

Simple vs. Compound Interest Activity

Use with Camp Millionaire and The Money Game

PLAYBOOK PAGES USED:

Simple and Compound Interest Pages

COSTUMES/PROPS NEEDED:

8.5 x 11 Simple & Compound Interest Signs, students as volunteers. This activity works great with more participants. If possible, put a string on the Sign that says PRINCIPAL so that it can go around the volunteers neck (see below).

MAIN OBJECTIVES:

- To show how money grows with interest.
- To show how quickly money grows when using compound interest vs. simple interest.

KEY TERMS, CALLBACKS:

Simple interest, compound interest, compounding, compound growth, rate of return, return on investment

PRINCIPLES, SAYINGS, DECLARATIONS:

Interest is only interesting when you're receiving it.

SUGGESTED ENROLLING QUESTIONS:

How many of you would like to make money when you're sleeping? How about when you're on vacation? Great, you're going to love this next activity.

SET UP/PREPARATION:

Have the signs ready and ask for one volunteer to start.

DIALOGUE:

Have one volunteer come up and hand him the sign that says Principal to put around his neck. Ask the participants what they think the word Principal means. Explain that the Principle is the amount of money they invest. It is also referred to as Capital. In this activity, our Principal is \$100 which means we're investing \$100.

So we're going to invest our Principal of \$100 at 100% interest using something called SIMPLE INTEREST. Simple interest is when you only earn interest on the initial amount you invest, i.e., the Principle.

Have the Principal hold the sign that says Simple Interest. After the first year, if we invested our principle (i.e., our volunteer) at 100% (and remind them that the initial amount they invested was \$100), how many more people do we need up front? Right...One. Can I get one volunteer? (Have the new volunteer stand next to the Principal and hand him the sign that says YEAR 1.) How much

money do we have now? Exactly...\$200. Let's keep going.

After the second year, remember, we're still investing the principal at 100% using SIMPLE INTEREST so, again, we need one more person in front. Can I get another volunteer? (Have him stand next to Year 1 and hand him the sign that says YEAR 2.) How much money do we have now? Right...\$300. Our original \$100 plus \$100 in interest from Year 1 and \$100 in interest from Year 2.

After the third year, we invest the principal again at 100% using SIMPLE INTEREST so we need one more person up here. (Get volunteer who now holds Year 3 sign) And after the fourth year, we invest the principal again at 100% using SIMPLE INTEREST so we need one more person. (Get volunteer who holds Year 4 sign).

After four years we have five people total, each worth \$100. If you started with \$100 (your principal) and each year you EARNED \$100, at the end of the fourth year, you have \$500. Not bad. Everyone except for the Principal can take a seat.

You will have a line of volunteers that look like this:

Is everyone ready for some fun now? Great. Has anyone ever heard of something called Compound Interest? This is how it works...

We're now going to invest our Principal of \$100 at 100% interest using COMPOUND INTEREST. Hand the Principal the Compound Interest Sign now.



First, let's learn the difference between Simple and Compound Interest. With Simple Interest, you only earn interest on your Principal. With Compound Interest, you earn interest on your Principal AND the Interest you earn along the way. In essence, your Interest becomes more Principal. After year one, how many more people do we need up here to represent the interest earned on your principal? Right...One. Get one volunteer and have him stand to the right of the Principal and hand him the Year 1 sign.

After year two, using COMPOUND INTEREST, which means we are investing our principal and the INTEREST we earned on the principal the first year, how many more people do we need up here? (Get two volunteers and stack them front to back Hand them the Year 2 sign. See photo on next page.) Right...two. Please stand in a line, Year 2s. Our \$100 has become \$400 in just two years.

After three years of COMPOUND INTEREST, how many people do we need? Yup...Please stand in a line, Year 3s. (Get four more volunteers and stack them front to back.) Now our \$100 has become \$800!

After four years of COMPOUND INTEREST, how many people do we need up here? Yes...eight! (Get eight volunteers if available.). Please stand in a line, Year 4s.

And what is your \$100 investment worth now? Exactly...\$1600!

Your group now looks something like this:

So, which kind of interest would you rather get on YOUR investments? COMPOUND, of course. Luckily, most investments pay compound interest, but why do you think it's important to know the difference? Exactly, so you can analyze your rate of return or return on investment and know how well your money is working for you.



Let's take this one step further, even though we've been talking about compound interest, it's actually the concept of COMPOUND GROWTH that we're talking about. Not all investments or assets make you money because of interest; some simply grow in value over time like stocks, mutual funds, ETFs (exchange traded funds) while others actually pay you interest because they are using your money for something. It's referred to as compound growth when the appreciation in value (value going up) is added to the principle so you have more shares of mutual funds for example, and then those shares go up in value also

The simplest example is when you put your money into a bank account. The bank lends your money out to people who need to borrow money. They charge those people more interest than they pay you in interest to borrow it. This is one way banks make money.

REVIEW:

Review by asking your participant to tell you the difference between Simple and Compound Interest.

FLIPCHART:

None

FOLLOW UP ACTIVITY:

It's great to follow this activity with The Magic of Compound Growth, available in the Camp Millionaire Curriculum Binder or look for it to be available in your Major League Players Program soon.

