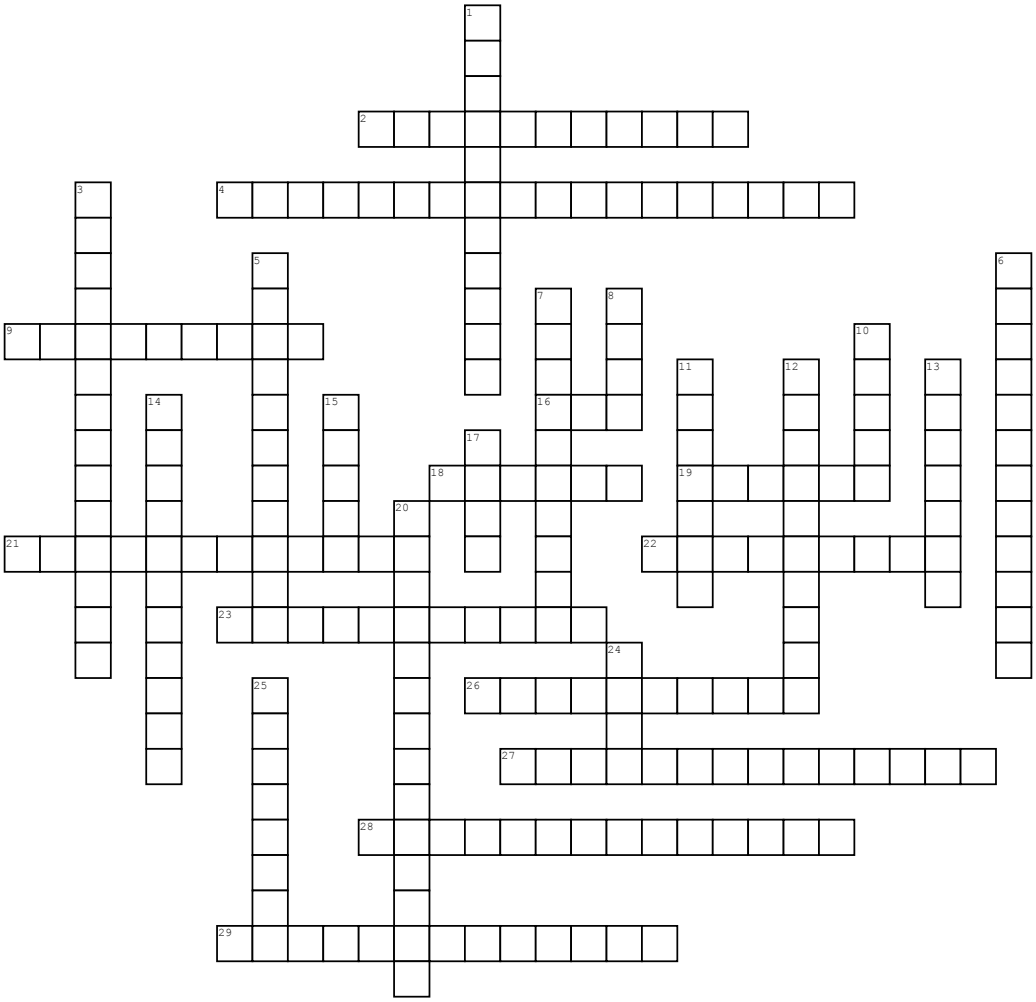
Name: _____ Date: _____ Period: _____

# DNA & RNA



**Across**

**2.** adapt or set apart to serve a special function
**4.** either of the nucleotide bases linked by a hydrogen bond on opposite strands of DNA
**9.** ]biological cells that can differentiate into specialized cells
**16.** ribonucleic acid
**18.** paired with adenine in single-stranded RNA
**19.** a specialized cell transmitting nerve impulses; a nerve cell
**21.** process by which genetic information is copied into a new molecule of mRNA
**22.** a sequence of three nucleotides forming a unit of genetic code in a transfer RNA molecule
**23.** a sugar derived from ribose by replacing a hydroxyl group with hydrogen
**26.** cells of the nerve system
**27.** any mechanisms used by cells to increase or decrease the production of specific products
**28.** newly synthesized strand of DNA
**29.** red cell that carries oxygen to all parts of the body

**Down**

**1.** cells found in the muscle tissue
**3.** process by which less specialized cells develops to become more distinct in form and function
**5.** a chain of amino acids
**6.** an exchange of genes between two chromosomes
**7.** male reproductive cell
**8.** transfer RNA
**10.** a sequence of three nucleotides that form a unit of genetic code in a DNA or RNA molecule
**11.** paired with cytosine in double-stranded DNA
**12.** each of a pair of curved cells that surround a stoma
**13.** paired with adenine in double-stranded DNA
**14.** process by which the sequence of mRNA is decoded to make amino acids
**15.** genetically determined characteristic
**17.** messenger RNA
**20.** process by which double-stranded DNA molecule copies itself to make two new identical DNA molecules
**24.** a section of a DNA molecule that serves as the basic unit of hereditary
**25.** paired with guanine in double-stranded DNA

**Word Bank**

| | | | | |
|---|---|---|---|---|
| muscle cells | crossing over | differentiated | cytosine | polypeptide |
| guard cells | thymine | anticodon | nerve cells | guanine |
| stem cells | transcripton | tRNA | complementary bases | daughter strand |
| specialized | red blood cells | sperm cells | gene | deoxyribose |
| gene regulation | trait | codon | mRNA | uracil |
| translation | neuron | RNA | DNA replication | |