

BIZWORLD™

MEMO 1 KEY

Name:

Date

Message:

Please answer the following questions.

1. What is a business?

[a sole proprietor, partnership, or corporation that creates a product or service; the occupation, work, or trade in which a person is engaged; a commercial enterprise or establishment]
(Answers may vary)

2. List 5 different types of businesses.

[hardware store, restaurant, doctor's office, farming, internet search, university...] (Answers may vary)

3. What is the measure of a successful business?

[make money (profit), creation of jobs, benefits the community (by bringing money into the community, products or services)...]
(Answers may vary)

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MEMO 2 KEY

Name:

Date:

Message:

Congratulations! You and a group of your classmates are going to start and run your own business. The following list includes steps that every company must complete in order to be successful. Number the steps (1 to 6) in the order you think they should happen.

- 5 Sell your product
- 3 Manufacture, or make, a product efficiently
- 4 Market and advertise your product
- 2 Design a product
- 6 Determine whether your company is profitable
- 1 Raise money to finance your company

Write two additional steps you think are important in order for a company to succeed. (Answers may vary)

1. [estimate expenses or the cost of doing business]

2. [hire the best employees]

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MEMO 3 KEY

Name:

Date:

Message:

The following is a list of earning and unemployment rates, based on education level, for individuals ages 25 and over working full-time.

Education Level	Unemployment Rate	Median Annual Salary
Graduate degree	2.9%	\$55,328
College degree	3.3%	\$46,800
Some college, no degree	5.2%	\$32,344
High school diploma	5.5%	\$28,808
Some high school, no diploma	8.8%	\$20,592

Source: Unemployment rate, 2003 annual average: Bureau of Labor Statistics; earnings, March 2003: Bureau of the Census median weekly earnings time fifty two weeks.

Questions: Answer the following questions based upon the above information.

1. What are some examples of graduate degrees?
Sample answers: Masters in Business Administration, medicine, dentistry, optometry, law, Certified Public Accountant
2. Why do you think the unemployment rate for individuals with a graduate degree is the lowest?
Answers may vary - graduate degrees often provide a career specialty in a much needed industry
3. Based on this information, calculate the difference in earnings between an individual with a college degree and a high school diploma over a 30 year career.

$$(30 \times \$46,800) - (30 \times \$28,808) = \$539,760$$

Note: This is an earning greater than half a million dollars for what is typically a 4-year college degree

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MEMO 4 KEY

Name:

Date:

Message:

Three new businesses were incorporated in town last month. In the first month of business Steve's Candy, LLC generated \$3,317 in revenue; Abby's Clam Shack, Inc. brought in \$1,288; and Sarah's Sports Shop received \$5,512. Steve's Candy, LLC had \$1,727 in total expenses for the month, Abby's Clam Shack, Inc. had \$973 in expenses and Sarah's Sports Shop paid \$3,275 in total expenses last month.

Which company would you say was most successful in its first month of business? Why?

Steve's Candy, LLC could be identified as the most successful as it generated the most profit.

Revenue - Expenses = Profit
Steve's Candy, LLC: \$3,317 - \$1,727 = \$1,590

Or

Sarah's Sports Shop could be identified as the most successful as it generated the most revenue.

Jeff's Computer Repair Shop

Jeff has been working small jobs for the last four years to start up his own computer repair company. In all, he has been able to save \$13,801.48. In order to have his own space outside his parent's home, he wants to rent a small retail space. The least expensive space he found costs \$850.00 a month. He decides to rent the space.

1. If Jeff hasn't made any profit yet, based on how much Jeff has saved, how long will he be able to rent the space?

16 months or 16.24

2. In the first month, his revenue was \$3,217.40. His expenses, including rent, and the costs for repair, was \$1,912.50. He also paid an employee a salary of \$565. What was his overall profit for the month?

$(\$1,912.50 + \$565 = \$2,477.5)$ $(\$3,217.40 - \$2,477.5 = \$739.90 \text{ profit})$

3. If he continues to do about the same each month, how much profit will he have by the end of the year?

$\$739.90 \times 12 = \$8,878.8$

4. Unexpectedly, one of Jeff's customers didn't make a payment on a big repair. What was Jeff's overall profit for that month if his revenue from other customers was \$1,268.49, his expense for the lost repair was \$418.20, and he still has to pay for rent and his employee's salary?

$\$1,268.49 - (\$418.20 + \$850 + \$565) = - \$564.71$

5. In one year, Jeff has three slow months of business. He only brings in an average profit of \$300.00 for each of the three months, and the remaining nine months he brings in the same monthly average from question #2. What will his annual profit be for one year?

$(\$300 \times 3 = \$900) + (\$739.90 \times 9 = \$6,659.10) = \$7,559.10$

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MEMO 5 KEY

Name:

Date:

Message:

Making a pitch to the venture capitalist is your company's first opportunity to raise the money (\$BB) you will need to fund the design process. Your company will need approximately \$15-20 BB for design expenses.

