Objectives **Using an existing spreadsheet in MS Works**		
Instructional Goal	**Terminal Objective**	**Assessment Item**
Students will create data, a chart, and a graph using the spreadsheet program MS Works and an existing file.	Given a computer, an existing spreadsheet file created in MS Works, data, and questions, the student will demonstrate knowledge of spreadsheets by entering data, creating data, and by completing short-answer questions related to that data. The short-answer questions will be completed with an accuracy rate of at least 70%. Given a computer, an existing spreadsheet file created in MS Works, and data to input, the student will demonstrate knowledge of spreadsheets by entering data to the spreadsheet and generating a chart and graph from the entered data. The spreadsheet and generated graph will appropriately display the data and the final documents will be printed.	See attachments - Question/Task sheet and Rubric for self evaluation of question sheet See attachment - Question/Task sheet and Rubric for self-evaluation of spreadsheet and graph
Main Steps in Instructional Goal	**Performance Objectives for Main Steps**	**Assessment Items for Main Steps**
<u>Step 1</u> Open the spreadsheet file and read the directions on the question/task sheet	Given an existing MS Works spreadsheet file, the student will demonstrate opening the correct file by opening the program MS Works, by locating the file, and by double clicking on it. The correct file will be displayed. Given a question/task sheet containing directions related to the spreadsheet file, the student will demonstrate reading skills and	Open the existing spreadsheet file named *crops* in the program MS Works. Use the spreadsheet file called *crops* to answer questions 1-10 below. Use the spreadsheet file to

	comprehension by reading the directions and responding to those directions. The student will answer questions 1-10, and complete parts B and C.	respond to parts B and C below.
Step 2 Enter data into the cells to answer questions	Given short answer questions related to the spreadsheet and a scoring rubric, the student will demonstrate entering data from the questions into the appropriate cells by clicking on specified cells, by typing data into the cells, and by pressing enter. The answers will be recorded on the answer sheet and the rubric will be used to evaluate the answers until student obtains the level of Exemplary	See attached questions 1-10 and the rubric. Sample question: "Which crop will bring a greater yield: 5 acres of corn or 4 acres of sweet potatoes?"
Step 3 Enter data into the spreadsheet to create a chart	Given data to enter into specified columns in the spreadsheet file, the student will demonstrate entering the data by clicking on the appropriate cells, by typing the data, and by pressing enter. The resulting chart will be compared to the sample chart and the rubric will be used to evaluate the chart until the student obtains the level of Exemplary.	To the right of the *Total Price per Crop* column on the spreadsheet, label a new column called *Higher/Lower*. In the rows under *Higher/Lower*, enter the following number for each crop: (for sweet corn) Higher (for soybeans) Higher (for Irish potatoes) Higher (for sweet potatoes) Higher (for cotton) Higher (for peanuts) Lower (for apples) Lower In the rows in the *# of acres planted* column, enter a 25 for each crop.
Step 4 Highlight information to create a graph	Given specific data to graph, the student will generate a graph using that data by highlighting the correct data, by clicking on the New Chart icon, and by choosing the appropriate chart. The resulting graph will be compared to the sample graph and the rubric will be	▪ Using the spreadsheet, create a 3D bar graph containing the following information: A. The column headings *crop/unit, # of acres planted, 2000 yield per acre/per unit*

	used to evaluate the graph until the student reaches the level of Exemplary.	B. The crops *sweet corn, soybeans, Irish Potatoes, and sweet potatoes* and the information for each of the named crops in the columns above. ▪ Use your name as the chart title.
Step 5 Print resulting chart and graph	Given a printer, the student will execute printing the resulting chart and graph. The chart and graph will effectively display the data, and the rubric will be used to evaluate the chart and graph. The student is expected to reach a competency level of Exemplary on each part.	Print your final spreadsheet chart AND graph. Once you have printed both, compare them to the sample spreadsheet and graph. Refer to the rubric for scoring.
Subordinate Skills	**Subordinate Objectives**	**Assessment Items for Subordinate Steps**
2.1 Determine where the data should be entered	Given a short answer question and a sample spreadsheet, the student will demonstrate knowledge of cell contents by clicking on the appropriate cell. The student will continue until the resulting answer is affirmative.	Look at the picture above and click on the cell where you would enter the data to answer the following question: What would be the total yield if 10 acres of apples were planted?
2.1.1 Identify entry bar	Given a sample spreadsheet and examples and non-examples, the student will identify the entry bar by locating the information that would be displayed in the entry bar. The student will click on the correct choice.	Look at the picture above. If you were to click on cell A8, what information would be displayed in the entry bar? To choose your answer, click on one of the buttons below. A) cotton/lb. B) apples/lb. C) soybeans/bu.
2.1.2.1 Identify label	Given a sample spreadsheet and a task, the student will identify a label by clicking on a cell that contains a label. The student will continue until the resulting answer is affirmative.	Look at the sample below and click on a cell that you think contains a label.
2.1.2.2 Identify value	Given a sample spreadsheet and an	Look at the sample below

