

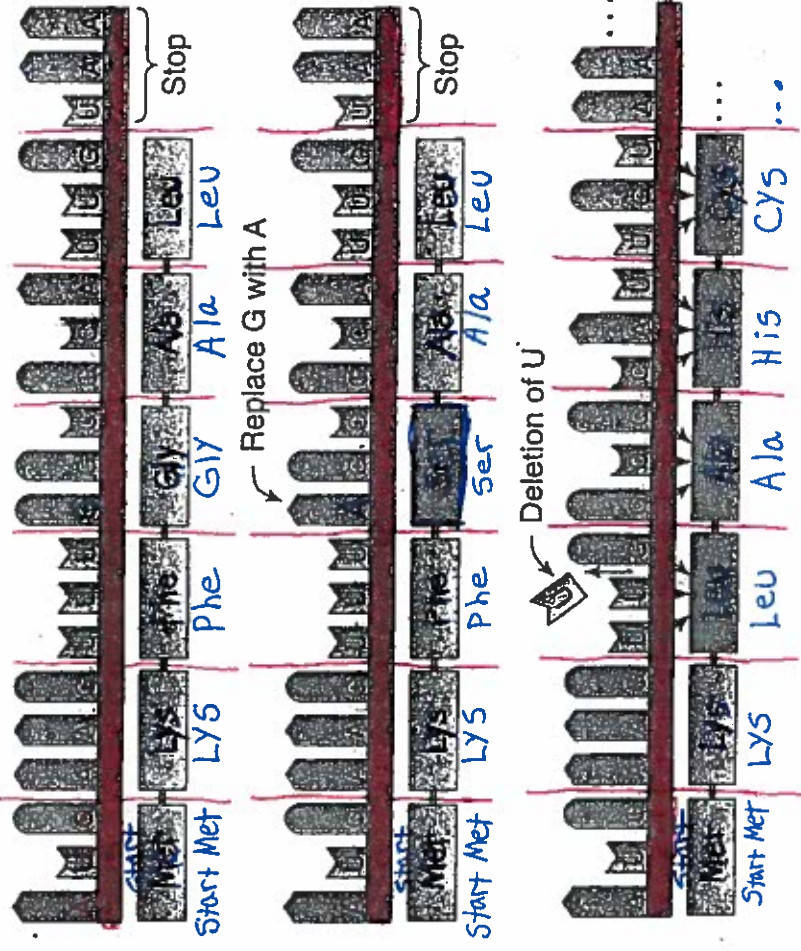
Transparency 19a

DNA Gene Mutations Notes

RETEACHING SKILLS

Use with Chapter 11, Section 11.3

Point - THE DOG BIT THE CAR
 THE DOG BIT THE CAT
 THE DOG BIT THE CAT
Frameshift - THE DOG BIT THE CAT
 THE DOG BIT THE CAT
 THE DOG BIT THE CAT
 THE DOG BIT THE CAT



Point
 Examples
 Achondroplasia
 Muscular Dystrophy
 Sickle cell anemia

Frameshift
 Examples
 Cystic fibrosis
 Crohn's disease

- Point mutation**
 Change in a single base pair in DNA.
 (letter substitution) same total # of letters stays
 mRNA
 Protein
- Frameshift mutation**
 A single base is added or deleted from DNA - shifts the reading of codons.
 Total # of letters changes from original sequence
 mRNA
 Protein