List 5-10 things about your company, employees or product that the venture capitalist may want to consider before determining if and/or how much money to invest in your company. *(Answers will vary)*

1. Strong leadership	6. <i>(Answers will vary)</i>
2. Creative design ideas	7. <i>(Answers will vary)</i>
3. Good teamwork	8. <i>(Answers will vary)</i>
4. Ideas for a good marketing campaign	9. <i>(Answers will vary)</i>
5. An understanding of the market	10. <i>(Answers will vary)</i>

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MEMO 6 KEY

Name:

Date:

Message:

1. Describe your friendship bracelet design. Include specifics such as the combinations of colors and the style of weave you envision.

(Answers will vary)

2. How might the sale of your friendship bracelet be influenced if another company were to copy the design?

Depending on the size of the market (consumers of a product or service), competition can reduce sales, therefore decrease revenue and profit.

3. How can a company or an individual protect or prevent others from copying a unique design?

*A **patent** is protection granted by a government that gives the creator of an invention (product, design or process) the sole right to make, use, and sell that invention for a set period of time.*

Jack's MP3 Carrying Case Company

1. Jack's MP3 Carrying Case Company (also known as MP3-C3) has just launched 5 new colors to his collection of MP3 cases; violet, black, white, red, and navy. Jack sells his carrying case collection using ONLY three colors combined in each large order from big companies. What is the total number of color combinations that Jack can send to a corporation? (The corporations don't care what colors they receive in each shipment).

(10) combinations

2. MP3-C3 decides to make cases from hard plastic, leather, silicon and neoprene. If each of the 5 colored cases is made in each of the four materials, what is the total number of case choices that MP3-C3 can offer interested corporations?

4 styles x 5 colors = 20 different types of case choices

3. After manufacturing the cases in all the different case materials and colors in equal proportions, Jack quickly grabbed three MP3 cases from a box of 20 samples to describe their varying quality to a customer. What is the probability that he will not pick out a violet or black case?

8/20 or 2/5 of the cases are either violet or black, therefore, the probability of choosing a case that is NOT violet or black is the remaining 3/5.

4. What is the probability that Jack will randomly pick a case from the same box of samples that is either made of leather, silicon or neoprene? Explain your answer.

1/4 of the cases are leather, 1/4 of the cases are neoprene, and 1/4 of the cases are silicon, therefore the probability of picking either of these is 3/4 or 75%.

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MEMO 7 KEY

Name:

Date:

Message:

Many products that are produced in large numbers utilize a manufacturing technique known as an assembly line. One example of a product commonly manufactured through the use of the assembly line process is the automobile.

1. Explain how an automobile is assembled by the assembly line process.

The assembly line is defined as a manufacturing process in which a product is assembled by many people or machines doing specific parts of production. Automobiles are assembled in this way as people or machines repeatedly perform specific tasks as each automobile moves along the assembly line.

2. Can you think of other products that are made by the assembly line process?

(Answers will vary)

3. Identify three benefits or advantages to using the assembly line process. (Answers will vary)

- a. Decreased production time
- b. Decreased production costs
- c. Product consistency

Simply Interest: Bank Loans

In order to open his own bike shop, Jerome has to take a loan out from the bank to cover the costs of buying the bikes, purchasing other inventory, and paying for rent and salaries. His bank loan was \$10,000. The bank gave Jerome a low interest rate of 6% to pay his loan back, and eventually decreased it to 4.5% after 5 years. Over 10 years, Jerome needs to figure out how much interest he owes the bank.

Loan Amount x Interest Rate x Number of Years = Interest Owed







Ex. $\$10,000 \times 0.06\% \times 1 = \600.00

Jerome owes \$600.00 in interest at the end of the first year of business.

1. At the end of two years, how much interest would Jerome owe?
\$1,200
2. How much would the interest be at the end of five years?
\$3,000
3. After five years, the interest rate decreased to 4.5%. What would he owe for the sixth year of his loan?
\$3,450
4. Calculate how much Jerome will owe in his seventh year of business:
\$3,900
6. On the tenth year of his loan, he is expected to pay off the whole loan. How much does he owe in interest for the tenth year? If his revenue is \$6,000 for the year, will he be able to pay off the loan? How much will he have left over for salaries, rent and purchasing new inventory for the next year?
\$5,250, yes, \$750

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VENTURE CAPITALIST VS. BANK KEY

Venture Capitalist vs. Bank	Receives ownership in your company	Charges your company interest on the money	Requires your company to repay the money	Is paid only if your company profits	Has an interest in the long term success of your company	Functions as a partner in your company
Venture Capitalist						
Bank (loan)						

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MEMO 8 KEY

Name: _____

Date: _____

Message:

The following is a series of questions designed to assist you and your company in estimating the number of products you will be able to produce today.

