CHAPTER 13: CALENDAR

CALENDAR

➢ Time and Calendar

LEARNIN OBJECTIVES

This lesson will help you to:—

- learn about measurement of time (hour and minutes).
- identify the duration of day and night.
- study calendar with dates and days.
- express time, using the terms, 'a.m.' and 'p.m.'

Historical Preview

In ancients times people used to tell the time by watching the position of sun in the sky. They invented Obelisks (slender, tapering, four-sided monuments) which were built as early as 3500 B.C. Obelisks were special because they used moving shadows to tell about the time. Later on Egyptians modified it and made Sundials.

QUICK CONCEPT REVIEW

Don't we talk about time all the time like:

Time to take a bath.

Time to eat food.

Time to sleep.

Wake up time.

So, "What is time?"

Just like you have length to measure your garden, height to measure how tall you are, weight for the mass of your body, time is a measure for events. Events that are happening now or that had happened before.

Like length, weight or height have units, Time also has units and those are years, months, weeks, days, hours, minutes and seconds.

To measure with hours, minutes and seconds we use clock. In a day we have 24 hours.

➢ CLOCK AND TIME

A clock dial has 60 divisions. These divisions show minutes or seconds. There are 12 numerals marked from 1 to 12 on clock face which are at an equal distances. 5th division is marked with 1, 10th division with 2 and so are 15th, 20th, 25th, 30th, 35th, 40th, 45th,

50th, 55th and 60th divisions marked with 3, 4, 5, 6, 7, 8, 9. 10, 11 and 12 respectively. These divisions, generally shown with longer lines than other divisions, represent hours (see the clock dial given)

The minute hand takes 60 seconds in moving from one division to next division. This is known as 1 minute.

60 seconds = 1 minute.

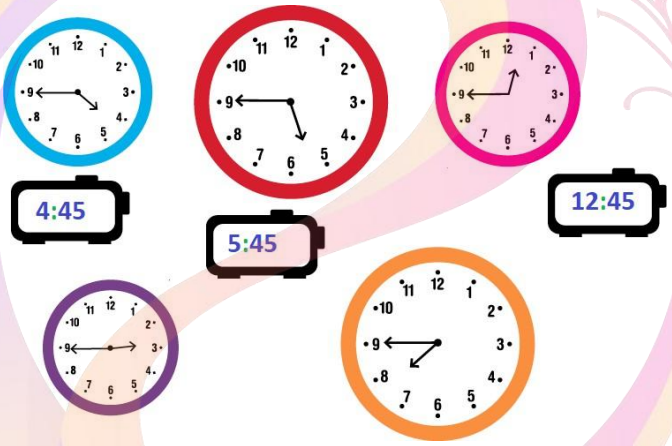
The minute hand takes 5 minutes in reaching from one marked numeral to next marked numeral. And in completing one full revolution it takes 60 minutes. This is called one hour.

60 minutes = 1 hour

An hour hand moves from one numeral to next numeral in 60 minutes.

Further we have seconds hand which takes 1 minute to complete one round. 60 seconds = 1 minute

❖ There are few examples for you -



❖ Amazing Facts

Months of the Year: Have you ever looked at the calendar and wondered where the names of the months came from? The origins of our calendar came from the old Roman practice of starting each month on a new moon. The Roman book – keepers would keep their records in a ledger called “Kalendarium” and this is where we get the word –Calendar.

➢ CALENDAR

There is a way of measuring time in months, weeks or days and that is called a calendar. We have 12 months namely January, February, March, April, May, June, July, August, September, October, November and December. Some months have 30 days and some have 31 days. February is a month where we have 28 days but every leap year we have

February with 29 days. To remember that which month has got 30 and 31doys we can use this poem.

30 days have September,

April, June and November,

All the rest have 31,

Excepting February alone.

Which only has but 28 days clear

and 29 in each leap year.

Further 7days makes a week. Name of the days are- Sunday, Monday, Tuesday, Wednesday, Thursday, Friday and Saturday.

❖ A poem for the days of the week:

Monday's child is fair of face

Tuesday's child is full of grace

Wednesday's child is full of cheer

Thursday's child is sweet and dear

Friday's child is loving and kind

Saturday's child is happy all the time

Sunday's child is honest and true

But the sweetest child belongs to you.

➢ Time

Synopsis

- 4 Time is measured using a clock.
- A clock has two hand, a long hand and a short hand. The long hand is called minute hand and the short hand is called hour hand.
- Some clocks have a third hand called second hand. Generally second hand is the thinnest hand. It moves much faster than the other two hands.

❖ Some Conversions:

- hour = 60 minutes; 1 minute = 60 seconds

∴ 1 hour = 60 × 60 = 3600 seconds; 1 day = 24 hours; 7 days = 1 week; 12 months = 1 year; 10 years = 1 decade; 10 decades = 1 century

∴ 100 years = 1 century

❖ Time Notations:

- The time 12 o'clock in the midnight is written as 12 midnight. The time 12 o'clock in the noon is written as 12 noon.
- The time from 12 midnight to 12 noon is noted as a.m. (ante meridiem) and the time from 12 noon to 12 midnight as p.m. (post meridiem).
- In a 24 hour clock, the hours from each midnight to the next one are numbered from 0 to 24.
- Railway and airlines time tables are based on 24 hour clock.
- We write the 24 hour time in 4 digits. The first two digits represent hours and the last two digits represent minutes. **e.g.,** 14:20 hours

❖ Time Calculations:

- 12 midnight is written as 24: 00 hours or 00: 00 hours. 12 noon is written as 12:00 hours.
- When we change p.m.to 24 hour clock time we add 12 to the hours and then write hours and minutes together without separating them.
- If the first two digits of 24 hour clock time show more than 12, the time will be in p.m. of 12 hour clock. To get time hours in p.m., we subtract 12 from first two digits.

Questions:

1. How many minutes are there in 2 hrs 30 minutes?

(a) 120

(b) 90

(c) 150

(d) 230

2. How many hours make 240 minutes?

(a) 6

(b) 3

(c) 5

(d) 4

3. What is the time corresponding to p.m. in the 24 hour clock?

(a) 10:00 hours

(b) 01:00 hours

(c) 12:00 hours

(d) 13:00 hours

4. What is the difference between 7 hours 25 minutes and 3 hours 45 minutes?

(a) 4 hrs 15 min

(b) 4 hrs 65 min

(c) 3 hrs 40 min

(d) 4 hrs 45 min

5. Leena will be 53 years old in 2019. What was her age in 1998?

(a) 32

(b) 34

(c) 72

(d) 74