## Simple versus compound interest



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

## Resources needed

- Representing linear and exponential growth - Visualiser
- Linear and exponential growth card sets - To print
- Linear and exponential growth answer sheet
- Simple versus compound interest Explainer
- Growing your money - Worksheet


## Suggested activity sequence

## Part A: What is the difference between simple and compound interest?

1 Use a grouping strategy to organise students in groups of 3 or 4 .
2 Students read the explainer and in groups construct a brief description of the difference between simple and compound interest and why it matters.
3 As a class, discuss student responses.

## Part B: Representing linear and exponential growth

1 Display the visualiser and work through each slide, giving students time to answer the questions. The visualiser provides answers to questions you can work through with students if needed.
2 Organise students into groups of 3 or 4. Give groups the following linear and exponential function cards in the order given below. Only give them a set of cards after they have matched the previous set.

| Card set | Groups: |
| :--- | :--- |
| 1. Investment <br> plans and <br> formulas | Match plans to formulas and <br> develop missing formulas |
| 2. Graphs and <br> tables | Complete missing information <br> in tables and match tables <br> with graphs. Match these with <br> plans and formulas. |
| 3. Statements | Match statements with plans, <br> formulas, graphs and tables. |

(3) Pair 2 groups to compare and explain their matching.
(3) Individual groups finalise their matching and create a poster by pasting their matching cards into 2 categories - simple interest and compound interest. Encourage students to provide a rationale for the way they have matched their cards.
5 Display completed posters on the wall and allow students to view the work of other groups. If necessary, identify any misconceptions or errors.
6 Students complete the worksheet individually.

