

## LAB 2 Laboratory Activity

# Parts of a Fruit

Some of the plants we call vegetables are actually fruits. Fruits are formed inside flowers that have been pollinated and fertilized. After fertilization takes place, the petals fall off and the ovary begins to develop into the fruit.

### Strategy

You will study the structure of typical fleshy and dry fruits. You will examine several fruits and classify the fruits as fleshy or dry.

### Materials

plum	peach	okra	pea in a pod	corn
tomato	peanut	olive	avocado	bean in a pod
apple	acorn	pear	sunflower seed	

### Procedure

1. Read the following paragraphs and study the diagrams.

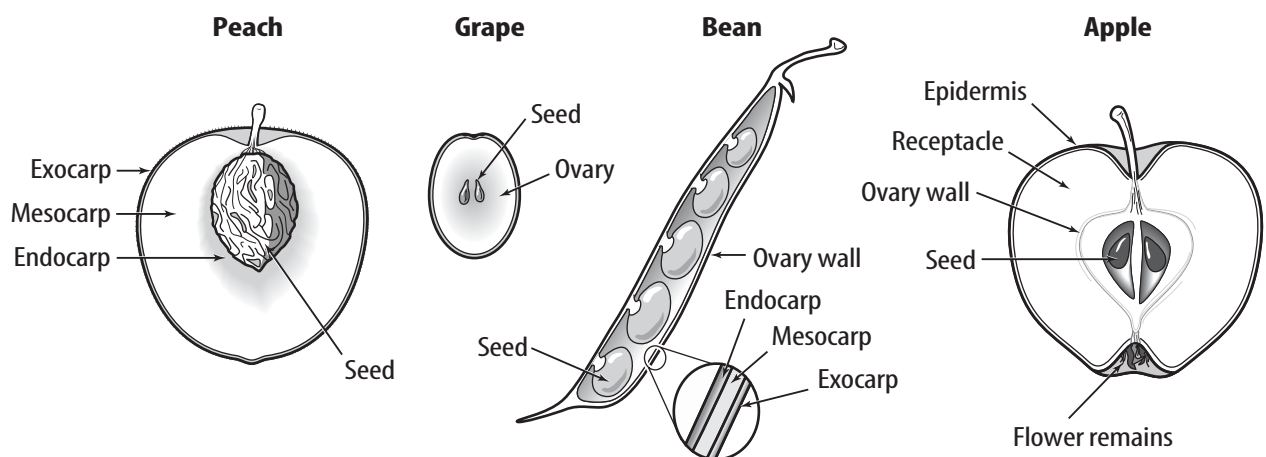
The peach is a fleshy fruit. A fleshy fruit consists of a single ripened ovary with a soft, fleshy ovary wall when ripe. Three kinds of fleshy fruits are the drupe, pome, and the berry. The peach is a drupe. The exocarp is the covering of skin. The mesocarp is fleshy. The endocarp is hard and encloses the seed.

The apple is a pome. The stem is the stalk by which the flower was attached. At the other end are the remains of the sepals, petals, and a ring of dried stamens. The thin skin is the epidermis. The fleshy part inside the skin developed from the receptacle, or flower stalk. The papery core is the ovary wall. Within the ovary are the seeds.

The grape is a berry. The entire ovary is soft.

Dry fruits have an ovary wall that is dry and brittle when ripe. They are classified as dehiscent or indehiscent. A dehiscent fruit splits along a definite seam when ripe. The bean is a dehiscent fruit called a legume. It splits along two seams.

2. Examine each of the fruits listed in Table 1 and determine if they are fleshy or dry. Determine the type of fruit (drupe, pome, or berry; dehiscent or indehiscent). Record your answers in the table.



## Laboratory Activity 2 (continued)

### Data and Observations

Table 1

Fruit	Fleshy or dry	Type
1. Plum		
2. Tomato		
3. Apple		
4. Peach		
5. Peanut		
6. Acorn		
7. Okra		
8. Olive		
9. Pear		
10. Pea		
11. Avocado		
12. Sunflower		
13. Corn		
14. Bean		

### Questions and Conclusions

1. What part of a flower becomes the fruit? \_\_\_\_\_
2. What part of a flower becomes the seed? \_\_\_\_\_
3. What are some fruits that we call vegetables? \_\_\_\_\_
4. What are some seeds that people eat? \_\_\_\_\_
5. From what part of the flower does a peach develop? \_\_\_\_\_
6. From what part of the flower does a grape develop? \_\_\_\_\_

### Strategy Check

- \_\_\_\_\_ Did you study the structure of fleshy and dry fruits?
- \_\_\_\_\_ Did you examine several fruits and classify them as fleshy or dry?