Worksheet: Protein Synthesis

Q1: Which of the following is **not** correct about tRNA?

A. A tRNA molecule will bind to an mRNA codon.

B. tRNA stands for transfer RNA.

C. tRNA stands for temporary RNA.

D. tRNA molecules contain 3 nucleotide bases that code for an amino acid.

Q2: How many bases in a row form a codon?

A. 5

B. 2

C. 4

D. 3

E. 1

Q3: In mRNA, which DNA base is replaced with uracil (U)?

A None

B A

C C

D G

E T

Q4: What organelle is the site of translation?

A Mitochondria

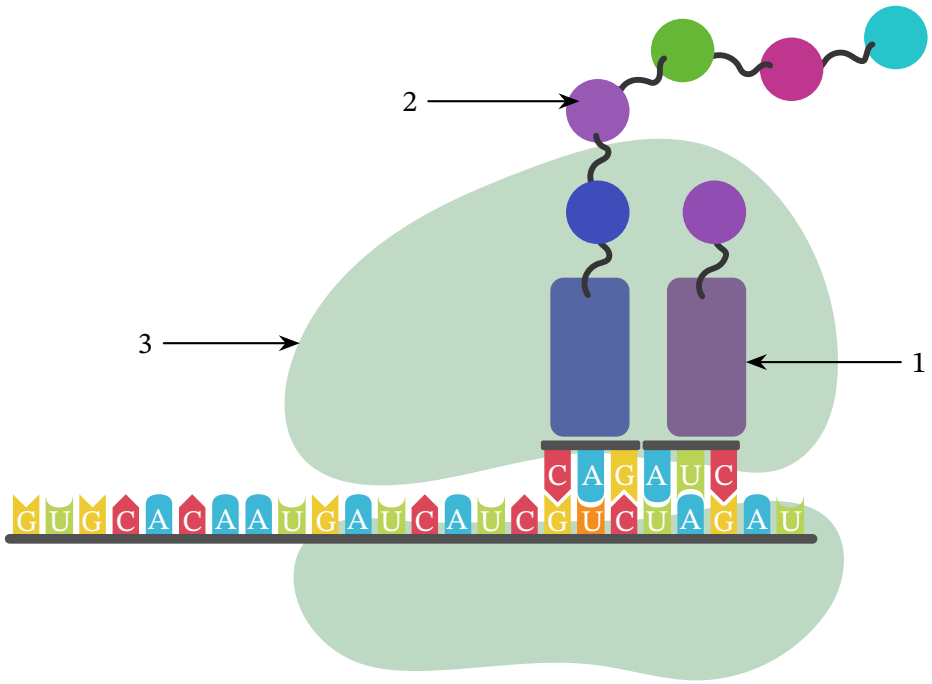
B Vacuole

C Cell membrane

D Ribosome

E Nucleus

Q5: The diagram provided shows mRNA undergoing translation.



What is represented by label 1?

A mRNA

B tRNA

C Ribosome

D Amino acid

What is represented by label 2?

A mRNA

B Amino acid

C tRNA

D Ribosome

What is represented by label 3?

A mRNA

B Ribosome

C tRNA

D Amino acid

Q6: Which of the following is **not** correct about DNA and protein synthesis?

A A chain of amino acids forms a section of DNA.

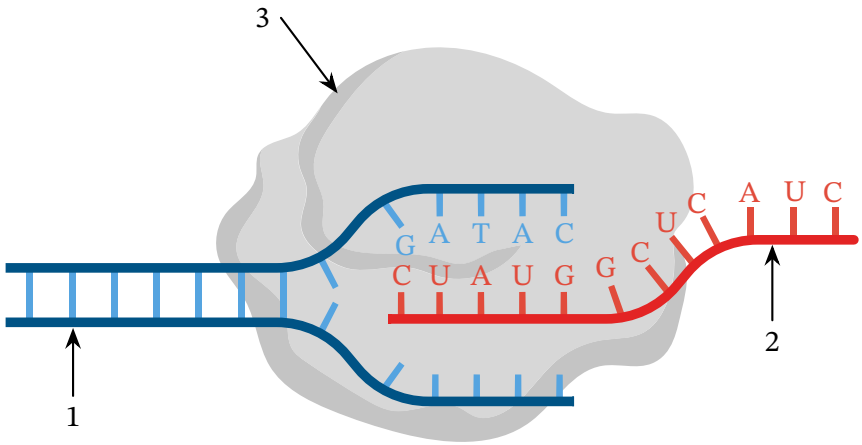
B A mutation in the DNA could result in a different protein being made.

C Each protein made has a specific shape relating to its function.

D A mutation in the DNA could result in a different sequence of amino acids being formed.

E The DNA produces a template for the resulting protein.

Q7: The diagram shows a strand of DNA undergoing transcription.



What is represented by label 1?

A DNA

B RNA

C mRNA

D RNA polymerase

What is represented by label 2?

A mRNA

B RNA

C DNA

D RNA polymerase

What is represented by label 3?

A RNA polymerase

B DNA

C RNA

D mRNA