**Lesson Title: Livestock Improvement through Selection**

**Unit: 8**

TEKS: 130.7(C) 5 (b)(c)

OBJECTIVES

The student will be able to:

1. Compare and contrast the idea of genetics vs environment
2. List examples of high and low heritability estimates
3. Define expected progeny differences
4. Describe the importance of livestock improvement

TEACHING MATERIALS, TOOLS, AND EQUIPMENT

PPT: Livestock Improvement through Selection

TEACHING PROCEDURE

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| --- | --- |
| Interest Approach/Anticipatory Set | Teacher Notes |
| 1. Link – Short Q and A over previous lecture  2. Motivation – Ask students what they feel have shaped them most, their genetics or environment | Ask questions to students |

|  |  |
| --- | --- |
| Teaching Plan and Strategy / Presentation of New Material | Teacher Notes |
| Objective 1: Compare and contrast the idea of genetics vs environment   * After you reach a certain point in the lecture allow the student’s time to write this down.   Objective 2: List examples of high and low heritability   * These are found within the power point presentation. Students should also grasp the idea of the importance of heritability and how it affects the livestock industry   Objective 3: Define expected progeny differences   * Definition is found in power point. Students should also have an understanding of how EPDs are used to select livestock   Objective 4: Describe the importance of livestock improvement   * This is the culminating idea of the lecture and can be done as a closing activity. Students should use information they have heard and written down during this lecture. | Power point  Lecture |

ENGAGEMENT

During portions of the lecture students should be writing things down to turn in at the end of the day for a day grade.

EVALUATION

Use the things written during and after the lecture to evaluate the understanding of the students

ADDITIONAL MATERIALS

Livestock and Carcasses by Donald L. Boggs, Robert A Merkel, and Matthew E. Doumit.

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

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