**Business Expo Design**

**A. Tasks**

Students will be expected to explore and give a presentation on an area of interest (Business Expo) that involves financial mathematics.

*1) Collect primary or secondary data (statistical or informational) related to the topic.*

*2) Organize and present a project- Business Expo.*

*3) Create and solve a contextual problem that is related to the project.*

*4) Make informed decisions and plans related to the project.*

*5) Compare advantages and disadvantages as part of the project.*

**B. Activities**

*Before Expo-*

1) Students will be group into four categories:

- food

- drinks

- services

- products

2) Students should plan their business as we move on with their lessons (*including source of capital, how to set up their business, etc*).

3) Do a feasibility study. Each group will focus on their business target and must achieve their goal. (*Target – to earn 200 yuan net profit*)

4) Interview businessmen related to their area of business they wish to explore.

5) Do marketing – ads (*promotion techniques*).

6) Attend business lectures and international fair.

*During Expo-*

1) Set up the booth every day for 3 days (March 26-28, 2014)

2) Sell products or services.

3) Do calculations in class.

4) Maintain cleanliness and safety in the surrounding area.

*After the Expo-*

1) Reflect on their business activities.

2) Submit reports.

3) Do a powerpoint summary of their activities.

**C. Reports**

1) Students should prepare and fill up some activity paper works everyday (*such daily income, expenses, profit, loss, etc*).

2) Students should use their prior knowledge in graphing- how to display data to show relations of variables involve in their math observations during the business expo. (*For example, the relation of price and quantity, daily income and quantity, number of customers and income, time and income, and the like.*)

3) Students will write their business plan, business target, and present their business plans, execution, summary, reflection, and conclusion at the end of the business expo in powerpoint.

In your reports and presentation, these specific outcomes should be meet:

1) Compare the unit price of two or more given items.

2) Solve problems that involve determining the best buy, and explain the choice in terms of the cost as well as other factors, such as quality and quantity.

3) Compare, using examples, different sales promotion techniques.

4) Determine the percent increase or decrease for a given original and new price.

5) Describe, using examples, various methods of earning income.

6) Identify and list jobs that commonly use different methods of earning income (e.g., hourly wage, wage and tips, salary, commission, contract, bonus, shift premiums).

7) Determine in decimal form, from a time schedule, the total time worked in hours and minutes, including time and a half and/or double time.

8) Determine gross pay from given or calculated hours worked when given - the base hourly wage, with and without tips; the base hourly wage, plus overtime (time and a half, double time).

9) Determine gross pay for earnings acquired by: base wage, plus commission; single commission rate

10) Explain why gross pay and net pay are not the same.

11) Identify income and expenses that should be included in a personal budget.

12) Explain considerations that must be made when developing a budget (e.g., prioritizing, and recurring and unexpected expenses).

13) Create a personal budget based on given income and expense data.

14) Collect income and expense data, and create a budget.

15) Modify a budget to achieve a set of personal goals.

16) Solve problems that involve systems of linear equations in two variables, graphically and algebraically.

17) Students will be expected to determine the characteristics of the graphs of linear relations, including the intercepts, slope, domain, and range.

18) Students will be expected to describe and represent linear relations, using words, ordered pairs, tables of values, graphs, and equations.

19) Students will be expected to demonstrate an understanding of relations and functions.

20) Students will be expected to interpret and explain the relationships among data, graphs, and situations.

**D. CRITERIA**

Math Reports (35%)

- This includes daily calculations, business plan, and overall report of the business.

- Did the group meet all the outcomes they need to achieve?

Business Marketing (10%)

- How the students promote their business before (ads/flyers) and during the business expo?

Group Effort (35%)

- This is how the group executes their tasks on the Business Expo.

Business Target (5%)

- Did the group attain their goal of their business plan?

Presentation (15%)

- How the group presents their overall perspective of the business expo and their reflection.

***Math Reports include:***

- Business Target

- Overview of the business

- Business Interviews

- Source of Capital

- List of Products and services

- List of gross income, net income, profit, expenses, wages

- Graphs of some statistical data (2 functions and 1 relation but not function)

(Please refer to the specific outcomes)

***Math Presentation should cover:***

- Business Goal

- Summary of the business

- Evidence of the activities

- Reflection

- Conclusion and Recommendation