1. (1 pt total) 
   a) The base in the nucleoside inosine can form a series of unusual base pairs. Circle which of the following bases can be involved in such interactions (0.25 pt each):
      ![Circle options: A, C, G, I, T, U]
   b) What is the term used to describe this feature? (0.25 pt)
      [wobble]

2. (1 pt total) Which of the following phrases details a feature that represents a point of difference between prokaryotic and eukaryotic cells? (0.5 pt each)
   a) Contain ribosomes
   b) Contain nuclei
   c) mRNAs undergo splicing
   d) Contain promoters

3. (2 pts total)
   TRUE or FALSE? (0.5 pt each)
   a) Transcription initiation occurs at an AUG sequence [false]
   b) Translation termination can occur at a UAG sequence [true]
   c) Cyclic AMP contains a 2',3' phosphodiester bond
   d) In a thymine dimer the adjacent bases are linked through the C-5 and C-6 positions

4. (1 pt total) **In translation**, recognition between two types of molecules is mediated by base pairing. Link the appropriate molecules in the left hand column with the relevant recognition motif that they contain from the right hand column (0.5 pt each):
   ![Links: mRNA to promoter, rRNA to terminator, hRNA to codon, tRNA to antiterminator, uRNA to template, anticodon]
   [2 gains only]