

CLOCK

# Clock

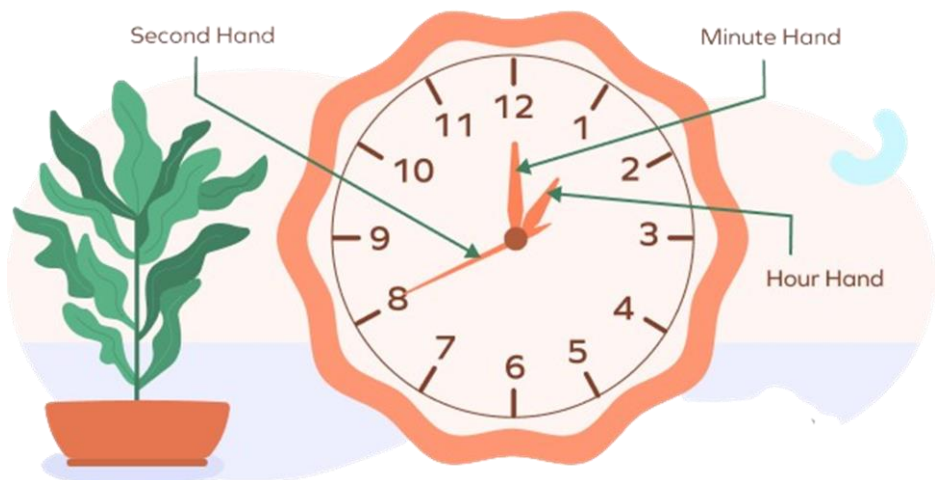
A clock is a device that measures and displays time.

The face of the clock is marked with numerals ( 1 to 12) and lines.

The clock is an instrument to measure time which is shown in **hours, minutes and seconds**.

Units of time

- Hours
- Minutes
- Seconds



## Hands on a clock

The clock generally has **three hands** to tell us time

- Hour hand
- Minute hand
- Second hand

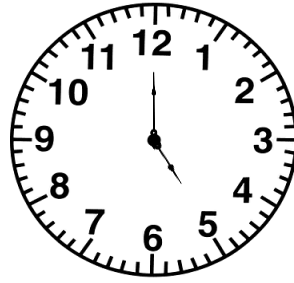


Some **analog clocks** have only **two hands**:

- The **shorter hand** represents the hours.
- The **longer hand** indicates the minutes.

**Example 1:**

What is the time?



The **shorter hand** of the clock is **at 5**.

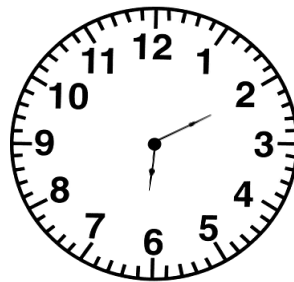
The **longer hand** of the clock is **at 12**.

So the **time is 5'O clock**.

We write it as **5:00**.

**Example 2:**

What is the time?



The **shorter hand** of the clock is **at 6**.

The **longer hand** of the clock is **at 10**.

So the **time is 6 hours and 10 minutes**.

We write it as **6:10**.

## Hour Hand on a Clock

- ❑ The shortest hand or the little hand displays the current hour.
- ❑ In a day, there are 24 hours, and since the clock only has numbers till 12, the hour hand goes around the clock 2 times.
- ❑ Once, from midnight to noon and then noon to midnight.
- ❑ The space between two numbers on the clock represents an hour.
- ❑ When the hour hand on a clock travels from one number to the next, it represents the passing of one hour.



