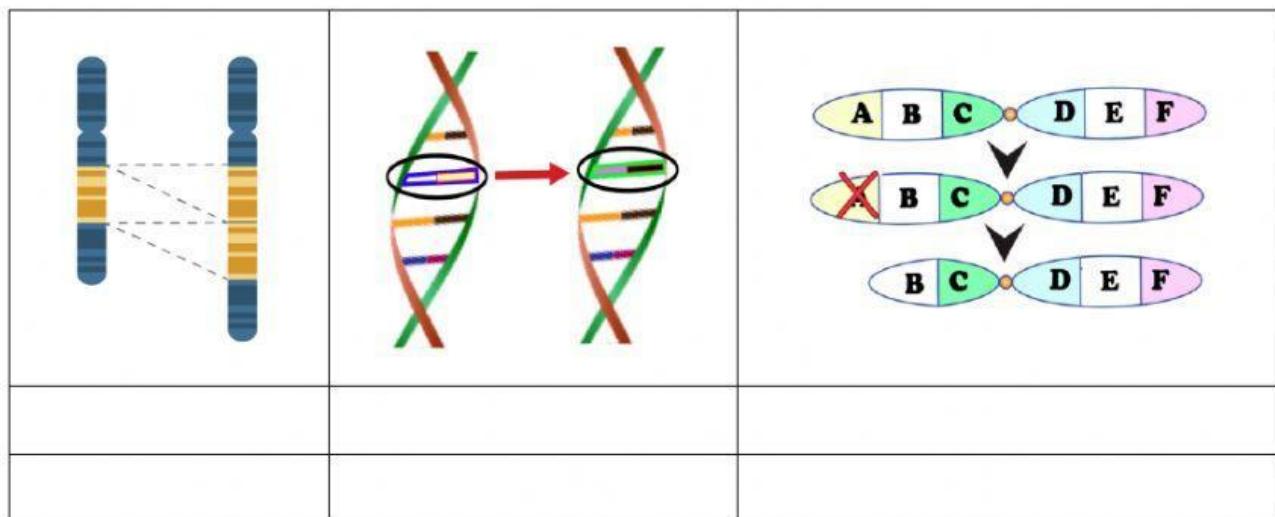


| | | | |
|--|-------------------------------------|------------------------|----------------------|
| Name: | Class/Section: 10 | | Date: |
| Unit: Unit 4 - Genetics | Chapter: 13-RNA & Protein Synthesis | Lesson: 13.3 Mutations | Textbook p.: 372-376 |
| HUBS Kazakh-German University Al-Farabi University Bilingual School | Online Task | | |

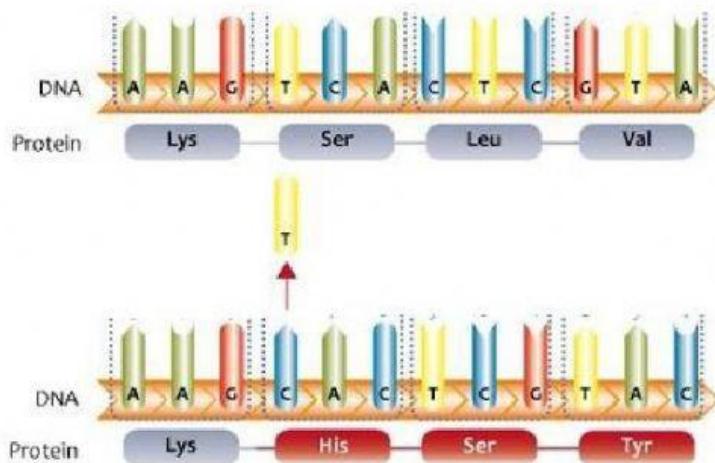
| | | | | | | |
|------------------------|------------|-----------|------------|----------|----------|------|
| Original DNA sequence: | TAC | ACC | TTG | GCG | ACG | ACT |
| mRNA transcript: | AUG | UGG | AAC | CGC | UGC | UGA |
| amino acids: | methionine | Threonine | Asparagine | Arginine | Cysteine | Stop |

| | | | | | | |
|------------------------|------------|-----------|------------|---------|---------------|----|
| Original DNA sequence: | TAC | ACC | TTG | GGA | CGA | CT |
| mRNA transcript: | AUG | UGG | AAC | CCU | GAU | |
| amino acids: | methionine | Threonine | Asparagine | Proline | Aspartic acid | |

1. What type of mutation is seen above? _____
2. How did the mutation affect the amino acid sequence? _____
3. Use the image below to answer the following
 - a. Identify the type of mutations.
 - b. State whether the mutation is a gene mutation or a chromosomal mutation.



4. Complete the following about the below image. Check the correct boxes.



This image is an example of

Gene mutation

Point mutation

Chromosome Mutation

This image _____ a frame mutation,