Financial Basics Foundation | SUNCORP

Money magic.

The financial rule of thumb – Time is money – is all about how the effect of **compound interest** can make your savings grow.

Compound interest means that you earn interest twice:

- Interest on the money you save
- Additional interest on the interest you've already received.

How much your money grows is determined by three factors:

- Your initial deposit and the amount of money you regularly save
- The length of time you save it for
- The interest rate paid on your savings

The three factors that determine the rate of growth will vary over the course of an individual's life and will differ for each individual person:

- The amount of money you can save over time is dependent on your income and financial needs
- The time you're prepared to leave your savings to mature will change as your financial needs change
- The rate of interest payable is out of your hands. It fluctuates over time, depending on supply and demand of credit, and the state of the economy. So, it's up to you to shop around to find the best interest rate available at the time.

Use this handy online calculator to see for yourself how compound interest can make your savings grow over time: Compound Interest Calculator

1. Case Study: **What is Money Magic?**

This simple example demonstrates the magic of compound interest.

Imagine that your Aunty Karen offered you the option of an END OF SCHOOL gift of $2000 to finance graduation expenses and schoolies OR, a MONEY MAGIC GIFT of $5000 with the condition that you left the money in a savings account for 15 years.

ANSWER THESE QUESTIONS

First, an easy question – are you fortunate to have such a generous aunt?	
Which gift would you choose? Why?	
Next, another easy question - how much money from the END OF SCHOOL GIFT of $2000 would you have left after 15 years?	
You'll need to enter the following information in the online calculator to answer this question. If you accepted the MONEY MAGIC GIFT and opened a savings account paying 4.25% interest, compounding annually (at the end of each year), how much money would you have after 15 years?	
How much interest would you have earned on your original deposit?	
Are you still happy with your choice or have you changed your mind? Which gift is the right option for you? Why?	
If you hover your curser over the interest area of the online calculator graph you can see very clearly the compounding effect on the amount of interest – **the $$$$ amount of interest earned each year continues to increase over time.** How much interest was earned for the first year? How much interest was earned for the last year? (Subtract the total interest earned at the end of the second last year from the total interest earned at the end of the last year.)	
Let's say you decide to leave the money there for another 5 years. How much interest would you have earned in total? How much interest was paid in the last year?	

SAVE ANSWERS

2. Case Study: **Your gift to future you**

Think about this - why not stash away some money for when you're a little older? It could be for a future gift for yourself, or maybe just a cash reserve you can access if you need it.

Let's say that your plan is to start saving for your luxury splurge as soon as you turn 20, when you know that you will have a regular income. Your goal could be to spend the money when you turn 40, perhaps on a new car, to take your future family on a dream holiday, or another indulgence.

This is what you need to know to work out how much money you'll have for your splurge:

- You open a special savings account which pays 5% interest, compounding monthly.
- You start with $25 and then deposit $25 per week, EVERY week for the next 20 years -ready for when you turn 40!
- To begin, enter this information in the online calculator and complete the first row - START SAVING AT 20 - in the table below. You should see an impressive growth in your savings, meaning you'll have plenty of money for the splurge!

Initial deposit	**Regular deposits – weekly**	**Years to grow**	**Interest rate**	**Total amount saved** (initial deposit + regular deposits)	**Total interest** ($$$$ growth)	**Total savings** (final value)	**% Growth** (total $ interest /total $ amount saved)
START SAVING AT 20							
$25	$25	20	5%				
START SAVING NOW							

Let's try another pathway to luxury. Assume you're currently 15 years old and have a regular income from your part time job, or another source such as your allowance – you can start saving immediately! You can't afford $25 a week, but can certainly manage $20. It's not a huge amount and once you start full time work, $20 per week will be an easy sacrifice.

Go back and complete the second row in the table – START SAVING NOW. Does that make a difference? Add your observations about these savings plans in the box below.

Amount of money invested:	Comparison of final savings value:	Comparison of growth rate:

SAVE ANSWERS

3. Case Study: **You have options!**

Let's say you're earning a regular income, you budget your money well, and your everyday transaction account ALWAYS has a healthy balance. Did you know that a high balance in an everyday transaction account is not necessarily a good thing, because these accounts generally don't earn much interest, and in many cases, no interest at all? You could be missing out on some serious money!

This case study looks at outcomes for a range of **one off** and **regular** transfers of money from your everyday transaction account to a separate savings account.

Assume the following to complete this task, then use the online calculator to enter the information in the table below:

- You always finish the year with a balance of over $500 in your everyday transaction account.
- You'll be opening a new savings account which pays 2.5% interest, compounding annually.
- At the point of starting this strategy you also have $1500 in another savings account.

Option 1

Make an initial deposit of $500 from your transaction account and continue to make an annual deposit of $500. Compare the outcomes, saving for 5 years or 10 years.

Option 2

Withdraw the $1500 from the other savings account, and combine it with $500 from your transaction account for the initial deposit into the new savings account. Leave this to grow without making any further deposits. Compare the outcomes, leaving it there for 10 years or 20 years.

Option 3

Open the new savings account with $500 from your transaction account, and $1500 from the other savings account, but continue to make an annual deposit of $500. Compare the outcomes, saving for 10 years or 20 years.

Initial deposit	Regular deposits – annually	Years to grow	Interest rate	Total amount saved (initial deposit + regular deposits)	Total interest ($$$$ growth)	Total savings (final value)	% Growth (total $ interest /total $ amount saved)
OPTION 1							
$500	$500	5	2.5%				
$500	$500	10	2.5%				
OPTION 2							
$2000	$0	10	2.5%				
$2000	$0	20	2.5%				
OPTION 3							
$2000	$500	10	2.5%				
$2000	$500	20	2.5%				

SAVE ANSWERS

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What are your observations about this range of options?

Option 1 – saving regularly for 5 or 10 years:	Option 2 – saving regularly for 10 or 20 years:	Performance difference between option 2 and option 3:
Overall observation on returns:		

SAVE ANSWERS