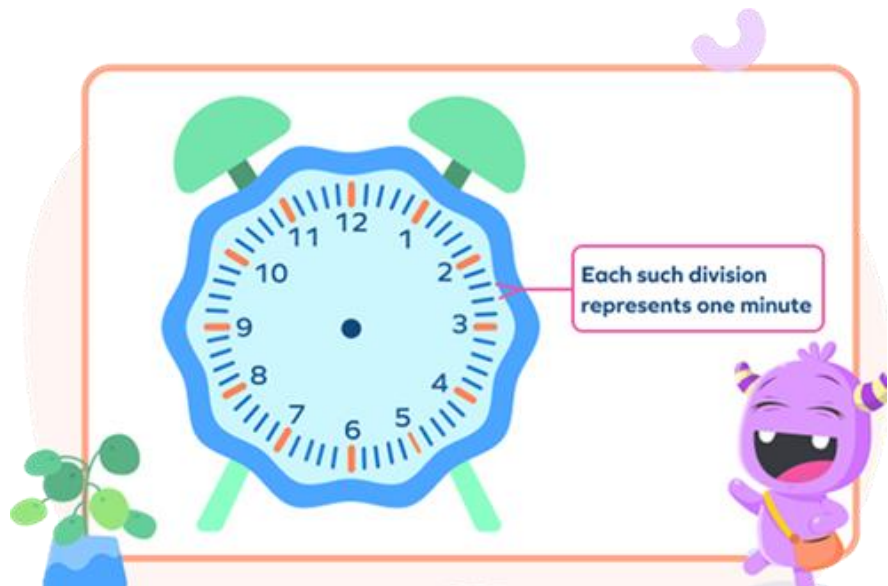
## Minute Hand on a Clock

The **minute hand** on a clock is the **long hand** that tells the **minutes** that have **passed** in that hour.

In simple words, it indicates the time in **minutes**.

The **distance** between **two numbers** on the clock face is **divided** into **5 small sections**.

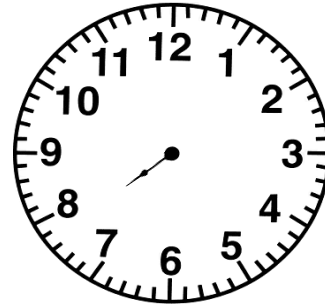
Each of these small sections or divisions represents **one minute**.



## Draw the minute hand and hour hand on the clock

Example 1: **8:00**

### Step 1:

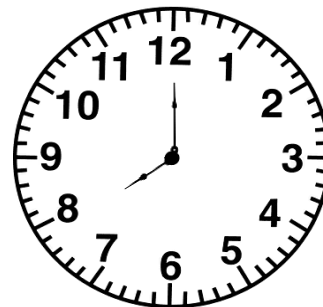


Mark the hour hand first.

Hour = 8

Draw the hour hand (shorter hand) towards 8.

### Step 2:



**8:00**

Mark the minute hand second.

Minute = 0

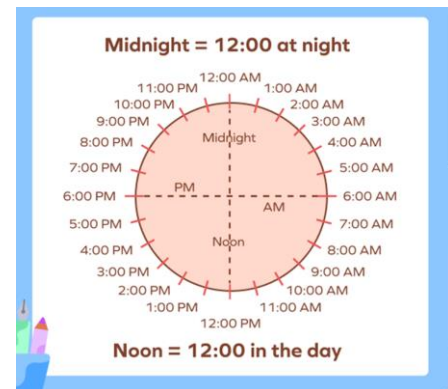
Draw the minute hand (longer hand) towards 12.

# A.M and P.M

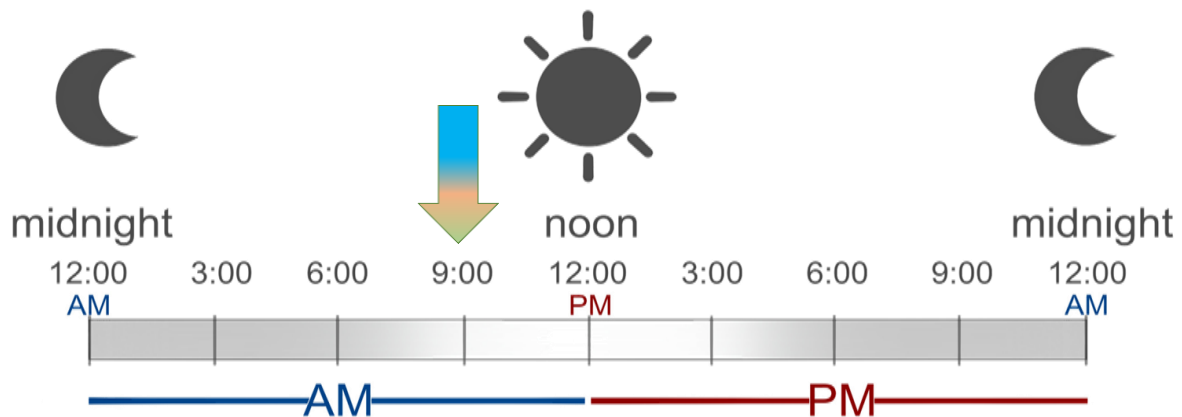
In a 12 hour clock the 24 hour time is divided into two periods 12 midnight to 12 noon and then 12 noon to 12 midnight and that's how it covers all the 24 hours.

