## Stage 10 Exploring Fractions, Decimals and Percentages

- Identify if a fraction is terminating or recurring.
- Interchange terminating fractions, decimals and percentages.
- Use a multiplier to calculate the result of percentage changes.
- Convert a fraction to a recurring decimal, including more complex ones.
- Calculate the result of a repeated change, including compound interest.
- Solve problems involving growth and decay.
- Terminating
- Recurring
- Percentage change
- Increase
- Decrease
- Compound
- Simple
- Interest
- Exponential
- Growth
- Decay

| Success Criteria | Before <br> Topic | After <br> Topic | Teacher <br> Mark |
| :--- | :---: | :---: | :---: |
| Convert a fraction to a recurring decimal. |  |  |  |
| Convert a recurring decimal of the form 0. $\dot{x}, 0 . \dot{x} \dot{y}, 0 . \dot{x} \dot{y} \dot{z}$ to a <br> fraction. |  |  |  |
| Convert a recurring decimal of the form 0.0 $\dot{x}, 0.0 \dot{x} \dot{y}$ to a fraction. |  |  |  |
| Recognise when a situation involves compound interest. |  |  |  |
| Set up a compound interest problem. |  |  |  |
| Calculate the result of a repeated percentage change, including <br> compound interest. |  |  |  |
| Set up a growth or decay problem. |  |  |  |
| Solve problems involving growth and decay. |  |  |  |

