Unit: Percents
Student Handout 7

Name _____

Date _____ Pd _____

SIMPLE INTEREST

Carl just turned thirteen and is now old enough to open a savings account. Previously, he used a piggy bank to save his money. Consider the advantages and disadvantages of using a savings account over a piggy bank.

SAVINGS ACCOUNT	PIGGY BANK

SIMPLE INTEREST

- Simple interest is interest earned only on the _____, or the original amount deposited in the account. It is earned over a period of time and written as a _____.

SIMPLE INTEREST:
$I = prt$

I = _____
p = _____
r = _____
t = _____

Use the simple interest formula to determine the amount of interest earned. Then, find the total value of the account, assuming no other deposits or withdrawals were made.

1. A $900 deposit for 20 years at a simple interest rate of 4% Interest: _____ Total Value: _____	2. A $5,600 deposit for 45 years at a simple interest rate of 3% Interest: _____ Total Value: _____
3. A $3,000 deposit for 30 years at a simple interest rate of 2.5% Interest: _____ Total Value: _____	4. A $4,000 deposit for 48 months at a simple interest rate of 2% Interest: _____ Total Value: _____

Use your understanding of the simple interest formula to determine the rate, interest, and principal. Then, find the total value of the account, assuming no other deposits or withdrawals were made.

5. An $800 deposit for 24 months earned $200 in interest

Rate: _____

Total Value: _____

6. A $1,595 deposit for 10 years at a simple interest rate of 8%

Interest: _____

Total Value: _____

7. A deposit earns $102 after 36 months at a simple interest rate of 5%

Principal: _____

Total Value: _____

8. Reece made a deposit into an account that earns 8% simple interest. After 8 years, Reece had earned $400. How much was Reece's initial deposit?

9. Jude deposited $550 into an account that earns simple interest, and after 11 years, the interest in the account was $484. What was the simple interest rate?

10. Explain the benefit of investing your money into an account that earns simple interest.

_____

_____

11. Kaston has two options for investing his money. He thinks choosing option A will earn the most interest. Is he correct? What is the difference in the amount of interest he would earn?

OPTION A

$550 deposit
3.5% simple interest
48 months

OPTION B

$550 deposit
3% simple interest
60 months

Summarize today's lesson:

Unit: Percents
Homework 7

Name _____

Date _____ Pd _____

SIMPLE INTEREST

Read each of the problems below, determine which formula should be used, and then find the solution.

PROBLEM	FORMULA	WORK & SOLUTION
1. Mrs. Baxter deposits $2,000 in an account that earns 5% simple interest. How much is Mrs. Baxter's investment worth after 8 years?	_____	
2. Joey made a deposit into an account that earns 6% simple interest. After 3 years, Joey had earned $400. How much was Joey's initial deposit?	_____	
3. Coach Cliffman made a deposit of $1,800 into an account that earns 2% annual simple interest. Find the amount of interest that Coach Cliffman earned after 3 years.	_____	

Use your understanding of simple interest to answer the questions below.

4. Peter is calculating the interest earned on a deposit of $275 in an account that earns 8% simple interest after 12 years.

$$I = prt$$
$$I = 275(0.8)(12)$$
$$I = 2,640$$

a. What did Peter do incorrectly?

b. What is the correct amount of interest?

5. Isabella is calculating the interest earned on a deposit of $3,000 in an account that earns 4% simple interest after 6 years.

$$I = prt$$
$$I = 3,000(0.04)(6)$$
$$I = 3,720$$

a. Isabella determines that her deposit will then be worth $6,720.00. Explain what Isabella did incorrectly.

b. What is the correct amount of interest?