## A.M (Ante Meridiem)

- It stands for **Ante Meridiem** and it means **before midday**
- Hence from 12 midnight to **noon** we use A.M. suffix after the time.



- **For** example we say its 9am.

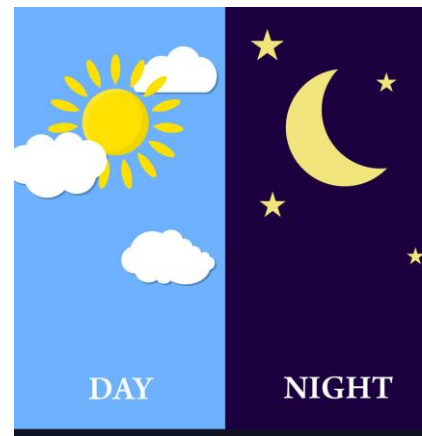




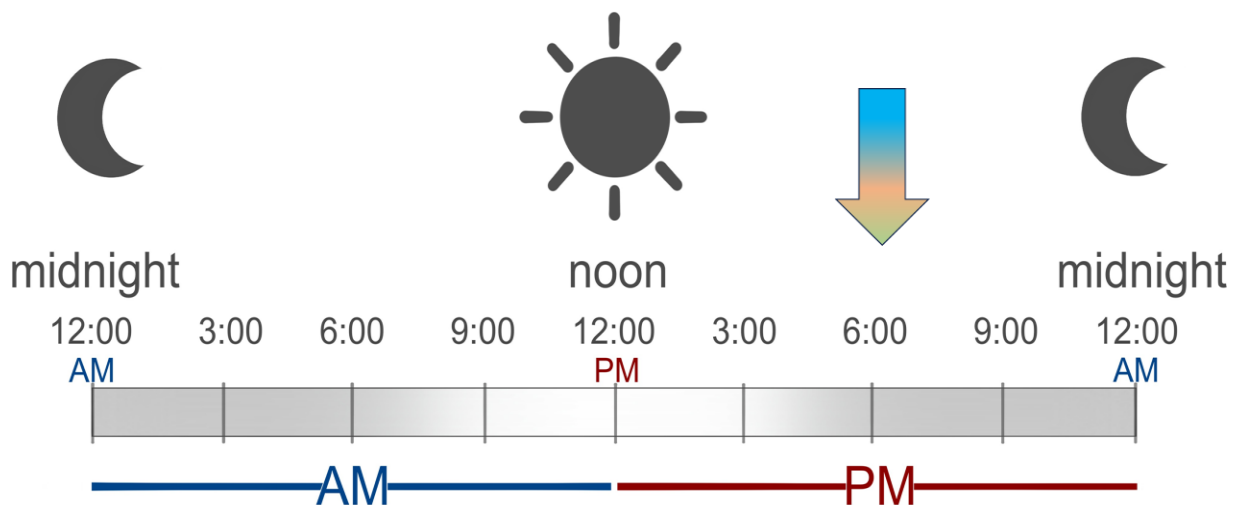
# P.M(Post Meridiem)

➤ It stands for **Post Meridiem** and it means **past midday**.

➤ Hence from **12 midday** to **12 midnight** we use P.M. suffix after time.



➤ **For example** we say its **6 pm**.



# Using a.m or p.m



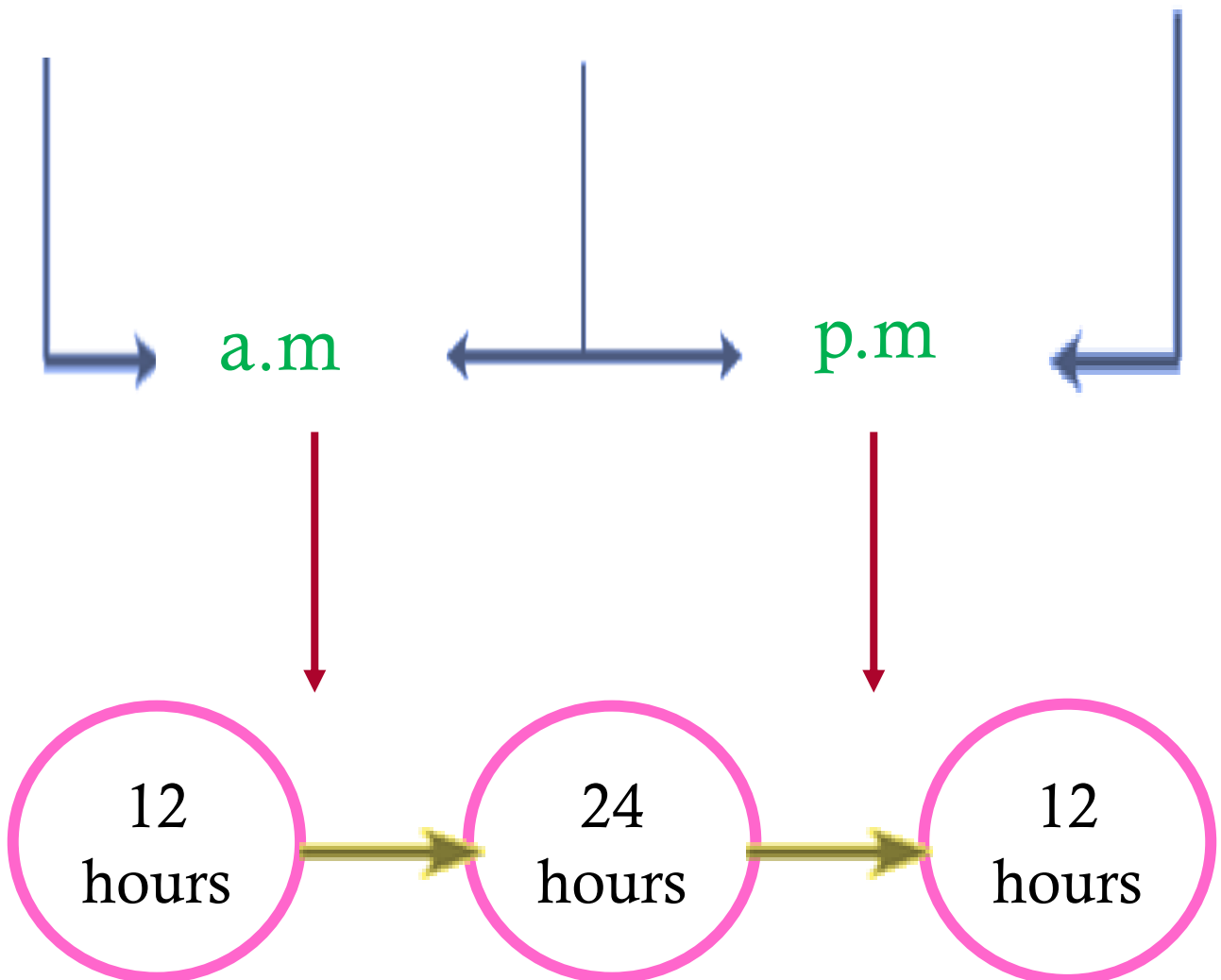
Midnight  
12' o clock



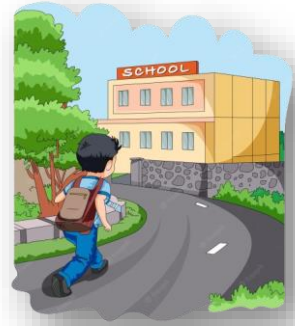
Noon  
12' o clock



Midnight  
12' o clock



- Ravi is going to **school** at **8.45 A.M.**



- Ramya eats her **lunch** at **1.00 P.M.**



- Afrin sees the **moon** at **8:20 P.M.**



- Kavi goes to **bed** at **9:00 P.M.**

- The **sun** rises at **6:10 A.M.**



# Addition with time

Follow these steps:

**Add** the **minutes**

**Add** the **hours**

If the **minutes** are **60 or more**, **subtract 60** from **the minutes** and **add 1 to hours**.

Example 1:

What is  $2:45 + 1:10$  ?



2 : 4 5

1 : 1 0

---

3 : 5 5

---

$$2:45 + 1:10 = 3:55$$

## Addition with time

Example 2:

What is  $5:50 + 2:15$  ?

Step 1:

$$\begin{array}{r}
 + \quad 5 : 50 \\
 \quad 2 : 15 \\
 \hline
 \quad : 65 \\
 \hline
 \end{array}$$

$$50 + 15 = 65$$

Step 2:

$$\begin{array}{r}
 \textcircled{1} \\
 5 : 50 \\
 + \quad 2 : 15 \\
 \hline
 8 : 05 \\
 \hline
 \end{array}$$

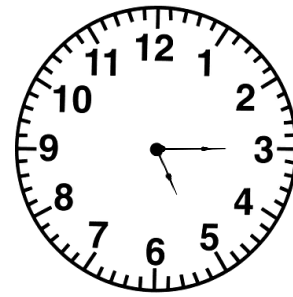
If the **minutes are 60 or more**, **subtract 60 from the minutes** and **add 1 to hours**.

Subtract 60 from minute ( $65 - 60 = 5$  Minutes)

Add 1 to Hours ( $7 + 1 = 8$  Hours)

$$5:50 + 2:15 = 8:05$$

### Example 3:

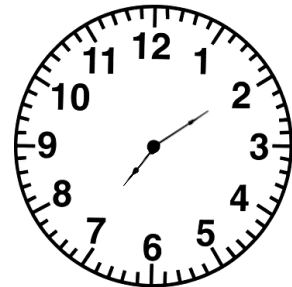


1) What time is it now? **5:15**

2) What time will it be in half an hour?

$$\begin{array}{r}
 \text{Actual time} \quad = \quad 5 : 15 \\
 \text{Adding 30 min} \quad = \quad 0 : 30 \quad + \\
 \hline
 \quad \quad \quad \quad \quad \quad \quad \quad 5 : 45 \\
 \hline
 \end{array}$$

### Example 4:

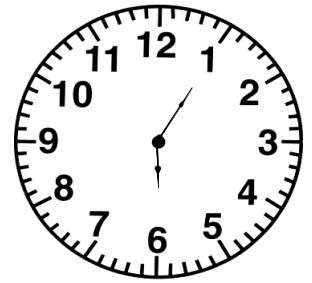


1) What time is it now? **7:10**

2) What time will it be in 2 hours?

$$\begin{array}{r}
 \text{Actual time} \quad = \quad 7 : 10 \\
 \text{Adding 2 hours} \quad = \quad 2 : 00 \quad + \\
 \hline
 \quad \quad \quad \quad \quad \quad \quad \quad 9 : 10 \\
 \hline
 \end{array}$$

## Example 5:

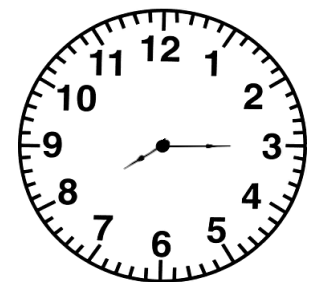


1) What time is it now? **6 : 05**

2) What was the time 5 hours ago?

$$\begin{array}{r}
 \text{Actual time} \quad = \quad 6 : 05 \\
 \text{Subtract 5 hours} = \quad 5 : 00 \quad - \\
 \hline
 \quad \quad \quad \quad \quad \quad 1 : 05 \\
 \hline
 \end{array}$$

## Example 6:



1) What time is it now? **8 : 15**

2) What was the time 2 hours and 10 minutes ago?

$$\begin{array}{r}
 \text{Actual time} \quad = \quad 8 : 15 \\
 \text{Subtract 2 hours} = \quad 2 : 10 \quad - \\
 \hline
 \quad \quad \quad \quad \quad \quad 6 : 05 \\
 \hline
 \end{array}$$