

Name: \_\_\_\_\_ Contestant Number: \_\_\_\_\_ School: \_\_\_\_\_

**University of Wyoming “Cowboy Classic” Fall 2013  
Agriculture Technology and Mechanical Systems Career Development Event  
Team Activity – Theme: Processing Systems**

**Directions:** Work as a group to complete parts A, B and C. You may use both word and excel to produce a report of your work. Please submit all materials imbedded in a single word document. (Consult the included report scoring rubric to include all necessary criteria and formatting for your document). Organize yourselves in order to properly address all sections. While you are working you will be evaluated by an observer on your ability to work as a team. Save a copy of your document and print one copy for submission and evaluation. **Be sure to show your work.** You have 1 hour.

**Scenario:** You are currently a Wyoming cattle rancher. As we all know this year has been a very dry year all over the state of Wyoming. The demand for hay is at an all time high while supply levels are very low resulting in an increased price for quality hay. You have been put in charge of finding hay to purchase for feeding this winter. Your goal for today is to create the most profitable situation for your business.

**Part A:** Using Excel compute the total tons of hay that needs to be fed this winter. The ranch will feed:

- 50 bred heifers weighing 975 pounds for 160 days. Each day 2.5% of the heifers body weight needs fed
- 275 bred cows weighing 1200 pounds for 80 days. Each day 2% of the cows body weight needs fed
- 275 bred cows weighing 1200 pounds for 80 days. Each day 2.5% of the cows body weight needs fed.
- 60 heifer calves weighing 500 pounds for 160 days. Each day 2.5% of the calves body weight needs fed. After 60 days the calves will go to a feedlot in Torrington.
  
- 14 Bulls weighing 1800 pounds for 80 days. Each day 2% of the bulls body weight needs fed.

**Round your final answer to the nearest whole number!**

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**Part B:** After determining how many tons of hay your cattle require during the winter, you now need to determine where you are going to purchase hay from. You want to minimize costs when purchasing hay. **Show your work using Excel and use information listed in the Cost Sheet to formulate your answers below.**

1. Calculate the cost of hay delivery per ton from the different locations.
2. Calculate the total cost (hay and delivery) per ton from each location.
3. Determine what hay you are going to purchase and justify your answer.
4. Provide the total number of tons purchased and the total cost for each transaction.
5. Calculate grand total tons purchased and grand total cost.
6. Calculate the number of truckloads it will take to deliver your hay if each truck can haul 24 tons.

**Part C:** What are you going to recommend to your business partners? Use your knowledge of good business and information from Part A and B to justify your recommendation with a 1-2 paragraph response. (Answer should be similar to question #3 in part B, but more detail is required)

**Cost Sheet:**

<b>Types of Hay for sale</b>	<b>Location of Hay</b>	<b>Distance From Ranch</b>	<b>Cost Per Ton</b>	<b>Tons Available</b>
Dry Land Grass Hay	Glasgow, Montana	425 Miles	\$215 includes Delivery	192 Tons
First cutting 4x4 alfalfa bales	Lingle, WY	140 Miles	\$230 per ton	120 Tons
Second cutting 3x3 alfalfa bales	Casper, WY	100 Miles	\$250	Unlimited
Third cutting 3x3 alfalfa/grass bales	Riverton, WY	220 Miles	\$240	Unlimited
Third cutting 3x3 alfalfa bales	Riverton, WY	220 Miles	\$250	Unlimited

- **Delivery Charge: \$15 per ton/ per 100 miles delivered**
- **You must purchase at least 48 tons of hay from each seller.**

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**National FFA Agricultural Mechanics Career Development Event  
Team Activity Final Report Scoring Rubric**

Criteria	Very strong evidence skill is present (100-90%)	Moderate evidence skill is present (89-60%)	Strong evidence skill is not present (59-0%)	Points Earned	Weight	Total Score
<i>Cover page with title and state name</i>	<ul style="list-style-type: none"> <li>Cover page contains both required items.</li> </ul>	<ul style="list-style-type: none"> <li>Cover page is missing one required item.</li> </ul>	<ul style="list-style-type: none"> <li>Cover page is missing both required items.</li> </ul>		x1	
<i>Description of activity</i>	<ul style="list-style-type: none"> <li>Contains a complete description of the team activity.</li> </ul>	<ul style="list-style-type: none"> <li>Missing one component of the team activity.</li> </ul>	<ul style="list-style-type: none"> <li>Missing two or more components of the team activity.</li> </ul>		X3	
<i>Description of roles of team members to complete activity</i>	<ul style="list-style-type: none"> <li>Contains a complete description of roles and safety measures used by all team members completing the activity.</li> </ul>	<ul style="list-style-type: none"> <li>Contains a vague description of roles and safety measures used by team members completing the activity.</li> </ul>	<ul style="list-style-type: none"> <li>Fails to describe the roles and safety measures used by team members completing the activity.</li> </ul>		X3	
<i>Section to include calculations, diagrams, tables, figures, etc. related to specific CDE activity theme and identified by instructions</i>	<ul style="list-style-type: none"> <li>This section of the report includes all required items as specified in activity directions.</li> </ul>	<ul style="list-style-type: none"> <li>This section of the report is missing one required item.</li> </ul>	<ul style="list-style-type: none"> <li>This section of the report is missing two or more required items.</li> </ul>		X5	
<i>Grammar, punctuation, and spelling</i>	<ul style="list-style-type: none"> <li>Spelling, grammar and punctuation are of extremely high quality with less than 2 errors throughout the report.</li> </ul>	<ul style="list-style-type: none"> <li>Spelling, grammar and punctuation are adequate with 3-5 errors present throughout the report.</li> </ul>	<ul style="list-style-type: none"> <li>Spelling, grammar and punctuation are less than adequate with 6 or more errors present throughout the report.</li> </ul>		X2	
<i>Professional format</i>	<ul style="list-style-type: none"> <li>Report is extremely neat and professional looking with all three required formatting criteria being present.</li> </ul>	<ul style="list-style-type: none"> <li>Report is reasonably neat and professional looking with two of the required formatting criteria being present.</li> </ul>	<ul style="list-style-type: none"> <li>Report is very unprofessional in appearance with one or none of the required formatting criteria being present.</li> </ul>		X2	
<b>Total Points</b>						

