#### Mathematics

# Financial Mathematics - Downloadable Resource. Lesson 3 of 4: Savings.

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## Try this

If you managed to save £25 a month, how long would it be before you had...

- 1) £1,000?
- 2) £2,000?
- 3) £1975?
- 4) £27,525?



### Connect

**Simple interest** – The interest that accrues upon the initial amount borrowed. It is a fixed sum every year (or other time period).

**Compound interest** – The interest that accrues upon the initial amount borrowed (or saved), and the interest, as times goes on.



### Connect

If I saved £10,000 in the Oak National Bank at 3%, how much money would I have after...

- 1) 5 years, assuming simple interest?
- 2) 5 years, assuming compound interest?
- 3) 32 years, assuming simple interest?
- 4) 32 years, assuming compound interest?
- 5) 110.5 years, assuming simple interest?
- 6) 110.5 years, assuming compound interest?



## Independent Task

If I saved £25,000 in the Oak National Bank at 3%, how much money would I have after...

- 1) 3 years, assuming simple interest?
- 2) 3 years, assuming compound interest?
- 3) 27 years, assuming simple interest?
- 4) 27 years, assuming compound interest?
- 5) 120 years, assuming simple interest?
- 6) 120 years, assuming compound interest?



## **Explore**

Most interest rates for savings accounts are around 1% at the moment (July 2020).

1) If you ran a bank, would you prefer to give your customers compound or simple interest on their savings? Why?

2) If you are a customer of a bank, would you prefer to have compound or simple interest on your savings? Why?

