

Name: _____

UNIT 7: LEARNING GUIDE – FINANCES

INSTRUCTIONS:

Using a pencil, complete the following questions as you work through the related lessons. Show ALL of your work as is explained in the lessons. Do your best and always ask questions if there is anything that you don't understand.

1.1 HISTORY OF FINANCE

1. Classify each example as barter or money.

| | Barter | Money |
|--|--------------------------|--------------------------|
| a. Trading doing the dishes for a hamburger. | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Exchanging \$10 for a movie ticket | <input type="checkbox"/> | <input type="checkbox"/> |
| c. An exchange using coins or banknotes. | <input type="checkbox"/> | <input type="checkbox"/> |
| d. J.T. gets a new car and pays for it with his credit card. | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Mr. R traded Mr. B two chickens for a leather belt. | <input type="checkbox"/> | <input type="checkbox"/> |
| f. The trading of one service for another service. | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Trading seven dollars for a hamburger. | <input type="checkbox"/> | <input type="checkbox"/> |
| h. Simi gives Jim her cookies in exchange for him cleaning her desk. | <input type="checkbox"/> | <input type="checkbox"/> |

2. The 5 steps of Material Consumption are listed below, but they are not in order.

Consumption Distribution Extraction Disposal Production

a. Order the steps that "stuff" moves through.

- | | |
|------|-----|
| i. | iv. |
| ii. | v. |
| iii. | |

- b. Give an example of what each step might look like for a cell phone.
 - i.
 - ii.
 - iii.
 - iv.
 - v.
 3. Give two examples of how you think consumerism negatively affects our society.

4. Identify each habit as a habit of consumerism or a habit of minimalism.
 - a. The need of an item is carefully considered prior to purchasing.
 - b. Items are purchased to help you be happy.
 - c. Judging people based on what they own.
 - d. Valuing experiences over things.
 - e. Buying items that are a good deal, even if they aren't really needed.
 - f. Recognizing that material goods do not lead to long-term happiness.

| |
|---------------------|
| 1.2 SIMPLE INTEREST |
|---------------------|

1. Indicate the meaning of each letter in the Simple Interest Formula below.

$$I = prt$$

l : _____

r : _____

p : _____

t : _____

2. In your own words, describe what *principle & interest* means (in financial situations.)

3. Calculate the amount of Simple Interest charged and the total amount to be paid at the end of the loan period for each example below.

a. Principle: \$500

Interest Charged: _____

Annual Interest rate: 6%

Total to be paid: _____

Length of borrowing period: 2 years

b. Principle: \$6000

Interest Charged: _____

Annual Interest rate: 4%

Total to be paid: _____

Length of borrowing period: 3 years

c. Principle: \$15 000

Interest Charged: _____

Annual Interest rate: 6.5%

Total to be paid: _____

Length of borrowing period: 5 years

d. Principle: \$4000

Interest Charged: _____

Annual Interest rate: 16%

Total to be paid: _____

Length of borrowing period: 6 months

4. Solve the Simple Interest problems below using the method of your choice (ie. triangle method or isolating the variable.)
- Keegan deposited \$700 into his bank account. After one year, his bank account balance was \$761.60. What interest rate did he earn?
 - Johanna wants to wait until her bank account balance is \$15 000 before she withdraws any money. She initially deposited \$12 500 and is earning an interest rate of 4.6%. How long will it take for her principle amount to reach her goal amount?
 - Isabel bought a new TV for \$800. She didn't have to pay for 20 months, but she owed \$986.67 at the end of the 20 months. What interest rate was she charged?
 - Thirty-two weeks after he borrowed \$7500 from the bank, Joaquin wanted to pay off his loan. What does he owe if he was charged an annual interest rate of 6.1%?
 - At the end of his 3-year borrowing period, Skye owed \$4635.55. His interest rate was 3.9%. What was the original amount of the loan?