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**National FFA Agricultural Mechanics Career Development Event  
Team Activity Process Rubric**

Indicators	Very strong evidence skill is present 5-4	Moderate evidence skill is present 3-2	Strong evidence skill is not present 1-0	Points Earned	Weight	Total Score
A. Managing team dynamics	<p><i>Completely committed to team dynamics, maturity and professionalism are always present.</i></p> <ul style="list-style-type: none"> <li>In team conflicts, problem-solving and decision-making methods and skills are used to produce a positive compromise.</li> </ul>	<p><i>Somewhat committed to team dynamics, maturity and professionalism are seldom present.</i></p> <ul style="list-style-type: none"> <li>In team conflicts, problem-solving and decision-making methods and skills are sometimes used to produce a compromise. Sometimes involvement in this process is limited.</li> </ul>	<p><i>Lacking team dynamics, maturity and professionalism.</i></p> <ul style="list-style-type: none"> <li>When team conflict arises minimal or no attempt at a resolution is made by team members.</li> </ul>		X 4	
B. Awareness of personality styles of others	<p><i>Totally conscious and respectful of differing attitudes, personalities and behaviors.</i></p> <ul style="list-style-type: none"> <li>Language is free of bias and completely shows an understanding and respect for others' differences in learning and personality.</li> </ul>	<p><i>Is, for the most part, respectful of others' differences in personality and behavior.</i></p> <ul style="list-style-type: none"> <li>For the most part, language conveys an understanding of others' differences in learning and personality.</li> </ul>	<p><i>Shows little tolerance for differing personalities and behaviors.</i></p> <ul style="list-style-type: none"> <li>Language used may be expressed as not understanding others' differences in personality and learning styles.</li> </ul>		X 4	
C. Uses positive and mature language and mannerisms	<p><i>Always uses mature language and mannerisms.</i></p> <ul style="list-style-type: none"> <li>Never uses immature verbal and/or nonverbal communication.</li> <li>Always has positive communications.</li> </ul>	<p><i>Usually uses mature language and mannerisms.</i></p> <ul style="list-style-type: none"> <li>Rarely uses immature verbal and/or nonverbal communication.</li> <li>Usually has positive communications.</li> </ul>	<p><i>Seldom or never uses mature language and mannerisms.</i></p> <ul style="list-style-type: none"> <li>Frequently uses immature verbal and/or nonverbal communication.</li> <li>Seldom has positive communications.</li> </ul>		X 4	
D. Reacting to changes	<p><i>Has ability to react and transition effortlessly to change.</i></p> <ul style="list-style-type: none"> <li>Shows excellent ability to adapt with unexpected change; thinks quickly; shows no sign of stress.</li> </ul>	<p><i>Typically reacts well to changes.</i></p> <ul style="list-style-type: none"> <li>Seems able to adapt to unexpected change most of the time; occasionally stresses.</li> </ul>	<p><i>Has difficulty reacting well to changes.</i></p> <ul style="list-style-type: none"> <li>Seems stressed by change.</li> </ul>		X 4	
E. Handling tasks	<p><i>Handles tasks with ease, including task assignment.</i></p> <ul style="list-style-type: none"> <li>Efficient in planning, managing and completing all tasks in a timely and organized fashion.</li> <li>All project parts are assigned equally.</li> </ul>	<p><i>Does a good job handling tasks with some ease, including task assignment.</i></p> <ul style="list-style-type: none"> <li>Is thoughtful about the planning and sequencing of tasks, but occasional priority mistakes are made.</li> <li>Some project parts are assigned equally.</li> </ul>	<p><i>Has difficulty handling tasks, including task assignment.</i></p> <ul style="list-style-type: none"> <li>Seems to have trouble deciding the order to do several tasks and struggles with completion in a timely manner.</li> <li>No project parts are assigned equally.</li> </ul>		X 4	
<b>Total Points</b>						