Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_

**Answer Key**

**Punnett Squares**

**Complete the Punnett squares based on the information in the pictures, and then answer the questions to the right of each Punnett square.**

**G g**

**Gray fur**

**1. What percentage of the offspring will have a homozygous recessive genotype? \_\_\_\_\_\_\_\_\_\_**

**2. What will be the ratio of gray fur to white fur in the offspring? \_\_\_\_\_\_\_\_\_\_**

**White fur**

Gg × gg

TT × tt

**3. What percentage of the offspring will have a tall phenotype? \_\_\_\_\_\_\_\_\_\_**

**4. What percentage of the offspring will have a homozygous recessive genotype? \_\_\_\_\_\_\_\_\_\_**

**5. What percentage of the offspring will have white eyes? \_\_\_\_\_\_\_\_\_\_**

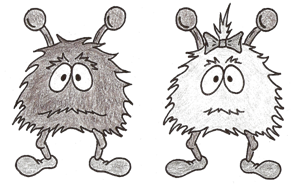
**6. What percentage of the offspring will have a heterozygous genotype? \_\_\_\_\_\_\_\_\_\_**

dd × Dd

**7. What percentage of the offspring will have a homozygous dominant genotype? \_\_\_\_\_\_\_\_\_\_**

**8. What will be the ratio of long beaks to short beaks in the offspring? \_\_\_\_\_\_\_\_\_\_**

Ll × ll



**50%**

**g**

**g**

**Gg**

**gg**

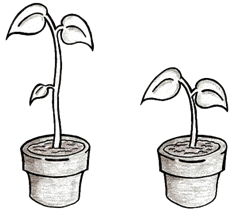
**Gg**

**gg**

**1:1**

***2:2 reduces to 1:1***

**T T**



**100%**

**Tall**

**t**

**t**

**Tt**

**Tt**

**Tt**

**Tt**

**Short**

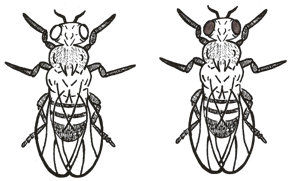
**0%**

**d d**

**Dark eyes**

**White eyes**

**50%**



**D**

**d**

**Dd**

**Dd**

**dd**

**dd**

**50%**

**L l**

**l**

**l**

**Short beak**

**Long beak**

**50%**



**Ll**

**ll**

**Ll**

**ll**

**1:1**

***2:2 reduces to 1:1***

**P**

**P**

**p p**

**9. What percentage of the offspring will have purple flowers as their phenotype? \_\_\_\_\_\_\_\_\_\_**

**10. What percentage of the offspring will have a heterozygous genotype? \_\_\_\_\_\_\_\_\_\_**

pp × PP

**Pp**

**Pp**

**Pp**

**Pp**

**Dark eyes**

**Dark eyes**

**11. What percentage of the offspring will have a heterozygous genotype? \_\_\_\_\_\_\_\_\_\_**

**12. What will the ratio of flies with dark eyes to white eyes be? \_\_\_\_\_\_\_\_\_\_**

Dd × Dd

**DD**

**Dd**

**Dd**

**dd**

**TT**

**TT**

**Tt**

**Tt**

**13. What percentage of the offspring will be short? \_\_\_\_\_\_\_\_\_\_**

**14. What percentage of the offspring will have a homozygous dominant genotype? \_\_\_\_\_\_\_\_\_\_**

TT × Tt

**Tall**

**Long beak**

**Long beak**

**15. What percentage of the offspring will have long beaks? \_\_\_\_\_\_\_\_\_\_**

**16. What will be the ratio of long beaks to short beaks in the offspring? \_\_\_\_\_\_\_\_\_\_**

Ll × Ll

**LL**

**Ll**

**Ll**

**ll**

**Gray fur**

**White fur**

gg × Gg

**Gg**

**Gg**

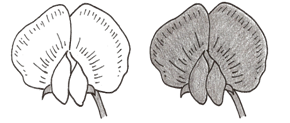
**gg**

**gg**

**Purple flowers**

**White flowers**

**100%**



**100%**

**D**

**d**

**D d**

**50%**



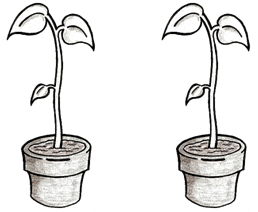
**3:1**

**T**

**t**

**T T**

**0%**



**Tall**

**50%**

**L l**

**L**

**l**

**75%**



**3:1**

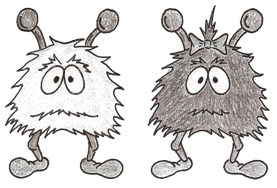
**g g**

**G**

**g**

**17. What percentage of the offspring will have the phenotype of gray hair? \_\_\_\_\_\_\_\_\_\_**

**18. What percentage of the offspring will have a homozygous recessive genotype? \_\_\_\_\_\_\_\_\_\_**



**50%**

**50%**

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