1.3 BORROWING MONEY

1. Describe some of the pro's and con's of purchasing a new car by using cash, payment, and leasing.

| | Pro's | Con's |
|----------|-------|-------|
| Cash | | |
| Payments | | |
| Leasing | | |

2. List some of the expenses related to owning and operating a car.

3. What's the difference between a fixed rate and a variable rate?

4. What's the difference between an amortization period and a term?

5. What's the difference between a personal loan and a line of credit?

6. What's a "deadbeat credit card owner" and why do the credit companies both love and hate deadbeats?

7. List 5 ways to achieve a good credit score.

1.4 COMPOUND INTEREST

1. Explain the differences between simple and compound interest.
2. What situation would result in a very small difference between simple interest and compound interest loans?
3. What situation would result in a very large difference between simple interest and compound interest loans?
4. Sketch the comparisons between simple and various compound interest loans (amount owed over time). Clearly label each graph, then identify the situations in the two previous questions on your graphs.
5. What is a "compound period?" Provide 3 examples.

6. Fill-in the empty cells in the Simple Interest table below:

| Period | P | r | I | A |
|--------|-------|----|---------|----------|
| 1 | \$400 | 6% | | \$424.00 |
| 2 | | 6% | \$24.00 | |
| 3 | \$400 | | | \$472.00 |
| 4 | | 6% | \$24.00 | \$496.00 |
| 5 | \$400 | 6% | | |

Show work for table calculations below:

7. Fill-in the empty cells in the Compound Interest table below:

| Period | P | r | I | A |
|--------|----------|----|---------|----------|
| 1 | \$400.00 | 6% | | \$424.00 |
| 2 | | 6% | \$25.44 | |
| 3 | \$449.44 | | | \$476.41 |
| 4 | | 6% | \$28.58 | \$504.99 |
| 5 | \$504.99 | 6% | | |

Show work for table calculations below:

1.5 COMPOUND FORMULA

1. Complete the following table with the corresponding compounding periods in one year.

| | Number of Compounding Periods in a Year |
|---------------|---|
| Annually | |
| Semi-annually | |
| Quarterly | |
| Monthly | |
| Weekly | |
| Daily | |

2. For each situation, complete the formula then calculate the final amount.

| | Formula | Amount (\$) |
|--|---|-------------|
| \$200 invested for 4 years at 5% compounded annually. | $A = \underline{\hspace{2cm}}(1 + \underline{\hspace{2cm}}) \text{---}$ | |
| Joe invests \$350 for 5 years at 6% compounded monthly. | $A = \underline{\hspace{2cm}}(1 + \underline{\hspace{2cm}}) \text{---}$ | |
| Sherry borrows \$2000 for 18 months at 8% compounded yearly. | $A = \underline{\hspace{2cm}}(1 + \underline{\hspace{2cm}}) \text{---}$ | |
| \$800 is borrowed for 4.5 years at 12% compounded quarterly. | $A = \underline{\hspace{2cm}}(1 + \underline{\hspace{2cm}}) \text{---}$ | |
| \$1200 invested for 9 years at 4% compounded semi-annually. | $A = \underline{\hspace{2cm}}(1 + \underline{\hspace{2cm}}) \text{---}$ | |
| Daily compounding of a \$250 loan for 9 weeks at 18%. | $A = \underline{\hspace{2cm}}(1 + \underline{\hspace{2cm}}) \text{---}$ | |

3. Determine the total value of an investment of \$10 000 if interest is paid at 3.2% per year compounded semi-annually for two years. **Layout all work.**
4. Determine how much Jon owes for an overdue credit card bill of \$5000 charging at 18% after one year if it has been compounded daily. **Layout all work.**
5. Calculate how much a \$5000 deposit would be worth at the end of 5 years if the rate of interest on the deposit was 4.3% compounded weekly. **Layout all work.**
6. Calculate the total amount your GIC investment would be worth if you invested \$3000 at a rate of 2.6% compounded quarterly for 4 years. **Layout all work.**