1. Approximately how long did it take you to make a prototype during Session Six? *(Answers will vary)*

Answer _____

2. Based on your answer in the question above, how many bracelets do you estimate you will be able to produce in 30 minutes?
(Answers will vary)

Answer _____

3. How many people does your company employ?
(Answers will vary)

Answer _____

4. If everyone in your company is able to make a product at the above rate, how many bracelets would you estimate your company will produce in 30 minutes? This is your estimated production.
(Answers will vary)

Answer _____

5. Identify ways in which your company could increase its estimated production? *(Answers will vary)*

1. The double twist style is faster to produce
2. Use of an assembly line
3. Define our specific design(s) before starting
4. Set personal goals

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ESTIMATED VS. ACTUAL PRODUCTION KEY

1. How many bracelets did you estimate your company would be able to produce? *(Answers will vary)*

Estimated Production = _____

2. What is the actual number of bracelets that your company was able to produce? *(Answers will vary)*

Actual Production = _____

3. What is the difference between your estimated production and actual production?

Actual - Estimated = Difference

4. What percentage of your estimated production did you actually produce?

(Estimated ÷ Actual) × 100 = % of estimated production

5. Identify three factors that could have increased your company's actual production. *(Answers will vary)*

- a. Use of an assembly line
- b. Better planning
- c. Setting goals

Homework - Level II

Family Budget

The following is a sample budget for a family of four for one month. Please refer to the questions below after reviewing the list of revenue and expenses.

Revenue	
Salaries Combined	\$112,000
Savings Interest	\$1.72
Gifts	\$250.00
TOTAL INCOME	\$112,251.72

Expenses	
Savings Account Contribution	\$3,550.00
Taxes	\$627.40
Rent	\$1,375.00
Bills (electric, gas, phone)	\$148.50
Groceries	\$423.30
Car Insurance	\$114.20
Health Insurance	\$850.00
Clothing, shopping	\$1,933.00
TOTAL EXPENSES	\$9,021.40

1. What is your total monthly income? \$112,251.72
2. What are your total monthly expenses? \$9,021.40
3. Most of the expenses listed above are *fixed* expenses (they remain the same each month). A few are *variable* expenses (they are expenses that change each month). List which expenses are fixed and which ones are variable, in the appropriate space below:

Fixed	Variable
Taxes	Savings Account Contribution
Rent	Groceries
Car Insurance	Clothing
Health Insurance	
Bills	

4. If you eliminated all of the *variable* expenses from your list above, how much money could you save on your monthly expenses?

$$\$3,550 + \$423.30 + \$1,933 = \$5,906.30$$
5. Based on your monthly contribution to the family savings account, how much could be saved in a year?

$$\$3,550 \times 12 = \$42,600$$
6. Based on the interest that is earned on the money in the savings account, how much revenue can be made off of the interest in one year?

$$\$42,600 \times \$1.72 = \$73,272$$
7. What could the annual savings be used for?

Answers will vary

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MEMO 10 KEY

Name:

Date:

Message:

Companies often use logos and slogans to help customers easily distinguish the company's brand or product. A **logo** is a graphic representation of a company name often uniquely designed for easy recognition. A **slogan** is a distinctive phrase or motto identified with a particular company or product.

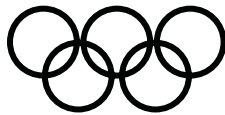
How many of these companies and/or products can you identify from the logos and slogans below?

1.



Disney

2.



International Olympic
Committee

3.



Mercedes-Benz

4. "Just do it."

Nike

5. "I'm lovin' it."

McDonald's

6. "Let your fingers do the walking."

Yellow Pages

7. "Have it your way."

Burger King

8. "Melts in your mouth, not in your hand."

M & M's

9. "The thirst quencher."

Gatorade

10. "Breakfast of champions."

Wheaties

Can You Reach Your Goal? Graphing Production Data

Your new company, Blazing Backpack LLC, has hit a few bumps in the road, and you are forced to rearrange the pricing structure of your business.

It costs too much to rent your warehouse to manufacture backpacks for a business day, so you are forced to cut your costs and only use the warehouse after business hours for 5 hours a day.

It costs \$14.87 to manufacture one backpack, and takes 6.5 minutes per person to make.

