. There are four puppies left with her. How many puppies did Sara have in total?**

**Step 2: Write the sentence in words**

Write the sentence in words that shows what the problem is saying

E.g:

- **Sold puppies is three**
- **Left over puppies is four**
- **Total puppies of Sara minus sold puppies equals left over puppies**

**Step 3: Change the words sentence into an equation.**

Change the word sentence to an equation. Use a variable for the number you don't know (which you are trying to find). Replace the words with values that you are given.

Sold puppies is three

$$\begin{array}{c} \downarrow \quad \downarrow \quad \downarrow \\ \text{Sold puppies} = 3 \end{array}$$

Left over puppies is four

$$\begin{array}{c} \downarrow \quad \downarrow \quad \downarrow \\ \text{Left over puppies} = 4 \end{array}$$

Total puppies of Sara minus sold puppies equals left over puppies

$$\begin{array}{c} \swarrow \quad \downarrow \quad \downarrow \quad \swarrow \quad \swarrow \\ \square - 3 = 4 \end{array}$$

This way the word problem could be introduced in the classroom.

This way the word problem could be introduced in the classroom.

**Strategy for learning word problem**

**Ask the students to take Book Page no: 197-198**

Students are made into groups of 3-5, where each team is given one question to make the role play.

A. Three friends wanted to buy a cricket bat and ball.

Bina had Rs 48.50, Raman had Rs 55.50 and Venu had Rs 38.00. How much money did they have in all?



Role play: dialogue between three students

- Hi Bina!
- Hi Raman!
- Hi Venu!
- I like to play cricket in the holiday.

- Can we buy cricket bat and ball to play?
- Yes, but how?
- How much do you have, Bina?
- I have 48 rupees and 50 paisa
- How much do you have, Raman?
- I have 55 rupees and 50 paisa.
- How much do you have, Venu?
- I have 38 rupees.

The teacher (addressing other groups in the class):

Can you draw/write and show me much each have?

What math will you do here to find the total?

How much they have **all together**?

(expected answer: add all the three amount)

Precise expected answer: Total money is bina's money plus raman's money plus venu's money.

**Tip to extend the question to think more:** If the Bat and ball cost 100 rupees, how much money will be left with the three friends.

Similarly, each team can participate in role play to different questions.