Spreadsheet Success

Topic: Computer Applications

Assessment Approach: Performance tests that may allow use of resources (e.g.; Internet, books)

Total Class Periods: 1 @ 50 minutes per class period

Materials/Resources: Instructor provides the printed test instructions**.**

Topic: Computer Applications

Core Standards (skill and knowledge) being tested by this scenario include:

- *CA3 – Create Spreadsheets*
  - design spreadsheet
  - prepare a chart
  - format spreadsheet
  - create formulas
  - edit spreadsheet
  - print and save spreadsheet

Level of Mastery (circle one): 1 (2) 3

Level Two - Practice Level - learning is characterized by individual and group practice work, research, analysis and interpretation, individual practice work on skill standards. Key terms: Understand, Practice, Interpret, Assess, Maintain Records

State Curriculum/Standards Connection

State IT/Technology Standard(s)

- *Not applicable*

Related State Academic Standard(s)

- *Not applicable*

Assessment Scenario: Spreadsheet Success

You work part-time at King's Food Supplies, and your supervisor has tasked you to create a spreadsheet showing sales to date for all regions by quarter. Figures for each region are as follows:

Region	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Central	41234	52678	54987	
Eastern	38906	48907	43215	
Midwest	22349	29845	34985	
Mountain	21345	23123	21568	
Western	56231	54211	53678	

Part One: Creating the Spreadsheet, writing formulas and entering data (50 points)

Create the spreadsheet. Include a total sales figure for each region that will automatically recalculate if any of the quarterly figures change. Include an appropriate title for the spreadsheet. Format the spreadsheet so it is attractive and easy to read. Print the spreadsheet in formula view for the supervisor to review.

Part Two: Revising data, revising format and creating a graph. (25 points)

2a. You now have 4th Quarter figures for all regions. Add them to the spreadsheet. The figures are as follows:

Central	47895
Eastern	45609
Midwest	42980
Mountain	22765
Western	50456

2b. Your supervisor would like to see the following formatting changes:

- Format the title and headings with a larger font and add shading
- Bold and center all headings
- Format total sales as currency and all other numbers with commas and 2 decimal places

2c. Create a pie graph for the Midwest Region.

2d. Print the reformatted spreadsheet and the pie graph for the supervisor to review.

Part Three: Additional Questions (12 points)

3. In the following illustration of a spreadsheet, assume a column is inserted between the Quarter 3 and Grand Total column for the Quarter 4 figure. After entering the column and 4th Quarter figure, the grand total did not change. Give 2 possible reasons for this. (5 points)

Quarter 1	Quarter 2	Quarter 3	Grand Total
456,000	34,666	356,000	846,666

4. To clearly illustrate the figures as shown in the sample spreadsheet in question 1, identify what you think would be the best type of graph to depict the figures and explain why you have chosen that graph type. (5 points)

5. If total figures in a spreadsheet are not automatically recalculating correctly, what steps would you take to fix the problem? (5 points)

Scoring Guidelines: Spreadsheet Success (Total possible points: 87)

Core Standards (skill and knowledge) being tested by this scenario include:

- *CA3 – Create Spreadsheets (* design spreadsheet, prepare a chart, format spreadsheet, create formulas, edit spreadsheet, print and save spreadsheet)

