

## II. Dihybrid crosses

### Procedure

1. Mate virgin vestigial females with sepia males.
2. After 1 week, remove parents.
3. Examine F<sub>1</sub> phenotypes and record number of flies examined.
4. Place 3-5 pairs of F<sub>1</sub> flies in a new vial.
5. Transfer step 4 flies to a new vial every 3-4 days. (2-3 vials/cross)
6. Examine F<sub>2</sub> phenotypes and record the numbers of flies examined.

### Results

1. Data Recording Sheet

Date of beginning: \_\_\_\_\_

**P:** vestigial (vg) females X sepia (se) males

**F<sub>1</sub>:**

		Numbers of flies			
Date	Sex	+	se	vg	se vg
	female				
	male				
	female				
	male				

**F<sub>2</sub>:**

		Numbers of flies			
Date	Sex	+	se	vg	se vg
	female				
	male				
	female				
	male				

2. Based on these results, draw a diagram to show the transmission of vestigial and sepia in two generations and the expected ratios of phenotypes in F<sub>2</sub>. Compare your results with the expectation by chi square test