	example, the student will identify the value by clicking on a cell that contains a value. The student will continue until the resulting answer is affirmative.	and click on another cell that you think contains a value.
2.1.2.3 Identify formula	Given a sample spreadsheet and an example, the student will identify the formula by clicking on a cell that contains a formula. The student will continue until the resulting answer is affirmative.	Look at the example below. Click on a cell that you think contains a formula.
2.1.2.4 Explain formulas	Given a sample spreadsheet the student will learn to explain formulas by clicking on the answer that explains what a formula means. The student will continue until the resulting answer is affirmative.	Look at the example below. Click on the cell that you think might contain a formula.
2.1.3 Identify cell address	Given a sample spreadsheet and a question, the student will identify the cell address by clicking on the part of the spreadsheet that contains the cell address. The student will continue until the resulting answer is affirmative.	Look towards the top left of the picture below. Click on the part of the spreadsheet that contains the cell address.
2.1.4.1 Identify column	Given a sample spreadsheet the student will identify the column by clicking on a specific column. The student will continue until the resulting answer is affirmative. Given a sample spreadsheet and examples and non-examples, the student will identify the name of the column by clicking on the appropriate answer. The student will continue until the answer is affirmative.	Click on the shaded (highlighted) column. In the picture above, do you know what column is highlighted? Click on the answer that identifies the column. Column A Column B Column C Column D
2.1.4.2 Identify row	Given a spreadsheet screenshot the student will identify the row by clicking on a specific row. The student will continue until the resulting answer is affirmative.	Click on the shaded (highlighted) row.

	Given a sample spreadsheet screenshot and examples and non-examples, the student will identify rows by clicking on the appropriate answer. The student will continue until the answer is affirmative.	Do you know what row is shaded? Click on the correct answer. Row 1 Row 2 Row 3 Row 4 Row 5
2.1.4.3 Identify cell	Given a sample spreadsheet screenshot and an example of cells, the student will identify a cell by clicking on a specific cell. The student will continue until the resulting answer is affirmative. Given a sample spreadsheet and examples and non-examples of cells, the student will identify cells by clicking on the appropriate answer. The student will continue until the answer is affirmative.	Click on the *cell* with the dark lines around it. Look at the top left of the picture below. Do you see where the spreadsheet *displays* the cell address? Click on the part of the spreadsheet that displays the cell address.
2.1.5 Define spreadsheet	Given the definitions of a spreadsheet, a screenshot of an existing spreadsheet, the student will define the spreadsheet by clicking on the correct definition from the choices given. The student will continue until the resulting answer is affirmative.	Look at the definitions below. Click on the button A, B, or C, that gives the best definition of a spreadsheet: A) A bunch of lines that crisscross and hold words and numbers B) A computer program that will let you compute numbers and make graphs. C) A program that lets you type in it
2.2 Click in the cell and type data and press enter	Given a spreadsheet file and a task, the student will execute entering data by clicking on the appropriate cell, by typing the specified data, and by pressing enter. The cell will display the specified information.	Type your name in cell A1.
3.1 Determine where the data should be entered	Given a task and a spreadsheet screenshot, the student will	Look at the picture above and click on the cell where

	demonstrate knowledge of cell contents by clicking on the appropriate cell that will calculate the data that is needed. The student will continue until the resulting answer is affirmative.	you would enter the data and answer the following question: What would be the total yield if 10 acres of apples were planted?
4.1 Determine what data should be highlighted	Given a spreadsheet screenshot and highlighted information, the student will demonstrate knowledge of highlighted information by clicking on the correct description of what is highlighted in the screen shot. The student will continue until the resulting answer is affirmative.	Look at the picture of the spreadsheet below. Click on the button (A, B, or C) that best describes the information that is highlighted: A. The column labels, CROP/UNIT, # ACRES PLANTED, 2000 YIELD PER ACRE, and 2000 PRICE DOLLARS, and five crop names and the data for those crops. B. The column labels, CROP/UNIT, # ACRES PLANTED, 2000 YIELD PER ACRE, and 2000 PRICE DOLLARS, and four crop names and the data for those crops. C. The column labels, CROP/UNIT, # ACRES PLANTED, and 2000 PRICE DOLLARS, and the four crop names and the data for those crops.
4.2 Click, hold, and drag to highlight	Given a spreadsheet file and the task of creating a chart including specific data, the student will execute highlighting data by clicking, holding, and dragging the cursor over the specified cells. The designated cells will be highlighted.	Using the spreadsheet, create a 3D bar graph containing the following information. A. The column headings CROP/UNIT, # ACRES PLANTED,

		2000 YIELD PER ACRE/PER UNIT B. The crops *sweet corn, soybeans, Irish potatoes,* and *sweet potatoes* and the information for each of the named crops in the columns above.
4.3 Identify New Chart icon	Given a screenshot of an icon bar, the student will identify the New Chart Icon by clicking on the correct icon. The student will continue until the resulting answer is affirmative.	Below is a picture of a toolbar. Click on the New Chart icon.
4.4 Determine what chart to use	Given a sample screenshot of the New Chart dialog box, the student will identify and select the icon for the 3D bar graph by clicking on it. The student will continue until the resulting answer is affirmative.	Click on the box that you think contains the 3D bar graph.
4.5 Type title	Given a sample of the New Chart dialog box, the student will identify and select the TITLE area by clicking on it. The student will continue until the resulting answer is affirmative.	On the chart above, click in the area where you would type your first and last name.

Entry Behaviors	**Entry Behavior Objectives**	**Assessment Items for Entry Behaviors**
Demonstrate reading skills and comprehension	Given the pretest questionnaire, the student will demonstrate reading comprehension by responding appropriately.	Sample question from the questionnaire: Circle the best answer. 1. Have you ever used a spreadsheet? Not at all Yes, once or twice Yes, quite often
Demonstrate a basic understanding of Windows programs and procedures.	Given a Windows computer, the program MS Works, and a file, the student will demonstrate opening the file. The correct file will be displayed. Given a Windows computer, the program MS Works, and a file, the student will demonstrate printing a file. The file will be printed.	Opening of files in the computer lab in Microsoft Works. Print documents that have been completed in Microsoft Works.