CHAPTER 18

ANSWER KEY

Transcription and Translation Worksheet Answer Key

BLM 18.2.9A

1. a) arginine

   b) alanine

   c) leucine

   d) stop codon, no amino acid is coded

2. a) AUGCCAGUGUACUAA

   b) methionine—proline—valine—tyrosine—stop

   c) UAC

3. a) methionine—lysine—histidine—tryptophan

   b) 4: AUGAAACAUUGG; AUGAAGCAUUGG; AUGAAACACUGG; AUGAAGCACUGG

   c) Redundancy. If a mutation occurs in the nucleotide sequence, the chance that a different amino acid will be translated is reduced. For example, CUU, CUC, CUA, and CUG all code for the same amino aid, leucine.