

NAME: \_\_\_\_\_ DATE: \_\_\_\_\_ CLASS: \_\_\_\_\_

### DNA AND RNA REVIEW WORKSHEET

- 1) \_\_\_\_\_, guanine (G), cytosine (C), and thymine (T) are the four \_\_\_\_\_ in DNA.
- 2) In DNA, \_\_\_\_\_ always forms hydrogen bonds with guanine (G).
- 3) The sequence of \_\_\_\_\_ carries the genetic information of an organism.
- 4) The double-coiled shape of DNA is called a \_\_\_\_\_.

5) Complete the chart on the three chemical differences between DNA and RNA:

Structure	DNA	RNA
1. Strand of nucleotides	a. _____	b. _____
2. Sugar	a. _____	b. _____
3. Nitrogenous base	a. _____	b. _____

6) What are the three components of a DNA nucleotide?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

7) What are the three components of an RNA nucleotide?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

8) How does base pairing differ in RNA and DNA?

9) If a sequence of bases on a DNA strand is AAC TAG GGT ATC TAC, what is the sequence of bases on the complementary strand?

---

10) Which series is arranged in order from largest to smallest in size?

- a. Chromosome, nucleus, cell, DNA, nucleotide
- b. Cell, nucleus, chromosome, DNA, nucleotide
- c. Nucleotide, chromosome, cell, DNA, nucleus
- d. Cell, nucleotide, nucleus, DNA, chromosome