Transcription and Translation Worksheet

1. What are the bases in DNA?

1. How do the bases pair up?
2. What are the bases in RNA?
3. What RNA nitrogen bases match with the following DNA nitrogen bases?

A T G C

1. If this is a sequence of one DNA strand, what is the RNA sequences that would bond with this DNA sequence?

A T T C A G C G A

1. How are DNA and mRNA alike?
2. How are DNA and mRNA different?
3. What is a codon?
4. What does a codon code for?
5. List three things proteins do for us.
6. Where in the cell are proteins made?
7. If the following were part of a DNA chain, what mRNA bases would pair with it to transcribe the DNA code onto mRNA?

G-G-A-T-C-G-C-C-T-T-A-G-A-A-T-C

Imagine you have the following strand of DNA. Go through the process of transcription and translation and build the correct amino acid chain (protein).

DNA mRNA Amino Acid

C

A

 T

G

G

 T

C

A

G

G

C

A

T

A

T