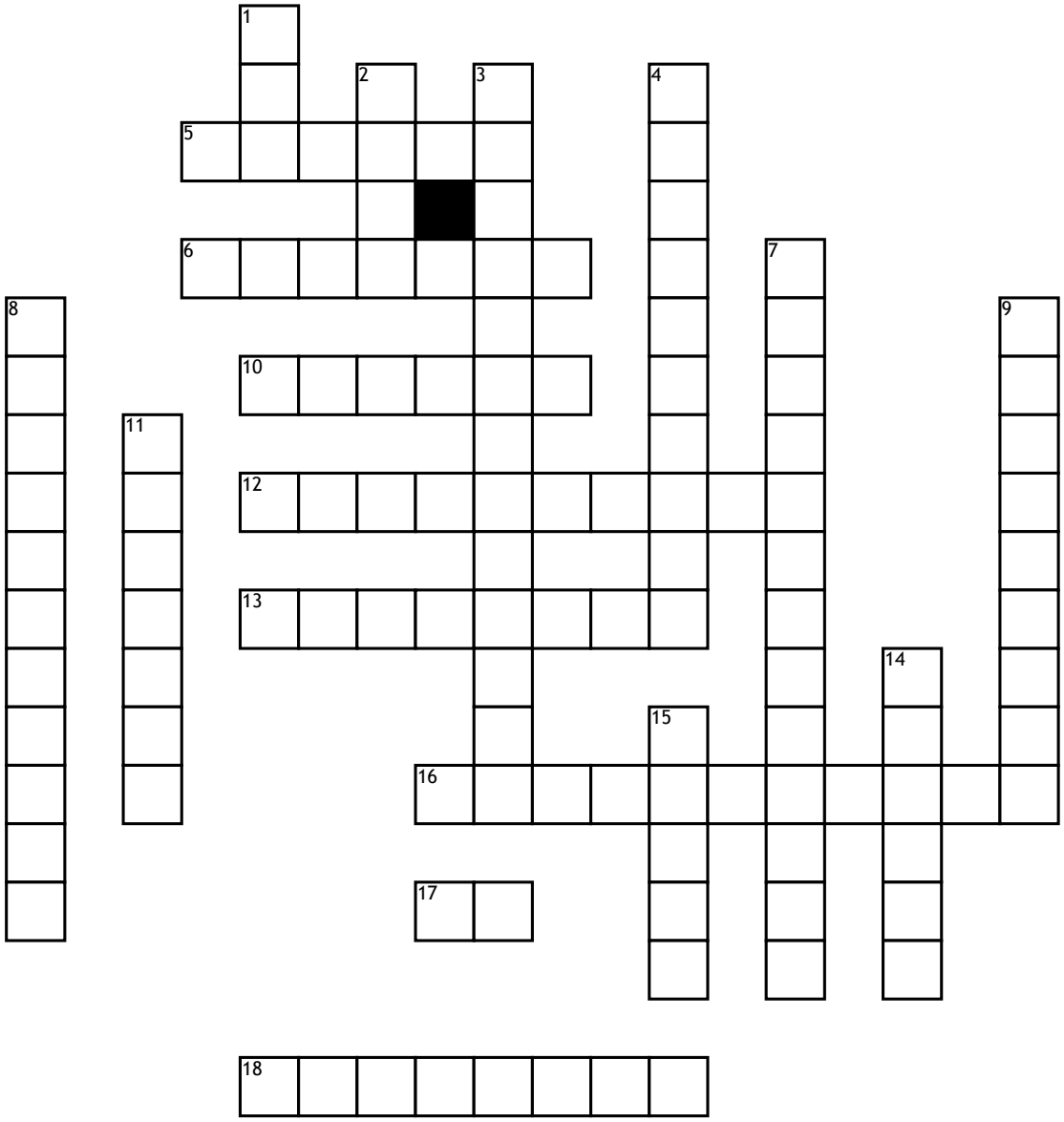
Name: _____ Date: _____ Period: _____

genetics



Across

5. sex cell, sperm or pollen or ova, that are haploid or N1

6. The original two individuals considered in a cross or mating

10. One member of a pair (or any of the series) of genes occupying a specific spot on a chromosome (called locus) that controls the same trait

12. Having two of the same alleles for a particular trait

13. the genetic constitution of an individual organism. Represented by the two alleles, one from each parent, that can affect the phenotype of the offspring.

16. The acquisition of traits genetically transmitted from parents to offspring

17. The generation immediately following a mating of the parent generation may be called the _____ generation

18. A diagram showing the lineage or genealogy of an individual and all the direct ancestors, usually to analyze or follow the inheritance of trait.

Down

1. A double-stranded nucleic acid that contains the genetic information for cell growth, division, and function

2. The fundamental, physical, and functional unit of heredity.

3. the action or process of fertilizing an egg, female animal, or plant, involving the fusion of male and female gametes to form a zygote. In the Punnett Square this is represented by putting the letters from the top and left side together in the boxes in the center.

4. A structure within the cell that bears the genetic material

7. the process of creating a copy of DNA into mRNA through the help of the enzyme RNA polymerase.

8. In an organism that is heterozygous for a specific trait then neither allele is complete expressed resulting in a blending of the two. For example in flowers a red and a white flower might be mated to produces a pink flower.

9. The physical representation of a characteristic or trait. What you actually see. The set of observable characteristics of an individual resulting from the interaction of its genotype with the environment

11. a type of cell division that results in four daughter cells each with half the number of chromosomes of the parent cell, as in the production of gametes and plant spores. When using a Punnet square it is the process represented by breaking the alleles into the letters that go across the top and down the side.

14. Augustinian monk and botanist who formulated the laws of heredity based on his careful breeding experiments on garden pea plants. Later, he was recognized for his seminal works on genetics. For this, he has become the father of genetics. Dominant allele: An allele that expresses its characteristics often repressing the expression of the allele it is paired with.

15. One of the scientist credited with isolating DNA—the double helix.