



Super saver



This sequence is intended as a framework to be modified and adapted by teachers to suit the needs of a class group.

Resources needed

- What is Superannuation? – Explainer
- Super saver – Worksheet
- Super-saver – Investigation
- Making an Excel spreadsheet –Flowchart

For example: You're a third-year apprentice plumber and your weekly wage is \$669.53 per week. How much super should your employer pay into your super account?

$$\begin{aligned}\text{Super} &= 12\% \times \text{salary} \\ &= 0.12 \times 669.53 \\ &= \$80.34\end{aligned}$$

- 2 Give students 5 simple calculations and a sixth one which is a bit more challenging – perhaps a 'working backwards' question, for example, if your employer pays \$72.30 into your super account, what's your salary?

Suggested activity sequence

Part A: Defining superannuation

- 1 Organise students in groups of 3 or 4.
- 2 Students read the *Explainer* and in groups construct a brief definition of superannuation. Each group writes their definition on the board.
- 3 When all definitions are displayed, discuss the concept of superannuation and develop a simple class definition.

Part B: Calculating super contributions

- 1 Explicitly teach students how to calculate super guarantee using a gradual release of responsibility model. An example of modelling is provided below.

$$\text{Super} = 9.5\% \times \text{salary}$$

Part C: Calculating return on investment for super accounts

- 1 Discuss investment returns earned on super accounts with students and the comparisons with interest. Consider the amounts people will accumulate in super if they just make contributions. Introduce the idea of interest adding to super balance.
- 2 Apply the compound interest formula to some super balances to calculate return earned.

The main formula for calculating the new balance for compounding interest is:

$$A = P(1 + r)^n$$

where A = new balance

P = original balance (Principal)

r = annual interest rate (%)

n = time in years

$$\text{Interest } I = A - P$$



- 1 Do a couple of examples on the board, for example.:

Super balance \$52,460, rate 6.5% 2 years.

New balance

$$P = 52,460$$

$$r = 0.065$$

$$n = 2$$

$$\begin{aligned} A &= P(1 + r)^n \\ &= 52,460(1.065)^2 \\ &= \$59,501.44 \end{aligned}$$

Interest

$$\begin{aligned} I &= A - P \\ &= \$59,501 - \$52,460 \\ &= \$7,041.44 \end{aligned}$$

Part D: Practising

- 1 As a class, talk through the requirements of the *Worksheet*. *Making an Excel spreadsheet – Flowchart* may be helpful for students.
- 2 Students complete the worksheet.
- 3 Work through solutions with the whole class.

Part E: Investigating super

- 1 Walk the students through the instructions for each task in the *Investigation*.
- 2 Students complete their investigations.
- 3 As a class, discuss students' findings.