

Lemonade Stand Instructions

You will be assigned to partners to complete this Project. This project will count as a ***Test Grade***.

You will complete 15 days on the lemonade game website, while your partner records all your data information. **(Make sure to click on the red *Fast Forward* button when you see the 'movie' come up on the Lemonade Stand screen.)** When you have completed your 15th day, click on the red bankrupt button on the Inventory/Purchasing Screen to get your End of Season Report. After your partner has recorded all of your information, then you will switch and record your partner's data information. Record the information on the Data Form Sheets that are provided for you.

Go to: www.coolmath4kids.com/mathgames/lemonade

Some Helpful Information To Help With Your Business:

- A pitcher without ice will serve 12 cups of lemonade
- A pitcher with a good serving of ice will serve 20-25 cups of lemonade
- A day with bad weather you will have about 15-25 buying customers
- A day with good weather you will have about 50-75 buying customers

REWARD

Who Earned the MOST \$\$\$ at their Lemonade Stand at the end of the 15 days?

Prizes to the 1st, 2nd, and 3rd Highest Net Profit Lemonade Stand Owners!!!

1st Place: Free 100 to replace lowest daily grade and an Extra Surprise

2nd Place: 20 points added to lowest daily grade and an Extra Surprise

3rd Place: 10 points added to lowest daily grade and an Extra Surprise

Data Forms

You will record the following data on your partner's data forms:

- On the Inventory/Purchasing Screen you will record:
 - High Temperature
 - Weather Forecast
 - Money before you purchase any more cups, lemons, sugar, or ice cubes.
 - How many cups, lemons, sugar, and ice cubes you started out with at the beginning of each day
- On the Acquisition Pages for each supply you will record:
 - How many cups, lemons, sugar, and ice cubes you have after you make your purchases of more supplies.
- Back on the Inventory/Purchasing Screen you will record:
 - How much money you have after you make your supply purchases
- On the Price/Quality Control Screen you will record:
 - All of your Price/Quality Control Information (which you can change each day if you would like): Price per cup, lemons per pitcher, sugar per pitcher, and ice per cup.
- On the Lemonade Stand Screen you will record:
 - Customers make comments that are listed in quote bubbles during the 'movie'. You are recording what the most common quote is.
 - You will check off Yes or No if you Sold Out of Lemonade and if you did Sell Out, write what you ran out of or were short of (or both).
- On the End of Day Reports Screen you will record:
 - The first sentence says, "You managed to sell 20 cups to 80 potential customers. You will need to record these numbers.
 - The second sentence says, " I'd say this is Pitiful!" You need to record the opinion.
 - You will then need to record the Customer Satisfaction and Popularity Percentage
 - On this same screen record how much money you have left/earned at the end of the day
- On the Inventory Losses screen you will record:
 - What your losses are for the day

Spreadsheet #1

When both you and your partner have completed all 15 days and the End of Season Report than you will need to make the following 2 Excel Spreadsheets with corresponding graphs.

1. Income Report Spreadsheet

- ❑ In A1 title the spreadsheet **Income Report** (Merge and Center to column L, pick your own font and size)
- ❑ In A2 type **Your Name – Jansen #** (Merge and Center to column L, pick the same font and size)
- ❑ Type the following Column Headings – separate the words using ALT+ENTER
 - In A3 type **Day**
 - ❑ Type in the numbers 1-15 in cells A4 through A18
 - ❑ Format these cells to 0 decimal places
 - In B3 type **High Temp.**
 - ❑ Type in your Temperatures for days 1-15
 - ❑ Format these cells to have 0 decimal places
 - In C3 type **Weather Forecast**
 - ❑ Type in your Weather Forecasts for days 1-15
 - In D3 type **Money Before Purchases**
 - ❑ Type in the Money you had before purchases for days 1-15
 - ❑ Format these cells to Currency with 2 decimal places
 - In E3 type **Money After Purchases**
 - ❑ Type in the Money you had after purchases for days 1-15
 - ❑ Format these cells to Currency with 2 decimal places
 - In F3 type **Money Spent on Purchases**
 - ❑ Type in the formula to calculate how much money you spend each day on stocking your inventory (on purchases)
 - ❑ Format these cells to Currency with 2 decimal places
 - In G3 type **Price Charged Per Cup**
 - ❑ Type in How much you charged per cup for days 1-15
 - ❑ Format these cells to Currency with 2 decimal places
 - In H3 type **Lemons Per Pitcher**
 - ❑ Type in how many lemons you used per pitcher for days 1-15
 - ❑ Format these cells to 0 decimal places
 - In I3 type **Sugar Per Pitcher**
 - ❑ Type in how many cups of sugar you used per pitcher for days 1-15
 - ❑ Format these cells to 0 decimal places
 - In J3 type **Ice Per Cup**
 - ❑ Type in how many ice cubes you used per cup for days 1-15
 - ❑ Format these cell to 0 decimal places

