14 Banks and Simple Interest

YUVG02

Let's recall.

What does the picture above show? Find out about the nature of work done in this office. Make a note of your observations.

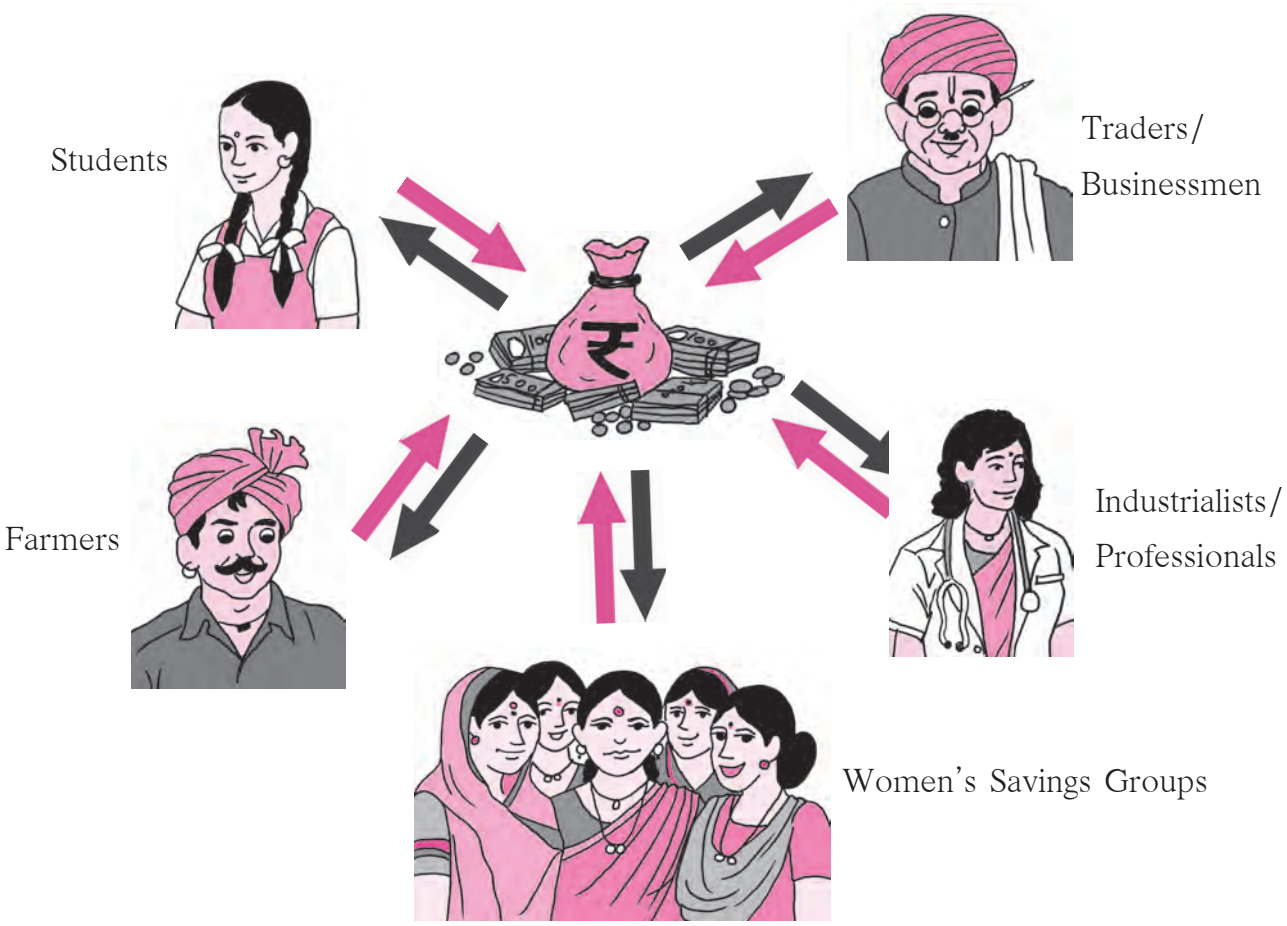
Let's learn.

A Bank

A bank is a government recognized organisation that carries out transactions of money. It is a **financial organisation**. Finance relates to money.

We need to be prudent in spending the money we earn. We save money for use in the future. Our savings are meant to meet expenses on education, building a house, medical treatment, on our occupation such as for using improved methods of agriculture, etc. Small savings made regularly accumulate over a period to become a large amount and prove useful in the future. An amount kept in a bank remains safe and also grows over the years.

