

NOTES: LESSON 11.1 – SIMPLE INTEREST AND COMPOUND INTEREST

Name: _____

Learning Goal: I can use formulas to calculate **simple interest** and **compound interest** of different investments and loans.

Meta de Aprendizaje: Puedo usar fórmulas para calcular el **interés simple** y el **interés compuesto** de diferentes inversiones y préstamos.

Language Goal: I can discuss with a partner how to use the formulas for **simple interest** and **compound interest** and then write an explanation.

Lenguaje Objetivo: Puedo discutir con un compañero cómo usar las fórmulas de **interés simple** y **interés compuesto** y luego escribir una explicación.

SIMPLE INTEREST

$$I = Prt$$

COMPOUND INTEREST

$$A = P(1 + r)^t$$

For both formulas, you need _____ information:

- **P** = **P**incipal, which is the money that you _____ with.
- **r** = **I**nterest **r**ate, which is a % that _____ .
 - To change a percent to a decimal you must _____ .
 - Example, **8%** is _____ and **4.25%** is _____
- **t** = **t**ime, which will be the number of _____ .

But what is **INTEREST!**!?!?

1. When _____ money, like to buy a car or a house, **INTEREST** is

_____ .

2. When _____ money, like in a savings account, **INTEREST** is

_____ .

SIMPLE INTEREST

$$I = Prt$$

EXAMPLE:

You deposit \$1,000 in a savings account that earns 2% *simple interest*. How much interest does the account earn after 5 years?

Step 1: Convert 2% to a decimal:

$$r =$$

Step 2: Substitute and solve!

$$I = P r t$$

ANSWERS

Interest Earned:

Account Total:

COMPOUND INTEREST

$$A = P(1 + r)^t$$

EXAMPLE:

You deposit \$1,000 in a savings account that earns 2% *compound interest*. How much interest does the account earn after 5 years?

Step 1: Convert 2% to a decimal:

$$r =$$

Step 2: Substitute and solve!

$$A = P (1 + r)^t$$

ANSWERS

Account Total:

Interest Earned: