



**GRADES 1 to 12
DAILY LESSON LOG**

School:		Grade Level:	
Teacher:	Depedtrends.com	Learning Area:	
Teaching Dates and Time:		Quarter:	

I. OBJECTIVES	
A. Content Standards	The learner's demonstrate an understanding of the information stored in DNA as being used to make proteins.
B. Performance Standards	
C. Learning Competencies Write the LC code for each	: Explain mutations may cause changes in the structures and functions of a protein. S10LT-IIIe-38
D. Learning Objectives	Compare the different types mutations Ang their possible results.
II. CONTENT	MUTATION: CHANGES IN THE GENETIC CODE
III. LEARNING RESOURCES	
A. References	
1. Teacher's Guide pages	
2. Learner's Materials pages	281-293
3. Textbook pages	
4. Additional Materials from Learning Resource (LR) portal	
B. Other Learning Resources	
IV. PROCEDURES	
A. Reviewing previous lesson or presenting the new lesson (2 mins.) elicit	Would there be a possibility that mistakes may occur when DNA is replicated? Yes. Answers may vary depending on students point of view
B. Establishing a purpose for the lesson (1 min.) Engage	Notice figure 8. What have you observed? Common mistakes in mutation
C. Presenting examples/ instances of the new lesson Explore (2-5 mins.)	When is mutation inherited? Are mutataion in sex cells heritable? Many diseases are caused by the effects of inherited Gene's. In most cases, there is only a small difference between DNA sequences in the defective Gene's and a normal one. The difference is enough to cause serious and often fatal diseases. They maybe be passed from one generation to the next of present in gametes.
D. Discussing new concepts and practicing new skills #1 Explain (15 mins.)	What might happen if an incorrect amino acid was inserted in a growing protein chain during the process of translation? A change in nitrogenous bases in a protein may yield a different amino acids and a corresponding change in the protein structure and function.
E. Discussing new concepts and practicing new skills#2 (10 mins.)	Perform Activity 6. Chromie Change. Do the procedure for the activity. Fill in the table for translocation, deletion and inversion. See tables on page287.

F. Developing mastery (Leads to Formative Assessment 3) (12 mins.) Elaborate	How are the three chromosomal aberration different from each other? How are they similar? Translocation occurs when a piece of chromosomes breaks off and attaches to another chromosomes. An inversion involves the breakage of chromosome in two places in which the resulting piece of DNA is reversed and re-inserted into the chromosomes. Deletion refers to the loss of a segment of DNA or chromosome.
G. Finding practical applications of concepts and skills in daily living (3 mins.)	Which condition results to gain of chromosome materials? Loss of chromosome materials? Gain or loss of chromosome materials result in chromosomal mutations or aberrations, may also result in down syndrome, Klinefelter's syndrome or Turner's syndrome. However, Cri-du-Chal syndrome is due to loss of chromosomes.
H. Making generalizations and abstractions about the lesson (3 mins)	What are some possible effects of chromosomal mutations? The possible effects of chromosomal mutations are medical problems, problems on growth and development, genetic disorders, and even death.
I. Evaluating learning (8 mins)	Compare the different types of mutations and their possible effects. Translocation occurs when a piece of chromosomes breaks off and attaches to another chromosomes. An inversion involves the breakage of chromosome in two places in which the resulting piece of DNA is reversed and re-inserted into the chromosomes. Deletion refers to the loss of a segment of DNA or chromosome. Changes that affect the structure of chromosomes can cause problems with growth, development and function of the body's systems. These changes can affect many Gene's along the chromosomes and disrupt the proteins made from the Gene's.
J. Additional activities for application or remediation (1 min)	Explain the following genetic disorders in figures 11,12,14,15,16 and 17.
V. REMARKS	
VI. REFLECTION	
A. No .of learners who earned 80% on the formative assessment	
B. No. of learners who require additional activities for remediation.	
C. Did the remedial lessons work? No. of learners who have caught up with the lesson.	
D. No .of learners who continue to require remediation	
E. Which of my teaching strategies worked well? Why did these work?	
F. What difficulties did I encounter which my principal or supervisor can help me solve?	
G. What innovation or localized materials did I use/discover which I wish to share with other teachers?	

Prepared by:

Checked by

Teacher

School Head

Observed by:
