

Environmental/Natural Resources CDE

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Career Development Purpose and Objectives:

Purpose

To foster cooperation and teamwork and provide a natural resource education experience for participants. Five member teams are tested on their basic knowledge in soils, aquatics, wildlife, forestry, plus a current topic, which changes each year. Additionally, the purpose of the event is to promote natural resource education in a manner that succeeding generations will be more environmentally literate, with the skills and knowledge to make informed decisions regarding the environment.

Objectives

Participant will demonstrate their knowledge of:

The effect individual actions have on environmental problems.

The interactions and interdependencies of our environment.

Current environmental issues.

The agencies available to assist in resource protection matters.

The need to become environmentally aware and action orientated adults.

Related Content Standards – Humanities:

Standard 1: 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:

Related Content Standards – Mathematics:

9th Grade Math

Standard 1: 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)

9.M.1.1.6 Use appropriate vocabulary.

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)

9.M.1.3.2 Identify that error accumulates in a computation when there is rounding.

(349.05.b)

Goal 2.1: Understand and use U.S. customary and metric measurements.

9.M.2.1.1 Given the formulas, find the circumference, perimeter, or area of triangles, circles, and quadrilaterals, and the volume and surface area of rectangular prisms and cylinders. (349.01.a)

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

9.M.2.2.1 Use rates, ratios, proportions, and map scales in problem-solving situations.

(349.03.a)

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

Goal 2.3: Apply dimensional analysis.

9.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 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

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Goal 5.2: Collect, organize, and display data.

9.M.5.2.1 Collect, organize, and display data in tables, charts, and graphs. (352.02.a)

10 Grade Math

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

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

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

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

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

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

Goal 4.5: Use reasoning skills.

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

Goal 5.2: Collect, organize, and display data.

10.M.5.2.1 Collect, organize, and display data in tables, charts, and graphs. (352.02.a)

Related Content Standards – Science:

8-9 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)

Standard 5: Personal and Social Perspectives; Technology

Goal 5.1: Understand Common Environmental Quality Issues, Both Natural and Human Induced

8-9.ES.5.1.1 Analyze environmental issues such as water and air quality, hazardous waste, and depletion of natural resources. (656.01a)

Goal 5.2: Understand the Relationship between Science and Technology

8-9.ES.5.2.1 Explain how science advances technology. (655.01a)

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8-9.ES.5.2.3 Explain how science and technology are pursued for different purposes. (655.01b)

Goal 5.3: Understand the Importance of Natural Resources and the Need to Manage and Conserve Them

8-9.ES.5.3.1 Describe the difference between renewable and nonrenewable resources.

(656.03a)

9-10 Grade Biology

Standard 1 Nature of Science

Goal 1.1: Understand Systems, Order, and Organization

9-10.B.1.1.1 Explain the scientific meaning of system, order, and organization. (648.01a)

9-10.B.1.1.2 Apply the concepts of order and organization to a given system. (648.01a)

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Goal 1.3: Understand Constancy, Change, and Measurement

9-10.B.1.3.1 Measure changes that can occur in and among systems. (648.03b)

9-10.B.1.3.2 Analyze changes that can occur in and among systems. (648.03b)

9-10.B.1.3.3 Measure and calculate using the metric system. (648.03c)

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Related Content Standards – Social Studies Economics: