

Exploring financial identity through mathematics and statistics - Assessment

Formative assessment is an ongoing process throughout teaching and learning. The assessment rubric can be downloaded, and learning outcomes highlighted and/or hyperlinked to evidence.

Assess: Where am I? What am I doing? What do I do next?

Refer to the <u>assessment guide</u> to see the types of learning outcomes that can be gathered as evidence of learning.

Level 4

| Formative Assessment: <u>Financial capability learning progressions</u> | | | | | |
|---|--|--|--|---|--|
| Where am I? What am I doing? What do I do next? | Prestructural | Unistructural | Multistructural Need it/Know it | Relational Think it/Link it | Extended Abstract Extend it /Defend it |
| Manage money and income: Money | I cannot list different ways of paying and receiving payments for goods without support. | I can list one relevant way of paying and receiving payment for goods. | I can list several relevant ways of paying and receiving payment for goods. | I can compare different ways of paying and receiving payment for goods e.g. debit cards. I can explain the differences. | I can compare different ways of paying and receiving payment for goods e.g. debit cards. I can explain the differences and can make judgments about what is the best option for me. |
| Manage money and income: Spending | I need support to describe different ways to get value for money when spending. | I can discuss one way to get value for money when spending. | I can describe several relevant ways to get value for money when spending. | I can describe several relevant ways to get value for money when spending and apply this to my choices around spending. | I can describe several relevant ways to get value for money when spending and apply this to my choices around spending. I can reflect on my spending and look for ways to improve. |
| | l need support to discuss external | l can discuss one relevant external factors that can | l can discuss several relevant external factors that can | l can discuss several relevant external factors that can affect people's financial | l can discuss several relevant external factors that can affect people's |

| | factors that can affect people's financial choices. | affect people's financial choices. | affect people's financial choices. | choices and I can explain what influences me. | financial choices and I can explain what influences me. I can reflect on what external factors motivate me, and change my behaviours. |
|--|--|--|---|--|---|
| Manage money and income: Credit and debt | I need support to understand debt. | l can list one relevant idea about debt. | l can list several relevant ideas about debt. | I can discuss differences between "good" and "bad" debt and can explain what the difference is. | I can discuss differences between "good" and "bad" debt and I can evaluate why one is good to have and the other is not. |
| Manage money and income: Saving and Investing | I can list one relevant idea about saving choices for individuals, whānau or groups with support. | I can list one relevant idea about saving choices for individuals, whānau or groups. | I can list several relevant ideas about saving choices for individuals, whānau or groups. | I can compare differences in saving choices and outcomes between individuals, whānau or groups and explain these differences. | I can compare differences in saving choices and outcomes between individuals, whānau or groups and explain these differences. I can evaluate which is the best option for different situations. |
| Financial Management Budgeting is a financial tool. | l can identify a financial commitment with support. | I can identify one regular financial commitment individuals, whānau or groups have to make. | I can identify several regular financial commitments individuals, whānau or groups have to make. | I can identify regular financial commitments individuals, whānau or groups have to make and can explain the positive and negative impacts of these. | I can identify regular financial commitments individuals, whānau or groups have to make and can explain the positive and negative impacts of these. I can make a generalisation about the impact these outgoings have on my potential savings. |
| | I can read a simple bank statement with support. | I can read one part of a statement, to monitor a given budget. | I can read several parts of a bank statement, to monitor a given budget. | l can use money management tools, including bank statements, to monitor a given budget. | I can use money management tools, including bank statements, to monitor a given budget. I can respond to impacts and adjust when necessary. |
| | l cannot start a budget without support. | I can plan a budget with limited elements. | I can plan a budget using several relevant elements. | I can plan relevant short term, medium term and long-term aspects within a proposed financial plan and can explain why these are relevant. | I can plan relevant short term, medium term and long-term aspects within a proposed financial plan and can explain why these are relevant. I can create a budget for a specific activity and time frame that is relevant to me. |

Mathematics and Statistics Achievement Objective Descriptors

Learners will use their mathematical knowledge and toolbox of strategies to solve a problem(s). Problem solving involves finding out what works and what doesn't and clearly communicating the strategy and skills used to solve the problem.

