

Restaurant Wrangle Prep and Keys

General info

“Restaurant Wrangle” is a 4th grade data analysis project meant to give students practice with these TEKS

- 4.9.A - represent data on a frequency table, dot plot, or stem-and-leaf plot marked with whole numbers and fractions; and
- 4.9.B - solve one- and two-step problems using data in whole number, decimal, and fraction form in a frequency table, dot plot, or stem-and-leaf plot.

We plan to use this project in our afterschool program where we have one “math coach” per student. I plan to print a copy of the student materials for each student and prepare a 2-pocket folder for each student for them to use to keep their project materials together.

Instructions for Math Coaches:

Please read through the student material to learn how the project works and come to me with any questions.

At the beginning of the project, give your scholar a project folder with the instructions/Business plan sheet and the first project already in it.

Explain the project to your scholar.

Take a few minutes to think about the different kinds of restaurants and how they might decide which one to buy. Have them enter the type of restaurant they want to buy on the front page of the project information. You will use the Business Plan on the back to collect and compare the information from the research projects. The idea is to see if the information they learn in their research confirms their idea about which kind of restaurant they want to buy or if they change their mind.

Help the scholar work through the first research project and record his/her rankings on the business plan.

As the scholar finishes one project you can give him/her the next. It may take more than 1 day for some scholars to complete the whole project and that is fine!

Research Project 4 requires the scholars to actually find 15 people to survey. This can be adults or other scholars, but they should really do the survey.

When the scholar has completed all the projects, help him/her complete the rest of the business plan. Turn in the business plan to the “Banker.” This might be a different person at each school, so find out who the banker is at your school before starting the project.

The banker will have a small prize, a chef’s hat or something similar, to congratulate the scholar for completing the project. Help the scholar decorate a sticker with the name of his/her restaurant to put on his/her chef’s hat.

Project 1: If you buy it, they will come! – Key

Italian/Pizza	Frequency	Visits per year
At least once a week	4	(X 52) 208
Once every 2 weeks	3	(X 26) 78
Once a month	7	(X 12) 84
Once every 2 months	6	(X 6) 36
Once a year or less	10	(X 1) 10
	Total visits per year: 416	

Project 2: Sales & Profit – Key

Finish the Stem and Leaf plot for the BBQ restaurant by adding the sales of \$17 and over. Then calculate the Gross Sales and Profit.

Individual sales (Gross)
\$10.29
\$10.43
\$10.44
\$10.60
\$10.99
\$11.03
\$11.21
\$11.31
\$11.40
\$11.94
\$12.17
\$12.70
\$12.79
\$13.10
\$13.65
\$13.70
\$13.80
\$13.80
\$14.76
\$14.96
\$14.99
\$15.00
\$16.05
\$16.61
\$16.65
\$17.51
\$17.80
\$17.94
\$18.10
\$19.42

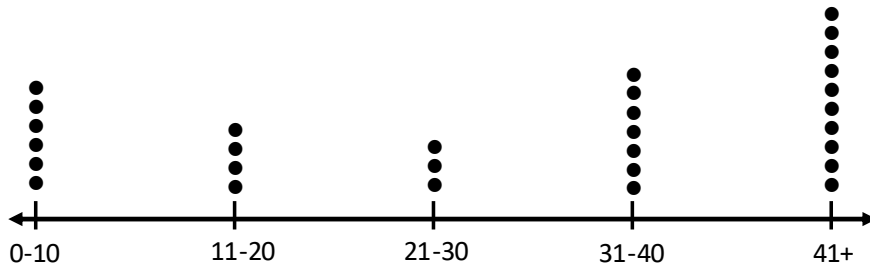
BBQ		
Stem	Leaf	Total:
10	29, 43, 44, 60, 99	\$52.75
11	03, 21, 31, 40, 94	\$56.89
12	17, 70, 79	\$37.66
13	10, 65, 70, 80, 80	\$68.05
14	76, 96, 99	\$44.71
15	00	\$15.00
16	05, 61, 65	\$49.31
17	51, 80, 94	\$53.25
18	10	\$18.10
19	42	\$19.42

18 | 42 means \$18.42

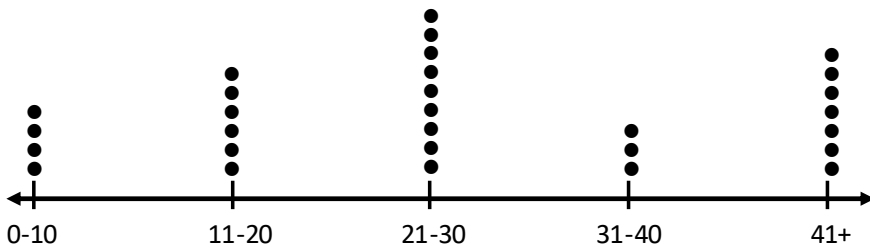
Gross Sales:	415.14
Expenses:	377.78
Profit:	37.36

Project 3: Location! Location! Location! -- Key

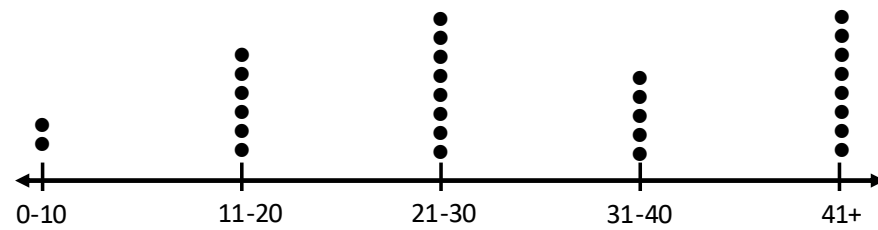
Steak (minutes) less than 30 = 13



Chicken (Minutes) less than 30 = 19



Italian (Minutes) – less than 30 = 16



BBQ (Minutes) less than 30 = 11

