Section Review 11-3

1. segregate 2. multiple alleles, multiple genes 3. b

4. c 5. d 6. a

7.

•	FfJj				
		FJ	Fj	fJ	fj
	FJ	FFJJ	FFJj	FfJJ	FfJj
FFJj	Fj	FFJj	FFjj	FfJj	Ffjj
	FJ	FFJJ	FFJj	FfJJ	FfJj
	Fj	FFJj	FFjj	FfJj	Ffjj

8. In incomplete dominance, the heterozygous phenotype is somewhere in between the two homozygous phenotypes. In codominance, the heterozygous phenotype shows both traits. **9.** Polygenic traits have more variation in phenotypes because different combinations of alleles for these genes produce many different phenotypes. **10.** Morgan chose fruit flies because fruit flies are easy to keep in the lab and they reproduce quickly, producing a great number of offspring.

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11–3 Section Assessment

- During gamete formation, pairs of alleles for different traits segregate, or separate, independently of each other.
- Answers include descriptions for any two: incomplete dominance, codominance, multiple alleles, or polygenic traits.
- In incomplete dominance, two alleles combine their effects to produce a single in-between phenotype, such as pink flowers from red and white parents. In codominance,
- each allele is expressed separately, as when erminette chickens have both black and white feathers.
- They are small, easy to keep in the laboratory, and produce large numbers of offspring in a short period of time.
- The offspring in the second cross will show greater variation because 100 percent of the offspring from the first cross (CC x Cc^{ch}) will be full color.