Rangeland Assessment CDE

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Career Development Purpose and Objectives:

Purpose:

To create interest and promote understanding in Range Science by providing opportunities for recognition through the demonstration of skills and proficiencies.

Objectives:

To demonstrate basic knowledge of range science practices.

To explore career opportunities, skills and proficiencies in the range science industry.

To recognize rangeland site characteristics including soils, plant composition, and biomass composition.

To identify selected range plants, determine current use of rangeland and make recommendations for future uses.

To work together cooperatively as a group.

Related Content Standards – Humanities:

<u>Standard 1</u>: Acquisition and use of language

Goal 1.1: Listening

7-12.WL1.1.1.1 Comprehend basic vocabulary in isolation and in context.

7-12.WL1.1.1.2 Capture essential information from everyday conversations and short passages (e.g., cognates, context clues).

Goal 1.2: Speaking

7-12.WL1.1.2.1 Use basic vocabulary to respond to familiar prompts.

7-12.WL1.1.2.2 Express preferences, desires, opinions, and feelings.

7-12.WL1.1.2.3 Use appropriate level of politeness in simulated social exchanges.

Goal 1.3: Reading

7-12.WL1.1.3.1 Decode written text, diacritical marks, and symbolic systems.

Standard 2: Critical Thinking

Goal 2.1: Analysis of Language Elements and Products

7-12.WL1.2.1.2 Derive meaning from word order.

Related Content Standards – Language Arts: None Related Content Standards – Mathematics:

8-9 Grade Math

<u>Standard 1</u>: Number and Operation

Goal 1.1: Understand and use numbers.

9.M.1.1.2 Use positive and negative numbers, absolute value, fractions, decimals, percentages, and scientific notation, including application in real world situations. (347.01.a)

9.M.1.1.5 Solve problems using number theory concepts (factors, multiples, primes). (347.01.d)

Goal 1.2: Perform computations accurately.

9.M.1.2.1 Use the order of operations and perform operations with rational numbers. (347.02.a)

Goal 2.4: Apply appropriate techniques and tools to determine measurements.

9.M.2.4.1 Determine and use appropriate units. (349.01.a)

9.M.2.4.2 Approximate error in measurement situations.

9-10 Grade Math

<u>Standard 1</u>: Number and Operation

Goal 1.3: Estimate and judge reasonableness of results.

9-10.M.1.3.1 Apply number sense to everyday situations and judge reasonableness of results. (347.03.a)

9-10.M.1.3.2 Identify that error accumulates in a computation when there is rounding. (349.05.b)

Goal 2.2: Apply the concepts of rates, ratios, and proportions.

9-10.M.2.2.1 Use rates, ratios, proportions, map scales, and scale factors (one- and twodimensional) in problem-solving situations. (349.03.a)

9-10.M.2.2.2 Apply concepts of rates and direct and indirect measurements.

9-10.M.2.2.3 Construct equivalent units, comparable units, and conversions. (349.02.a)

Goal 2.3: Apply dimensional analysis.

9-10.M.2.3.1 Use customary and metric units and their relationship to one another and to real world applications involving length, area, capacity, weight, time, and temperature. (349.04.a)

Goal 4.5: Use reasoning skills.

10.M.4.5.1 Use logic to make and evaluate mathematical arguments. (348.02.b)

Related Content Standards – Science:

9-10 Grade Biology

<u>Standard 1</u>: Nature of Science

Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills

9-10.B.1.6.1 Identify questions and concepts that guide scientific investigations. (649.01a)

9-10.B.1.6.2 Utilize the components of scientific problem solving to design, conduct, and communicate results of investigations. (649.01b)

9-10.B.1.6.3 Use appropriate technology and mathematics to make investigations. (649.01c)

9-10.B.1.6.4 Formulate scientific explanations and models using logic and evidence. (649.01d)

9-10.B.1.6.5 Analyze alternative explanations and models. (649.01e)

9-10.B.1.6.6 Communicate and defend a scientific argument. (649.01f)

Goal 1.8: Understand Technical Communication

9-10.B.1.8.1 Analyze technical writing, graphs, charts, and diagrams. (658.02a)

8-9 Grade Earth Science

Standard 1: Nature of Science

Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills

8-9.ES.1.6.1 Identify questions and concepts that guide scientific investigations. (649.01a)

8-9.ES.1.6.2 Utilize the components of scientific problem solving to design, conduct, and communicate results of investigations. (649.01b)

8-9.ES.1.6.3 Use appropriate technology and mathematics to make investigations. (649.01c)

8-9.ES.1.6.4 Formulate scientific explanations and models using logic and evidence. (649.01d)

8-9.ES.1.6.5 Analyze alternative explanations and models. (649.01e)

8-9.ES.1.6.6 Communicate and defend a scientific argument. (649.01f)

8-9.ES.1.6.7 Explain the differences among observations, hypotheses, and theories. (649.01g)

Goal 1.8: Understand Technical Communication

8-9.ES.1.8.1 Analyze technical writing, graphs, charts, and diagrams. (658.02a)

8-9 Grade Physical Science

<u>Standard 1</u> Nature of Science

Goal 1.6: Understand Scientific Inquiry and Develop Critical Thinking Skills 8-9.PS.1.6.1 Identify questions and concepts that guide scientific investigations. (649.01a) 8-9.PS.1.6.2 Utilize the components of scientific problem solving to design, conduct, and communicate results of investigations. (649.01b) 8-9.PS.1.6.3 Use appropriate technology and mathematics to make investigations. (649.01c) 8-9.PS.1.6.5 Analyze alternative explanations and models. (649.01e) 8-9.PS.1.6.6 Communicate and defend a scientific argument. (649.01f) 8-9.PS.1.6.7 Explain the differences among observations, hypotheses, and theories. (649.01g)

None