**Lesson Title: Protein Folding**

**Unit: 4**

TEKS: 130.7 (c) 7 d

OBJECTIVES

The student will be able to:

1. Review central dogma of molecular biology.
2. Discuss type of protein.
3. Assess amino acids.
4. Demonstrate folding proteins.

TEACHING MATERIALS, TOOLS, AND EQUIPMENT

PPT: Protein Folding

TEACHING PROCEDURE

|  |  |
| --- | --- |
| Interest Approach/Anticipatory Set | Teacher Notes |
| 1. Link – Disscussed DNA, mRNA, tRNA, Transcription and Translation TRANSITION – Today, we’re going to learn how proteins fold and how proteins work.  | Ask questions to students |

|  |  |
| --- | --- |
| Teaching Plan and Strategy / Presentation of New Material | Teacher Notes |
| Objective 1: Review Central Dogma of Molecular Biology * Lecture with Power Point, explain in great detail
* Show video found on ppt. Alternate link is here : <http://www.youtube.com/watch?v=erOP76_qLWA>

Objective 2: Discuss type of protein* Lecture on each protein type
* Explain how they work

Objective 3: Assess Amino Acids* Discuss each Amino Acid
* Explain how they work

Objective 4: Demonstrate folding proteins* See Engagement
 | Power Point Lecture; have students engaged in lecture.  |

ENGAGEMENT

<http://fold.it/portal/> is a website that allows students to practice folding proteins to create specific shapes. This is great reinforcement to the lesson while allowing the students the opportunity to fold proteins with the goal of curing cancer, Alzheimer’s, and other degenerative diseases.

EVALUATION

Have a Q&A session. Make sure the students understand what was lectured.

ADDITIONAL MATERIALS

 Power Point, and Technology.

College & Career Readiness Standards: II.C.1; II.E.7 (Write in the number/letters already crosswalked for your unit)

©Texas Education Agency, 2011