Parts One and Two: Total possible points: 75

Standard or Skill/Knowledge **Part One: (50 pts)**	**Meets Standard (50 pts)**	**Approaching Standard (45 pts)**	**Minimum Standard (30 pts)**	**Does Not Meet Standard (0 pts)**
Create Spreadsheet & enter data (15 pts)	• *All data entered accurately/completely* • *Appropriate title included (15 pts)*	• *90% of data entered accurately/completely* • *Appropriate title included (13 pts)*	• *75% of data entered accurately/completely* • *Appropriate title included (8 pts)*	• *Less than 75% of data accurate/complete* • *No title included*
Formatting Spreadsheet (5 pts)	• *Easy to read formatting* • *Formatting enhances understanding by providing proper emphasis (5 pts)*	• *Formatting 90% readable and enhancing of understanding by providing proper emphasis (4 pts)*	• *Formatting 75% readable and enhancing of understanding by providing proper emphasis (2 pts)*	• *Poorly formatted – less than 75% readable and understandable*
Writing Formulas (30 pts)	• *Correct formula entered for total sales (30 pts)*	• *Formula entered for total sales 90% correct (28 pts)*	• *Formula entered for total sales 75% correct (20 pts)*	• *Incorrect formula or no formula* • *No total sales figures included*
Part Two: (25 pts)	**Meets Standard (25 pts)**	**Approaching Standard (20 pts)**	**Minimum Standard (10 pts)**	**Does Not Meet Standard (0 pts)**
Revising Data (5 pts)	• *All data revised accurately (5 pts)*	• *90% data revision accuracy (4 pts)*	*75% data revision accuracy per instructions (2 pts)*	• *Most revisions not done or done inaccurately*
Revising Format (5 pts)	• *Format revised accurately per instructions (5 pts)*	• *90% format revision accuracy per instructions (4 pts)*	• *75% format revision accuracy per instructions (2 pts)*	• *Most revisions not done or done inaccurately per instructions*
Creating a Chart or Graph (10 pts)	• *Accurate graph (4 pts)* • *Title formatted (2 pts)* • *Headings formatted (2 pts)* • *Numbers formatted (2 pts)*	• *Accurate graph (4 pts)* *Two of the following (2 pts each)* • *Title formatted* • *Headings formatted* • *Numbers formatted*	• *Inaccurate graph* *One of the following (2 pts each)* • *Title formatted* • *Headings formatted* • *Numbers formatted*	• *Graph not done* • *Incorrect numbers graphed*
Printing Spreadsheet and Pie Graph (5 pts)	• *Spreadsheet and graph printed accurately (5 pts)*	• *90% accuracy in printed spreadsheet and graph (4 pts)*	• *75% accuracy in printed spreadsheet & graph (4 pts)*	• *Spreadsheet and graph not printed*

Scoring Guidelines

Additional Questions: Spreadsheet Success (Total possible points: 12)

3. In the following illustration of a spreadsheet, assume a column is inserted between the Quarter 3 and Grand Total column for the Quarter 4 figure. After entering the column and 4th Quarter figure, the grand total did not change. Give 2 possible reasons for this. (4 pts)

Quarter 1	Quarter 2	Quarter 3	Grand Total
456,000	34,666	356,000	846,666

Possible Answers:

- *The 4th quarter column figures were not added in the appropriate place.*
- *The formula for totals needs to be updated to include the new column.*
- *A formula was not entered correctly or at all for the total sales column.*

4. To clearly illustrate the figures as shown in the sample spreadsheet in question 1, identify what you think would be the best type of graph to depict the figures and explain why you have chosen that graph type. (4 pts)

Possible Answers:

- Pie/donut graph –both graph types clearly shows the relative share for each quarter by size of piece
- Bar/column/cylinder/cone/pyramid graph – all are variations of a bar graph and clearly show relative share by size of bar

5. If total figures in a spreadsheet are not automatically recalculating correctly, what steps would you take to fix the problem? (4 pts)

Steps to be followed:
1) Review the formula at the formula bar for accuracy.
OR
1) Print the spreadsheet in formula view to review for accuracy.
2) Using either of the above processes, locate the error and correct.

SCORE SHEET – Spreadsheet Success
ITCC Scenario-Based Assessments

Total Possible Points: 90

Date: _____ Rater Name: _____

School: _____ Team: _____

Student #	Part 1 (50 pts)	Part 2 (25 pts)	Q3 (4 pts)	Q4 (4 pts)	Q5 (4 pts)	Total Pts. (90)
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