Spreadsheet #1 Continued

- In K3 type **Ending Balance**
 - Type in how much money you had at the end of the day for days 1-15
 - Format these cells to Currency with 2 decimal places
- In L3 type **Money Made**
 - Type in a formula that calculates how much money you made for days 1-15
 - Format these cells to Currency with 2 decimal places
- In A20 type **Average**
 - In B20 enter the formula to average cells B4 through B18
 - Copy this formula through cell L20
 - Delete the error message in C20
 - Format the cells to Currency with 2 decimal places
- In A21 type **Total**
 - In cell E21 type in a formula to calculate the total of cells E4 through E18
 - Copy this formula to cells F21 & K21
 - Format these cells to Currency with 2 decimal places
- In A22 type **Net Profit/(Loss)**
 - In B22 type in a formula to calculate your Net Profit or Loss
 - Put a Conditional Format in this cell that makes it turn yellow with a bold font if it is greater than 0, or red with a bold font if it is less than 0

Spreadsheet #2

2. Customer Report Spreadsheet

- In A1 title the spreadsheet **Customer Report** (Merge and Center to column J, pick your own font and size)
- In A2 type **Your Name – Jansen #** (Merge and Center to column J, pick the same font and size)
- Type the following Column Headings – separate the words using ALT+ENTER
 - In A3 type **Day**
 - Type in the numbers 1-15
 - Format these cells to 0 decimal places
 - In B3 type **High Temp.**
 - Copy and Paste Column (Cells B3 through B18) from Income Report
 - In C3 type **Potential Customers**
 - Type in your Potential Customers for days 1-15
 - Format these cells to have 0 decimal places
 - In D3 type **Cups Sold**
 - Type in the Cups Sold for days 1-15
 - Format these cells to have 0 decimal places
 - In E3 type **Percentage Sold**
 - Type the formula to calculate the percentage of customers you sold to
 - Format these cells to Percent with 0 decimal places
 - In F3 type **Customer Satisfaction**
 - Type in the Customer Satisfaction percentages as a decimal for days 1-15
 - Format these cells to Percent with 0 decimal places
 - In G3 type **Popularity**
 - Type in the Popularity percentages as a decimal for days 1-15
 - Format these cells to Percent with 0 decimal places
 - In H3 type **Calculated Opinion**
 - Type an IF function for cell H4 that assigns the text “Great” if the value in cell E4 is greater than 50%; otherwise the IF function assigns the text “Good”.
 - In I3 type **Actual Opinion**
 - Type in the opinion the computer gave you for days 1-15
 - In J3 type **Match?**
 - Type an IF function for cell J4 that assigns the text “Yes” if the value in cell H4 is equal to I4; otherwise the IF function assigns the text “No”.
 - In A20 type **Average**
 - In B20 enter the formula to average cells B4 through B18
 - Copy this formula through cell G20
 - Format cells B20 through D20 with 0 decimal places

- Format cells E20 through G20 to Percent with 0 decimal places

Graphs

3. Graphs – You and your partner's graphs should not look anything alike!!! On the second graph you and your partner should not choose the same chart style!!!

- Make a Graph Titled **Temperature Line Graph**
 - Using the Chart Wizard make a line graph charting the different temperature for days 1-15
 - Under Titles - Category (X) Axis is **Day**
 - Under Titles - Value (Y) Axis is **Temperature**
 - Under Gridlines - Show the major gridlines on the Value (Y) Axis
 - Under Legend - Do Not show the Legend
 - Under Data Labels – Value should be checked off
 - Under Data Table – Data Table should be checked off, Show Legend Keys should not be checked off
 - Make this graph As A New Sheet
- Make a graph from your Customer Report Spreadsheet comparing **Customer Satisfaction to Percentage Sold**
 - Choose what type of Chart you would like
 - Show the Legend
 - Add a chart title, X Axis title, and Y axis title
 - Make sure it makes sense!
 - Hint: This graph should probably be either a column or bar graph
 - Make this graph As A New Sheet

PRINT:

Please print and turn in the following pages (You should have 10 pieces of paper total – no more, no less!!!): (Everything from Excel should be printed in landscape and fit to 1 page – you will only be able to print once and if it is more than one page or not in landscape it will be an automatic 5 point deduction from your grade!!) Make sure your name and class period is typed on each sheet of paper. If it is written, I will assume you cheated and it will be an automatic 0!!

1. **4 page** Data Form Packet
2. **1 page** Income Report Spreadsheet
3. **1 page** Income Report Spreadsheet with formulas
4. **1 page** Customer Report Spreadsheet

5. **1 page** Customer Report Spreadsheet with formulas
6. **1 page** of Temperature Line Graph
7. **1 page** of Customer Satisfaction vs. Percentage Sold Graph