

Although you have looked at numerous flowers, were you aware of what the structures represented?

Safety Precautions

- Follow all dissection procedures as instructed by your teacher razor blades are sharp and not to be played with.

Procedure

1. Obtain a flower from your teacher.

2. Use the razor blade to remove the male and female parts of the flower and complete the tables below. Remember to properly label your structures.

Biological Drawing (male) (2 Marks)	Structure	Function (1 Mark Each)
	Stamen	
	Filament	
	Anther	

Biological Drawing (female) (2 Marks)	Structure	Function (1 Mark Each)
	Pistil	
	Stigma	
	Style	
	Ovary	

3. Use the razor blade to cut the ovary in half, as a cross section. Use a hand lens to observe the inside of the ovary. Draw and label the cross section of the ovary.

Biological Drawing (2 Marks)	Structure	Function (1 Mark Each)
	Ovary	
	Ovules	

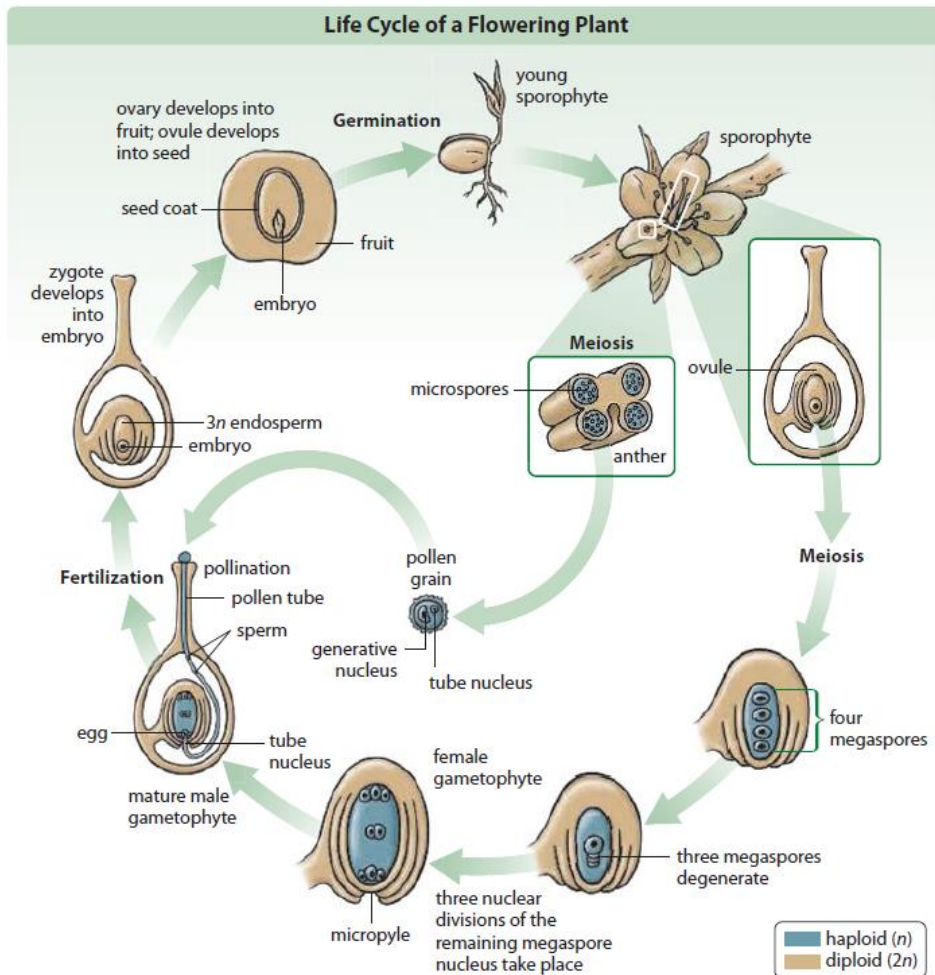
Analysis

Pollination involves the transfer of pollen from an anther to a stigma. Some plants can self-pollinate. Most plants are cross-pollinated, which means they receive pollen from another plant.

1.) What are different ways that pollen grains can move from the flowers of one plant to those of another? (1 Mark)

2.) Why does cross-pollination contribute to genetic diversity, while self-pollination does not? (2 Mark)

3.) An herbicide prevents the formation of the tube nucleus. How might this affect reproduction of the plant? (2 Mark)



4.) Using the diagram above, briefly explain the sexual reproductive strategy of plants. (5 Marks)
