Transcription/Translation SL

1. Transcription is the process of creating a molecule of _____ from DNA. It is carried out by _____ _____ enzyme which copies the relevant _____ by adding free _____ _____. Complementary _____ pairing takes place as normal with the exception of _____ replacing _____.

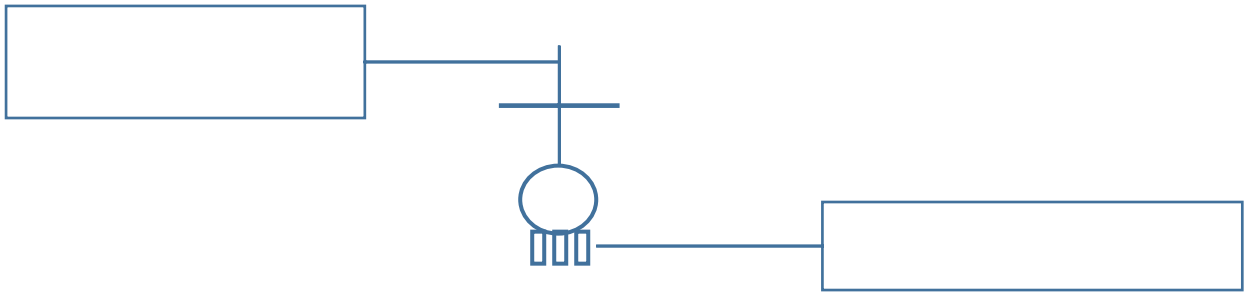
2. An _____ molecule consists of _____ of bases called _____. These have the same meaning in _____ all organisms.

3. A strand of DNA could read as below. Transcribe the correct strand in the space between them.

   - A T G C A C A G G A T A C T A - Sense strand

   - T A C G T G T C C T A T G A T - Anti-sense strand

4. The diagram below represents a simplified molecule of _____. Fill in the labels.



5. In translation, _____ first binds to the small subunit of the _____. Once the _____ codon is in the correct location, a _____ molecule, carrying an _____ _____ binds to the _____. Then the _____ subunit of the _____ binds. This allows the next _____ molecule to bind, and the formation of a _____ bond between _____ _____ is facilitated. The _____ moves along the _____ molecule, repeating this pattern by continually adding another _____ until the _____ has been formed.

   Draw a quick schematic of this process on the back of this page for practice.

