


What is compound interest? (Year 7-10)

 30-45 mins

Understand how compound interest works and why saving now can help you later. It may be one of the most important things you will ever learn. This resource has been developed with [ABC education](#).

Outcomes

Students:

- understand the importance of compound interest and apply it to saving scenarios.

Curriculum links

Mathematics

- Working with authentic information, data and interest rates to calculate compound interest and solve related problems (ACMNA229).

Economics and Business

- Factors that influence major consumer and financial decisions and the short- and long-term consequences of these decisions (ACHEK053).

Required resources

- ABC Video: [My five cents: What is compound interest?](#) (2:08) – video transcript available on page 2.
- Moneysmart [Compound interest calculator](#)

Discovery (15 mins)

Compound interest concepts

Reflect on the following questions:

- How can money work for you?
- What is the difference between simple interest and compound interest?

Watch ABC video: [My five cents: What is compound interest?](#) (2:08)

- List the terms that stand out to you as you watch the video. (For example: compound interest, compounding, financial funds, superannuation, retirement.)
- Search the definitions of these words using the search function on [Moneysmart.gov.au](#)

Get practical (30 mins)

Real-life examples

Use the Moneysmart [Compound interest calculator](#) to complete the following:

Exercise 1: In the video, after 10 years, Romesh has \$13,439 while Lucia has \$27,196.

- Romesh begins to deposit \$100 monthly into the account. How much does he accumulate after 12 years?
- Lucia stops depositing \$100 monthly after 10 years. How much does she accumulate after 12 years?
- How much should Romesh deposit every month in those 12 years to exceed Lucia's amount at the end of 12 years?

Exercise 2: Imagine you received \$10,000 to put into a savings account with interest of 2% p.a, compounded annually for 10 years. Investigate the impact the following monthly deposits have on the final amount.

- Deposit \$0, \$10, \$20 and \$50 per month.

Exercise 3: Using the same conditions as Question 2, which is better: depositing \$10 per week, depositing \$20 per fortnight, or depositing \$50 per month?

- Explain your reasoning using your calculations on the Compound Interest Calculator.

Exercise 4: Think of your own circumstances, how much would you be able to put into a savings account? How much would that accumulate over 10 years?

Exercise 5: Can you think of a real-world example where compound interest works for you and against you? (eg. How a bank uses compound interest in loans?)

Video transcript - My five cents: What is compound interest?

[music plays]

Gen Fricker: Saving for the future. Everyone tells you to start now, but the future is ages away, so why? I'll give you one good reason. Compound interest, it works like this.

When you put money into a savings account, you'll earn extra money called interest. If you leave that interest in the account along with the original amount, it compounds. In other words, because there is now more money in the account, you'll earn even more interest next year, and if you don't touch your savings, they will keep growing.

Lucia and Romesh got \$10,000 each from their grandma when they turned 19. They each put their money into savings accounts that earned 3% interest. Lucia decides to save more, so she adds \$100 per month. Romesh just leaves his money to earn interest. After 10 years, Lucia has twice as much money as Romesh. Wow!

Romesh decides it's time for him to start saving, so he copies Lucia and puts in \$100 per month. Lucia on the other hand, stops putting money into her savings account for now. She knows her money will keep growing because of compound interest.

Here's the kicker. Even though Romesh adds \$100 a month, he will deposit more money for much longer than she did. It's all because she started earlier and compounding works over time.

As well as savings accounts, compound interest is used by all sorts of financial funds. For example, it's one of the key building blocks for superannuation, which is the compulsory retirement savings scheme in Australia.

My five cents on compound interest is, time is money. So the sooner you start, the better off you'll be. Cha- Ching!