Financial Transactions



- In the above picture, who are the people shown to be using bank services?
- What does the symbol on the bag in the centre stand for?
- What do the arrows in the above picture tell you?

Project Work

- Teachers should organise a visit to a bank. Encourage the children to obtain some preliminary information about banks. Help them to fill some bank forms and slips for withdrawals and deposits.
- If there is no bank nearby, teachers could obtain specimen forms and get the children to fill them in class.
- Give a demonstration of banking transactions by setting up a mock bank in the school.
- Invite participation of parents who work in banks or other bank employees to give the children more detailed information about banking.

Bank Accounts

To use banking services one has to open an account in a bank. We need the following documents or papers to open a new bank account.

(1) Proof of residence : Ration card, electricity bill, telephone bill, domicile certificate, identity card, etc.

(2) Proof of identity : Aadhaar card, voter's identity card, PAN card, passport or any other proof suggested by the bank, besides a reference from another customer who is an account holder.

A savings account is meant to induce a habit of saving money. An account holder can deposit money in the savings account as and when money is available. He/She may also withdraw/take out some money from that account occasionally if needed.

Banks give an interest of 4% to 6% on the money in the savings account. The customer gets facilities like a pass-book, cheque book, ATM card, mobile banking, sms banking, Internet banking, etc. to operate the account.

We have to fill in certain printed slips to deposit money in an account or to withdraw it. Every bank has its own different forms, but the information to be given in it is the same.

There is another kind of bank account called a current account. Money can be withdrawn from it any number of times, but one does not get any interest on the amount in this account.

To get more interest, we have to keep a fixed amount in a bank for a longer period of time. We can avail of facilities like the Fixed Deposit (FD) or Recurring Deposit (RD) schemes for that purpose.

Calculation of Interest

Account holders of a bank are paid some amounts for keeping their money in the bank. On the other hand, people who borrow from a bank are charged an amount for the use of the money loaned to them. Such amounts are called **interest**. The money deposited in the bank or the money lent by a bank to a borrower is called the **principal**.

When calculating interest on a deposit or a loan, the rate of interest is given for every 100 rupees. That rate of interest is for a given period of time. A rate of interest 'per cent per annum', written as **p.c.p.a.**, gives the amount of interest due on every hundred rupees for a **period** of one year, that is, annually.

Simple Interest

In this class, we shall learn only about the interest charged for one year. This is simple interest. The interest charged for longer periods of time can often be quite complicated. That rate is different from simple interest.

Example 1 : Vinita deposited ₹15000 in a bank for one year at an interest rate of 7 p.c. p.a. How much interest will she get at the end of the year?

In this example, the principal is ₹15000, period is 1 year, and rate of interest is 7 p.c.p.a. If principal increases, interest increases. That is, interest increases in proportion to the principal.

Let us suppose that the interest on the principal of ₹15000 is x.

On principal ₹100, the interest is ₹7.

We shall take the ratio of interest to principal, write it in two forms and obtain an equation.

$$\frac{x}{15000} = \frac{7}{100}$$

$$\frac{x}{15000} \times 15000 = \frac{7}{100} \times 15000 \qquad \text{(Multiplying both sides by 15000)}$$

$$x = 1050$$

Vinita will get an interest of ₹1050.

Example 2 : Vilasrao borrowed ₹20000 from a bank at a rate of 8 p.c.p.a. What is the amount he will return to the bank at the end of the year?

In this example, the principal is ₹20000. Rate is 8 p.c.p.a., that is, ₹8 is the interest on principal ₹100 for 1 year.

Interest increases in proportion to the principal, that is, ratio of interest to principal remains constant. Let us write the ratio of interest to principal in two ways and obtain an equation.

Let interest on principal 20000 rupees be x rupees.

Interest on principal 100 rupees is 8 rupees.

$$\frac{x}{20000} = \frac{8}{100}$$

$$\frac{x}{20000} \times 20000 = \frac{8}{100} \times 20000 \qquad \text{(Multiplying both sides by 20000)}$$

$$x = 1600$$

Amount to be returned to the bank = principal + interest = 20000 + 1600 = ₹21600

Practice Set 35

(1) At a rate of 10 p.c.p.a., what would be the interest for one year on ₹6000?

(2) Mahesh deposited ₹8650 in a bank at a rate of 6 p.c.p.a. How much money will he get at the end of the year in all?

(3) Ahmed Chacha borrowed ₹25000 at 12 p.c.p.a. for a year. What amount will he have to return to the bank at the end of the year?

(4) Kisanrao wanted to make a pond in his field. He borrowed ₹35250 from a bank at an interest rate of 6 p.c.p.a. How much interest will he have to pay to the bank at the end of the year?