Answer the questions below:

1. How many backpacks can you manufacture in 5 hours with 7 people working?

$$60 / 6.5 = 9 \quad 9 \times 5 = 45 \quad 45 \times 7 = 315$$

2. How many backpacks can you manufacture in 5 hours with 11 people working?

$$45 \times 11 = 495$$

3. How long does it take you to manufacture 140 backpacks? (one person working)

$$140 / 9 = 15.5 \text{ hours}$$

4. How much does it cost you to manufacture 800 backpacks?

$$\$14.87 \times 800 = \$11,896$$

5. Look at the production of your company, Blazing Backpacks, LLC and create a graph as a visual representation of the following production data. *A work day is 8 hours/day and a work week is 40 hours/week.*

- a. Please create a line graph that represents the # of backpacks that **one** person can manufacture in 8 weeks.

$$9 \text{ per hour, } 9 \times 8 = 72/\text{day, } 72 \times 5 = 360/\text{week, } 360 \times 8 = 2,880$$

$$\text{Week 1} = 360, \text{ Week 2} = 720, \text{ Week 3} = 1,080, \text{ Week 4} = 1,440, \text{ Week 5} = 1,800, \text{ Week 6} = 2,160, \text{ Week 7} = 2,520, \text{ Week 8} = 2,880$$

- b. Add a line that represents the # of backpacks that **three** people manufacture in 8 weeks.

$$2,880 \times 3 = 8,640$$

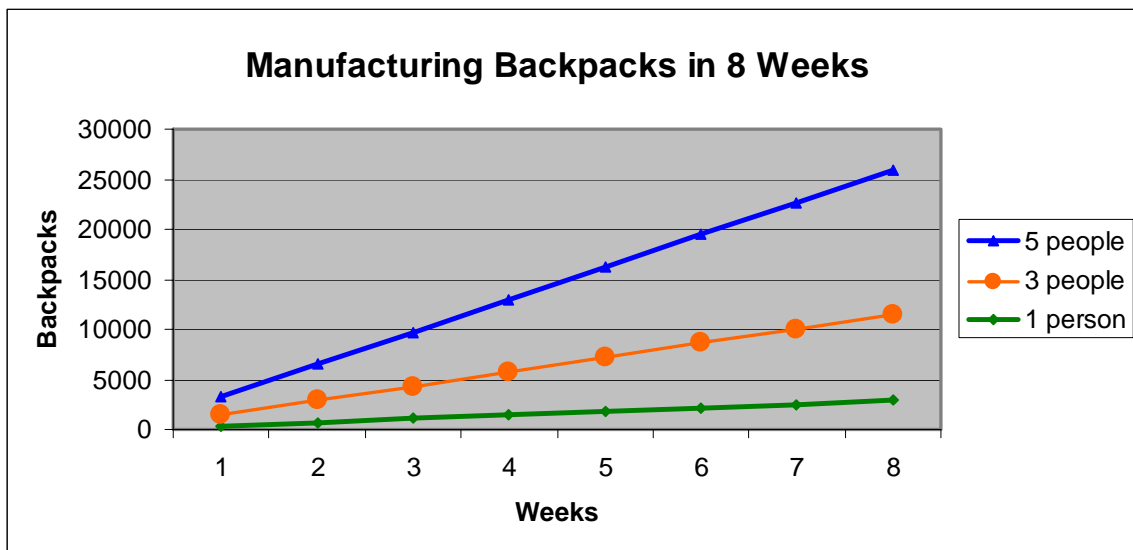
$$\text{Week 1} = 1,080, \text{ Week 2} = 2,160, \text{ Week 3} = 3,240, \text{ Week 4} = 4,320, \text{ Week 5} = 5,400, \text{ Week 6} = 6,480, \text{ Week 7} = 7,560, \text{ Week 8} = 8,640$$

c. Add another line that represents the # of backpacks five people manufacture in 8 weeks.

$$2,880 \times 5 = 14,400$$

Week 1= 1,800, Week 2= 3,600, Week 3= 5,400, Week 4= 7,200, Week 5= 9,000, Week 6= 10,800, Week 7= 12,600, Week 8= 14,400

Remember to include a title and to label both axis. If you use different colors to represent each line, remember to create a key.



BIZWORLD™

MEMO 12 KEY

Name:

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Message:

The Friends First Bracelets Company has been profitable for the past several years. As the founder and president of the company, Steve owns 80 of the 100 shares of stock in the company. The company was recently valued at \$150,000.00 (one hundred fifty thousand dollars).

Bracelets Unlimited, Inc. is another successful company in the friendship bracelet industry. Bracelets Unlimited was founded by Laurie who recently sold the company but still owns 300 of the 1000 shares of stock in the company. The company was recently valued at \$600,000.00 (six hundred thousand dollars).

1. Which individual, Steve or Laurie, currently has a larger dollar value based upon ownership in the company they founded?

Laurie has a greater value.

Laurie's Value = $(300/1,000) (\$600,000.00) = \$180,000.00$

Steve's Value = $(80/100) (\$150,000.00) = \$120,000.00$

2. Which individual currently has a greater influence on the future direction of the company they founded? Explain how you made this conclusion in the space below.

Steve has a greater influence.

Steve owns a majority share of stock in his company and is the current president.