

Name \_\_\_\_\_

Date \_\_\_\_\_

## Practice Complementary Strands - Homework

1. A DNA strand has the following sequence. What will be the complementary strand?

**a) CGGAGTATAGTGCAGCGATAATGC**

• strategy:

- divide strand into 3-letter codons
- check carefully that everything lines up
- suggest: do all the A's, then all the T's, etc.
- do it in the same way every time!

2. Give the complementary sequence for the following DNA strand:

**a) AATAGCGGATGCGTGTCCGAG**

3. What will always be true about the number of A's and T's in any given DNA strand?

4. What will always be true about the number of C's and G's in any given DNA strand?

5. Give the complementary strand for the following DNA sequence:

**a) AATATGGGCGATATA**

6. Give the complementary strand for the following DNA sequence:

**a) CAATA | CAGCTG | ATGAC**

7. In the previous question, what do you notice about the sequence between the dividers?

8. Give the complementary strand for the following DNA sequence:

**a) GAATCCCGGGATAGCA**

9. In the question above, is there a palindromic sequence? if so, show it on the question above.