Compound Interest

Key financial ideas
★ Banks pay interest on money in savings accounts, so your money grows!
★ Earning interest on interest already earned is called compound interest. Compound interest makes the capital investment (the money you deposit) grow faster.

You need
★ a calculator ★ the business section from a newspaper ★ a spreadsheet (optional)
★ a classmate

Activity One

1. Connor finds out the interest rate for term deposits at three banks.

If I save my $1,000 for a while, I'll earn interest on it. That'll give me more money to spend later!

CC BANK 5.8% for amounts of $500 or more

AWE BANK 5.9% for a 6 month fixed-term deposit

BETABANK ☆ 6.7% for a 1 year fixed-term deposit

    a. Which is the best rate?
    b. To get the best rate, what does Connor have to commit to?

2. Discuss with a classmate:
    a. Which bank should Connor invest with?
   b. How long should he invest his money for?

Activity Two

How does compound interest work?

$1,000 (the capital) invested at an interest rate of 7 percent earns $70 the first year. If this $70 interest is added to the capital and reinvested for another year, this makes the capital investment larger ($1,070), so at the end of the second year, the interest will be even more ($1,070 × 0.07 = $74.90). (You have to pay tax on the interest earned, but we're not including this here.)

So I'll be earning interest on my interest. I like the sound of that!

1. Copy and complete the table below for 5 years:

Year	Capital	Interest at 7%	Balance
1	$1,000.00	$70.00	$1,070.00
2	$1,070.00	$74.90	$1,144.90
3			
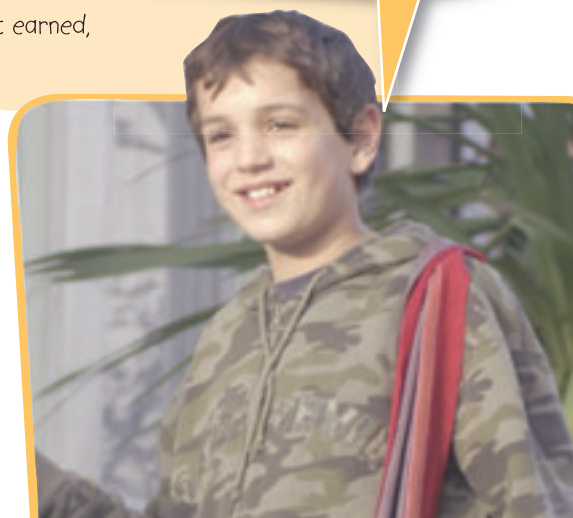
2   **a.**   If Connor decides to invest his money at 7 percent for 5 years, how much interest might he earn on his money altogether? (Note that there are usually penalties if you break a fixed-term contract.)

        b.   At 7 percent interest, how long would it take for Connor to double his money? (You could work this out on a spreadsheet.)

3   How much could $1,000 be worth at the end of 2 years if it were invested at:

        a.   6.5 percent?   **b.**   5 percent?   **c.**   8.5 percent?

Activity Three

When Connor and Rebecca turn 16, they will each get the other $1,000 given to them by Granny. The other cousins under 16 are aged 9, 12, and 14.

If the extra $1,000 for each of the twins' cousins is invested at 7 percent, how much might each get when they turn 16? (You could use the table in **Activity Two** or a spreadsheet.)

a.   Kalala

I've just turned 12.

b.   Hayden

I'm 9 years and 6 months old.

c.   Tavita

I'm 14 and a quarter.

Investigation

Find out how much interest various banks are offering today on term investments. Which term is best value, and why do you think so? How much interest would you receive from that bank on $1,000 after 1 year? After 3 years?

Reflective question   ⭐ People pay tax on the interest they earn. Should this discourage you from saving?