Name: ____________________

Date: ______________

Simple versus Compound Interest

A bank offers two different types of 10-year bonds: simple interest bonds and compound interest bonds.

- *Simple Interest Bond – 11%/a payable at the end of each year (the interest is not reinvested).*
- *Compound Interest Bond – interest accumulates at 11%/a compounded annually.*

You have bought two $500 savings bonds – one of each type. Both mature after 10 years.

1. Use the spreadsheet templates to compare the value of each matured bond.

   a) What is the value of the *simple* interest bond after 10 years? __________

   b) What is the value of the *compound* interest bond after 10 years? __________

   c) Explain why the two values are different.

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2. Use the spreadsheet to create a graph which shows the amount accumulated over time for both the simple and compound interest bonds.

   a) Describe the shape of the *simple* interest graph.

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   b) Describe the shape of the *compound* interest graph.

   ____

   c) What do you notice about the distance between the two graphs as the investment matures?

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Name: ____________________

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3. Extend your spreadsheet to 20 years and adjust your graph. Explain what the graph demonstrates about the effects of compound interest over longer periods of time.

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4. Summarize the differences between simple and compound interest.

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