Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Period \_\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_

If you **did not receive a passing** grade on this test, in order to retake you are required to:

* **complete this study guide,**

My child had completed this study guide, studied, and is ready to retake this test.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* **study—this study guide, and**
* **have your parent sign this study guide.**

**HEREDITY STUDY GUIDE Chapter 5 Section 1**

1. Heredity is the passing of traits from parents to \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

2. What is an offspring? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Different forms of a single gene are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

4. Who is known as “The Father of Genetics,” and what plant did he study?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. The allele that has to have two copies to express the trait is the recessive or dominant

allele?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. Each parent donates a set of instructions to its offspring known as \_\_\_\_\_\_\_\_\_\_\_\_\_.

7. If you cross a tall true-breeding pea plant with a short true-breeding pea plant and the

offspring are all Tt, what is the dominant trait?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. There is a green frog with alleles of Gg.

What is its genotype? \_\_\_\_\_\_\_\_\_\_

What is its phenotype? \_\_\_\_\_\_\_\_\_

Is it heterozygous or homozygous?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9. Be able to make and interrupt Punnett Squares.

Complete the Punnett square and answer the two questions.

**R R**

|  |  |
| --- | --- |
| \_\_\_ \_\_\_ | \_\_\_ \_\_\_ |
| \_\_\_ \_\_\_ | \_\_\_ \_\_\_ |

What are the parents’ genotype? \_\_\_\_\_\_\_\_\_\_\_\_\_

r

r

What percent of the offspring will be red?\_\_\_\_\_

---------------------------------------------------------------------------------------------

10. Create a Punnett square showing the cross of:

Round seed, heterozygous

Round seed, heterozygous

Round is dominant.

|  |  |
| --- | --- |
| \_\_\_ \_\_\_ | \_\_\_ \_\_\_ |
| \_\_\_ \_\_\_ | \_\_\_ \_\_\_ |

Wrinkled is recessive.

------------------------------------------------------------------------------------------------

Inherited and Acquired Traits.

Fill in the blank with **I** for inherited and **L** for learned.

11. \_\_\_\_\_\_Adult deer have a reddish-brown coat in the summer and grayish-brown coat in

the fall and winter.

12. \_\_\_\_\_\_The herd of deer moves to a field where it can eat new growth of corn.

13. \_\_\_\_\_\_A herd of deer finds bushes to sleep in.

14. \_\_\_\_\_\_Deer can run up to 40 miles per hour.