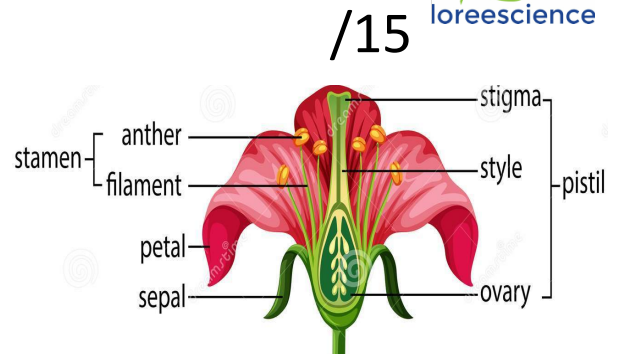
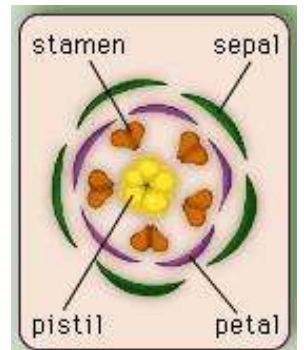


Background Information:

The seed-bearing plants that produce flowers are angiosperms. The flower produces the seeds, each of which contains a new plant embryo. The parts of the flower are usually found in whorls, or rings. **Petals** are one of the sets of whorls. They attract pollinators. **Sepals** lie outside the petals but can sometimes be part of the outermost layer of petals and not easily identified. Sepals protect the bud.



The reproductive organs, the stamens and pistils, lie inside the petals. A **stamen** is a male reproductive part. It consists of an anther that is held up by a **filament**. The **anther** produces pollen grains. A **pistil** is a female reproductive part. Its top is called the **stigma**. The middle supporting structure is the **style**, and the large base is the **ovary**, where the eggs (ovules) are found.



Dissection Procedures:

1. Find a flower – tulips, lilies, crocus’, and daffodils work very well. As long as you can easily see parts like in the picture on the right it will work.
2. Identify the **petals**. These form the next layer of flower parts. Carefully remove them.
3. Locate the **stamen**. Without the petals these male flower parts should now be exposed. Carefully remove them.
4. The female flower parts remain. Carefully cut the **pistil** in half lengthwise & look inside the ovary. You may be able to see ovules/eggs.
5. Put all the flower parts in a labelled chart like the one on page 2.
6. Submit an image of your flower chart & answers to Edsby.

Questions:

1. What advantage to the flower are colorful petals? ① _____
2. Why are the sepals referred to as “accessory parts” (of the plant) like the liver & gall bladder are for the digestive system? ① _____
3. What plant **organ system** do anthers belong to? ① _____
4. How is the structure of the stigma related to its function? ② _____

5. Would you expect to find any meristematic cells in the parts you dissected & put in the chart? ① _____
Why or why not? ① _____
6. Touch the top of the stigma. What does it feel like? ① _____
How does this help with its function? ① _____

Flower Part	Sample of Flower Organs (Dissected part)
<p style="text-align: center;">Petals</p>	<p style="text-align: center;">①</p>
<p style="text-align: center;">Stamen</p>	<p>Label the anther & filament ②</p>
<p style="text-align: center;">Pistil / Carpals</p>	<p>Label the stigma, style & ovary ③</p>

