Name: _____

Date: _____

Millionaire

Instructions:
You will be using the spreadsheet provided to complete this activity.

It is important that you only make changes to the annual investment and annual interest rate.

Getting Familiar with the spreadsheet.

1. If someone invests $200 a year at an annual interest rate of 8%, how much will they have after 10 years? _____ After 20 years?_____

2. a) If Charles is 35 right now and he invests $500 a year at 10% interest, how much will he have when he is 60?_____
   b) If Charles is 20 right now and he invests $500 a year at 10% interest, how much will he have when he is 60?_____
   c) How much more money did his investment accumulate to by beginning his investment 15 years earlier?

3. a) How much would you have to invest each year at 9% if you wanted to have $500000 in 30 years? _____
   b) How much would you have to invest each year at 9% if you wanted to have $1000000 in 30 years?_____

4. a) What interest rate would you need to earn if you were investing $500 a year and wanted to reach $150000 in 25 years? _____
   b) What interest rate would you need to earn if you were investing $1000 a year and wanted to reach $150000 in 25 years? _____

5. So, you want to be a millionaire?

Suppose you could earn on average 8% each year on your investments.

a) If you start investing when you are 20, how much would you need to deposit each year to earn $1000000 by the time you are 65?_____ Approximately how much would this be weekly? _____
b) What if you waited until you were 30? How much would you need to deposit each year to earn $100000 by the time you are 65? (remember that's only 35 years now) _____
c) How much would you need to deposit each year if you waited until you were 40?_____ 50? _____

Name: _____

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Record this information in the chart below:

Age	20	30	40	50
Number of years until 65				
Amount deposited each year				
Total amount you deposit until 65.				
Total amount available at age 65. (total of deposits and interest)				
Interest earned over length of investment				

Complete the following on a separate piece of paper:

6. a) If you invest $1.00/day starting on your 20th birthday and continue until your 30th birthday how much will you have? (Assume on average a 7% return each year)._____
   b) Now, suppose you keep this money in your account without investing anything more after age 30, how much will your investment have grown to by the time you retire on your 60th birthday? (Hint: you will need to use the compound interest formula)
   c) How much would this same investment accumulate to if you had contributed $1.00/day from your 20th birthday to your 60th birthday?
   d) Given your answer for (c), would your investment grow to the same amount if you invested $2.00/day from age 40 - 60 years (20 years) instead of $1.00/day from age 20-60 years (40 years)? Explain fully.

7. Using the information above, and other concepts covered in this unit, write a letter to a friend who is turning 20 which explains to them the lesson you have learned. Include information about:
   - how they should invest to become a millionaire by the time they retire
   - how this plan will vary if they start now as opposed to later