



A collage of various analytical chemistry and data visualization elements. It includes a lightbulb with a brain-like filament, a 3D pie chart, a flowchart with arrows, laboratory glassware like test tubes and flasks, and a smartphone displaying data. The background features a dark area with floating black circles and diamonds.

# EPEA516 ANALYTICAL SKILLS II

Dr. Harish Mittu  
Associate Professor

# Learning Outcomes



After this lecture, you will be able to

- define basic concepts of calendar,
- elaborate the relationship among day, week, month and year.

# Basic Concept of Calendar

Day	Month - Year				
Sunday	6	13	20	27	
Monday	7	14	21	28	
Tuesday	1	8	15	22	29
Wednesday	2	9	16	23	30
Thursday	3	10	17	24	31
Friday	4	11	18	25	
Saturday	5	12	19	26	

**Week**

# Basic Concept of Calendar

Day	March - Year				
Sunday		6	13	20	27
Monday		7	14	21	28
Tuesday	1	8	15	22	29
Wednesday	2	9	16	23	30
Thursday	3	10	17	24	31
Friday	4	11	18	25	
Saturday	5	12	19	26	

Fundamental Unit

# Basic Concept of Calendar

- Week

Sunday

Monday

Tuesday

Wednesday

7 Days = Week

Thursday

Friday

Saturday

# Basic Concept of Calendar

- Month
- Collection - Specified Number of Days

January

February

March

April

May

June

July

August

September

October

November

December

# Basic Concept of Calendar

Day	February – Non-leap Year				
Sunday		6	13	20	27
Monday		7	14	21	28
Tuesday	1	8	15	22	
Wednesday	2	9	16	23	
Thursday	3	10	17	24	
Friday	4	11	18	25	
Saturday	5	12	19	26	

# Basic Concept of Calendar

Day	February – Non-leap Year				
Sunday		6	13	20	27
Monday		7	14	21	28
Tuesday	1	8	15	22	29
Wednesday	2	9	16	23	
Thursday	3	10	17	24	
Friday	4	11	18	25	
Saturday	5	12	19	26	

# Basic Concept of Calendar

Day	April, June, September, and November				
Sunday		6	13	20	27
Monday		7	14	21	28
Tuesday	1	8	15	22	29
Wednesday	2	9	16	23	30
Thursday	3	10	17	24	
Friday	4	11	18	25	
Saturday	5	12	19	26	

# Basic Concept of Calendar

Day	January, March, May, July, August, October, and December				
Sunday		6	13	20	27
Monday		7	14	21	28
Tuesday	1	8	15	22	29
Wednesday	2	9	16	23	30
Thursday	3	10	17	24	31
Friday	4	11	18	25	
Saturday	5	12	19	26	

# Basic Concept of Calendar

- Year



# Basic Concept of Calendar

- Relation among Day, Week, Month, and Year
- A day
  - 7<sup>th</sup> part of the week;
  - 28<sup>th</sup> or 29<sup>th</sup> or 30<sup>th</sup> or 31<sup>st</sup> part of a month;
  - 365<sup>th</sup> part of the Lunar year or 366<sup>th</sup> part of the leap year.

# Basic Concept of Calendar

- Relation between Day, Week, Month, and Year
- A week
  - $4^{\text{th}}$  or  $4 \frac{1}{7}^{\text{th}}$  or  $4 \frac{2}{7}^{\text{th}}$  or  $4 \frac{3}{7}^{\text{th}}$  part of a month.
  - $52^{\text{nd}}$  or  $52 \frac{1}{7}^{\text{th}}$  or  $52 \frac{2}{7}^{\text{th}}$  part of a year.
- A month is the  $12^{\text{th}}$  part of a year.

# Basic Concept of Calendar

- Date
  - Number/Digit - Each Day
  - That Part of a Month
  - 365<sup>th</sup> Part of the Year - Lunar Year
  - 366<sup>th</sup> Part of the Year - Leap Year

# Basic Concept of Calendar

- Century
  - Set/Group – 100 Years
  - 100, 200, 300, 400, 500, 600, 700, and so on.
  - 400, 800, 1200, 1600, 2000, 2400, etc.

# Basic Concept of Calendar

- Ordinary Year
  - 365 Days
  - 52 Full Weeks and One Extra Day
  - Not Exactly Divisible by 4
  - For Example, 2010, 2011, 2021, 2022, etc.

# Basic Concept of Calendar

- Leap Year
  - 366 days
  - 52 Full Weeks and Two Extra Days
  - Exactly Divisible by 4
  - For example, 2012, 2016, 2020, 2024, etc.

# Basic Concept of Calendar

- First day of a century
  - Monday, Tuesday, Thursday, or Saturday
- Last day of a century
  - cannot be Tuesday, Thursday, or Saturday

# Basic Concept of Calendar

- April & July for all years
  - Same Calendar
- January and October for non-leap years
  - Same Calendar

# Basic Concept of Calendar

- The calendars of two different years are same if -
  - Both years are either ordinary years or leap years.
  - January 21 of both years must be the same day of the week.

# Conclusion

- Basic Concepts of Calendar
  - Calendar
  - Day
  - Week
  - Month
  - Year
  - Date
  - Century
  - Leap and Ordinary Year

# Summary

- Basic Concepts of Calendar
- Relationship among Day, Week, Month and Year
- First & Last day of Century

That's all for now...