Children, today we are going to start a new chapter that is Plant Life--- The Flower. So today our learning objectives will be

- The Flower
- Parts of a Flower
- Types of Flower

**The Flower:** A flower as we know is the most attractive and beautiful part of the plant and develops from a floral bud present on the stem. The long stalk which attaches the flower to the stem is the called the **pedicel**. The tip of the petiole is slightly flattened and is called the **thalamus**. The thalamus forms the base from which all the other parts of a flower arise.

**Parts of A Flower:**

A typical flower consists of four main parts arranged in four whorls--- **calyx**, **corolla**, **androecium** and **gynoecium**.
Calyx - It is the outermost first whorl of the flower. It consists of green leaf like structures called sepals.

Corolla: - It is the second whorl of the flower. It consists of brightly colored large and scented structures called petals.

Androecium: - It forms the third whorl of the flower. It is the male reproductive part of a flower. It consists of filament -like structures called stamens. Each stamen has two main parts.

- A thin, long and narrow stalk called filament which supports the anther, and
- A small, bilobed structure called anther

The anther bears yellow, powdery substances called pollen grains. The pollen grains take part in reproduction of flowers.

Gynoecium: - It forms the fourth whorl of the flower. It is the female reproductive part of a flower. It is composed of one or more carpels or pistils. Each carpel or pistil is composed of stigma, style and ovary.

- Stigma is the sticky disc-like structure on which the pollen grains land.
- Style is the long, narrow, thread -like tube extending from the ovary.
- Ovary is the swollen part which contains small round-shaped eggs called ovules.

**Parts of a flower and their functions:**

<table>
<thead>
<tr>
<th>Flower part</th>
<th>Function</th>
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</thead>
<tbody>
<tr>
<td>Sepals</td>
<td>Protect the inner parts of a flower at its bud stage.</td>
</tr>
<tr>
<td>Petals</td>
<td>Protect the essential whorls of a flower and attract butterflies, bees and insects for pollination. They may also secrete scent and nectar.</td>
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<tr>
<td>Stigma</td>
<td>It has a sticky substance for trapping the pollen grains.</td>
</tr>
<tr>
<td>Style</td>
<td>Style holds the stigma high to catch the pollen grains. It varies in length.</td>
</tr>
<tr>
<td>Ovary</td>
<td>It protects the ovule and grows into the fruit.</td>
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<tr>
<td>Ovule</td>
<td>The ovules develop into seeds.</td>
</tr>
<tr>
<td>Filament</td>
<td>It holds the anther high up.</td>
</tr>
<tr>
<td>Anther</td>
<td>It contains pollen grains.</td>
</tr>
</tbody>
</table>

**Types of flower**

- **Bisexual flower:** - This type of flower possesses both the male part (androecium) and female part (gynoecium). Example, Rose and hibiscus.
• **Unisexual flower:**- This type of flower possesses either male part (androecium) or female part (gynoecium). Example, Papaya
• **Complete flower:**- A flower which has all the four whorls is called a complete flower. Example, Hibiscus
• **Incomplete flower:**- A flower which lacks any one of the floral whorls is called an incomplete flower Example, Papaya

[Copy the questions and solve them on a sheet of paper date wise. Keep the worksheets ready in a file to be submitted on the opening day.] Read the notes thoroughly before answering the questions.

**Q1) Give one word answer for the following:**

1. It is the most attractive and colourful part of the plant.
2. The female reproductive organ of a flower.
3. The male reproductive part of a flower.
4. The first, outermost whorl of a flower.
5. The yellow, powdery substance present in anther.

**Q2) Answer the following questions:**

1. Name any four flowering plants. Also mention the colour of the flowers in these flowering plants.
2. Name a flower that has all the four whorls.
3. In which part of a flower ovule is found?
4. What are the male and female parts of a flower? Mention the functions of each.
5. What are pollen grains? Why are they produced in a flower?
6. Write the function of the following:
   • Sepals
   • Petals
   • Stigma
   • Style
   • Ovary

Now, let us try to do some activity. Take help from the video link given below and try to study the different parts of a hibiscus flower.

https://youtu.be/BDCM5FrIjto
Then on the basis of your observation complete the following:-

- Number of whorls present-----
- Number of petals present------
- The stamen consists of-----
- The number of sepals present------
- The gynoecium consists of-------