1. Using the Across and Down clues, write the correct words in the numbered grid below.



## ACROSS

- 2. The two layers of phospholipids arranged in such a way that their hydrophobic tails are projecting inwards while their polar head groups are projecting on the outside surfaces.
- 5. The 20 molecules that are held together by peptide bonds to make up proteins.
- 7. The description of an individual who has the same allele for a trait on both homologous chromosomes.
- 8. The attractive force between polar molecules of the same substance.
- 10. The theory that explains how a population changes over time to reflect the individuals who are most successful.
- 12. Proteins embedded in the cell membrane which allow organisms to differentiate between self and non-self cells.
- 18. The type of nuclear division that leads to four nuclei with a haploid complement of chromosomes produced from one diploid nucleus.
- 20. An organism that makes its own food.
- 21. The type of inheritance where the heterozygous individual has a blend of the dominant and recessive trait.
- 23. The 23rd pair of chromosomes in humans that determine whether the offspring is male or female.
- 24. The theory that eukaryotic cells arose from prokaryotic cells that lived closely together to the point that we now call these former cells "mitochondria" and "chloroplasts."

## DOWN

- 1. The making of RNA from DNA.
- 3. The duplication of the DNA during the middle "s phase" of interphase during the cell cycle.
- 4. The kingdom that has predominantly unicellular eukaryotic organisms including algae, protozoans, and slime molds.
- 6. The one difference between the experimental group and the control group.
- 9. The polysaccharide that is how animals store glucose in their liver.
- 11. The single stranded nucleic acid with uracil instead of the thymine found in DNA.
- 13. The part of an enzyme where the substrate will bind.
- 14. An organic catalyst that lowers the activation energy of chemical reactions in organisms thus increasing the rate of reaction.
- 15. The region of a chromosome to which the microtubules of the spindle attach, via the kinetochore, during cell division.
- 16. The site of meiosis in humans that includes the ovaries and testes.
- 17. Behavior of an organism that is not learned and is genetically determined.
- 19. The structure responsible for water absorption in plants.
- 22. The three nucleotide combination on the messenger RNA that matches up with the three letter combination on the transfer RNA and has the information to code for one amino acid.

RNA	independent variable
endosymbiosis	homozygous
amino acids	innate
autotroph	meiosis
centromere	phospholipid bilayer
gonads	sex chromosomes
replication	cohesion
active site	enzyme

incomplete dominance protista codon transcription natural selection glycogen root marker proteins