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| **TEXAS CTE LESSON PLAN**  [www.txcte.org](http://www.txcte.org) | |
| **Lesson Identification and TEKS Addressed** | |
| **Career Cluster** | Agriculture, Food, and Natural Resources |
| **Course Name** | Principles of Agriculture, Food, and Natural Resources |
| **Lesson/Unit Title** | Demonstrating Identification Techniques for Beef Cattle |
| **TEKS Student Expectations** | **130.2 (c) Knowledge and skills**  (12) The student develops technical knowledge and skills related to animal systems. The student is expected to:  (A) Describe animal growth and development |
| **Basic Direct Teach Lesson**  **With Special Education Modifications/Accommodations and**  **one English Language Proficiency Standards (ELPS) Strategy** | |
| **Instructional Objectives** | **The student will be able to:**   * Describe the history of branding and how it came about * Explain what branding is and why it is important in beef cattle management * Construct their own brand * Demonstrate how to brand their own cattle using the proper steps |
| **Rationale** | Allows students to develop knowledge and skills regarding career and educational opportunities, personal development, globalization, industry standards, details, practices, and expectations. |
| **Duration of Lesson** | Teacher’s Discretion |
| **Word Wall/Key Vocabulary**  *(ELPS c1a, c, f; c2b; c3a, b, d; c4c; c5b) PDAS II (5)* | Freeze Brand  Hot Brand  Pigment |
| **Materials/Specialized Equipment Needed** | **Equipment:**   * Computer * Projector   **Material:**   * Branding Power Point * Handout-History of Branding Case Study (Attachment–coming soon) * Handout-County Brand Submission Sheet (Attachment–coming soon) * Pipe cleaners (enough for 3 students) * Paint * Cut out poster cows to brand |
| **Anticipatory Set**  (May include pre-assessment for prior knowledge) | Students will pick up a copy of the branding case study when they enter the classroom. Teacher *“After reading the case study, why do you think branding is important for beef cattle ranchers?” Allow for discussion*  **Motivation:** Imagine you have your own beef cattle ranch. For today’s lesson, we will be creating our own brands so we can keep track of our cattle.  **Today we will…**   * Describe the history of branding and how it came about * Identify other methods of identification * Explain what branding is and why it is important in beef cattle management * Construct their own brand * Demonstrate how to brand their own cattle using the proper steps |
| **Direct Instruction \*** | Students will listen to a quick power point led by the teacher.  Branding Cattle   * Branding Methods   + Freeze Brands   + Hot brands * Why do we brand?   + Identification   + Ownership * Freeze Brands   + A freeze brand consists of a super-cold or chilled branding iron.   + They are applied to the hide of the animal, where the pigment producing cells are destroyed or altered.   + When the hair grows back, it is white. * Advantages of Freeze Branding   + The brand is more legible throughout most of the year than a hot-iron brand.   + Freeze branding causes less damage to the hide than a hot brand * Hot Branding   + Burns the hide off the skin   + Can be electric   + Can be heated up by fire   Let’s look at some common designs   * <http://www.tscrabrands.com/design-brand.html>   Time to make your own!!  *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **Guided Practice \*** | *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **Independent Practice/Laboratory Experience/Differentiated Activities \*** | *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **Lesson Closure** |  |
| **Summative/End of Lesson Assessment \*** | After students finish their branding activities, students will come up with 3 of their own review questions for today’s lesson. They must also provide an answer to their review question.  They will place the review questions in a question jar or hat. The teacher will allow 5-10 students pull questions out of the jar.  These students must give the slip to the teacher and she will orally read the question and have the student answer. Use as time allows.  *Individualized Education Plan (IEP) for all special education students must be followed. Examples of accommodations may include, but are not limited to:*  NONE |
| **References/Resources/Teacher Preparation** | **Website:**   * <http://www.tscrabrands.com/> * <http://texashistory.unt.edu> |
| **Additional Required Components** | |
| **English Language Proficiency Standards (ELPS) Strategies** |  |
| **College and Career Readiness Connection[[1]](#footnote-1)** | **Cross Disciplinary Standards** I, C, 1, b  **Science** X, C, 1, c |
| **Recommended Strategies** | |
| **Reading Strategies** |  |
| **Quotes** |  |
| **Multimedia/Visual Strategy**  **Presentation Slides + One Additional Technology Connection** |  |
| **Graphic Organizers/Handout** |  |
| **Writing Strategies**  **Journal Entries + 1 Additional Writing Strategy** |  |
| **Communication**  **90 Second Speech Topics** |  |
| **Other Essential Lesson Components** | |
| **Enrichment Activity**  (e.g., homework assignment) | * Students will create their brand on a scratch sheet of paper and fill out the mark and brand application to into their county office. * Students will then receive 3 pipe cleaners to form their brand. They will also need a pipe cleaner to serve as the handle to dip in the paint. * One at a time, students will take turns dipping their brand in paint and then branding the cattle poster for their class period. At the end of the class period, the cow should be covered in brands. |
| **Family/Community Connection** |  |
| **CTSO connection(s)** |  |
| **Service Learning Projects** |  |
| **Lesson Notes** |  |

1. Visit the Texas College and Career Readiness Standards at <http://www.thecb.state.tx.us/collegereadiness/CRS.pdf>, Texas Higher Education Coordinating Board (THECB), 2009. [↑](#footnote-ref-1)