| In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to use a range of multiplicative strategies when operating on whole numbers. | I can: estimate the solution to a problem by rounding whole numbers to an appropriate level of accuracy use order of operations (BEMA) apply number strategies to solve calculations with whole numbers consider the impact of rounding on a solution for a estimation problem state the limits of accuracy for a given rounded whole number. |
|--|---|
| In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to understand addition and subtraction of fractions, decimals, and integers. | I can : add and subtract integers identify the relative size and place value of integers identify the place value of digits in decimals add and subtract simple decimals use order of operations (BEMA) with fractions, decimals and integers add and subtract decimals to any any place value. |
| In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to find fractions, decimals, and percentages of amounts expressed as whole numbers, simple fractions, and decimals. | I can: simplify fractions add and subtract fractions with different denominators add and subtract fractions with related denominators divide whole numbers by unit fractions. divide fractions multiple fractions identify a fraction of quantity convert between commonly used fractions, decimals, and a percentages. |
| In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to apply simple linear proportions, including ordering fractions. | I can: write simple ratios find equivalent ratios by simple multiplication or division identify equivalent rates by simple multiplication or division write ratios in their simplest form. |

| In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to know the equivalent decimal and percentage forms for everyday fractions. | I can: recall the equivalent decimals and percentages of everyday fractions identify simple percentages of amounts increase or decrease by a simple percentage convert between simple fractions, decimals, and percentages. |
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| In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to know the relative size and place value structure of positive and negative integers and decimals to three places. | round decimals to the nearest tenth and hundredth. |
| In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to form and solve simple linear equations. | I can: identify variables and constants in algebraic expressions and equations identify the symbol of the equal sign as balance between the left and the right construct and solve simple linear expressions or equations solve expressions or equations given values for variables. |

Level 5

| Formative Assessment: <u>Financial capability learning progressions</u> | | | | | |
|---|-------------------------|-------------------------|----------------------|-------------------------|-----------------------------------|
| Where am I? | Prestructural | Unistructural | Multistructural | Relational | Extended Abstract |
| What am I doing? | | | Need it/Know it | Think it/Link it | Extend it /Defend it |
| What do I do next? | | | | | |
| Manage money and | I cannot list different | I can list one relevant | I can list several | I can compare different | I can compare different ways of |
| income: | ways of paying and | way of paying and | relevant ways of | ways of paying and | paying and receiving payment |
| | receiving payments for | receiving payment | paying and receiving | receiving payment for | for goods and services e.g. debit |
| Money | goods and services | for goods and | payment for goods | goods and services e.g. | cards. |
| | without support | services. | and services. | debit cards. | I can explain the differences and |
| | | | | I can explain the | can make judgments about |
| | | | | differences. | what is the best option for me. |

| Manage money and income: Spending | I cannot describe different ways to get value for money when spending without support. | I can list one way to get value for money when spending. | I can describe several relevant ways to get value for money when spending. | I can compare several different ways to get value for money when spending and I apply this to my choices around spending. | I can describe several relevant ways to get value for money when spending and I apply this to my choices around spending. I can reflect on my spending and demonstrate a change in behaviour. |
|---|--|--|---|---|---|
| | I need help to understand what an external factor is. | I can discuss one relevant external factor that can affect people's financial choices. | I can discuss several relevant external factors that can affect people's financial choices. | I can discuss several relevant external factors that can affect people's financial choices and I can explain what influences me. | I can discuss several relevant external factors that can affect people's financial choices, explain what influences me and can make changes to improve my financial identity. |
| Manage money and income: Credit and debt | I need help to understand interest. | I can state one relevant idea about interest | I can state several relevant ideas about interest and I can identify simple interest. | I can compare banks and other financial institutions according to interest. | I can compare banks and other financial institutions according to interest and I can make a judgment call on the best rates at a given time |
| Manage money and income: Saving and Investing | I need help to calculate simple interest | I can work out simple interest over a given time. | I can work out simple interest over a 12 month period. | I can explain and calculate compound interest. | I can explain and calculate compound interest related to spending on an everyday item. |
| Budgeting and financial management: Budgets are a financial tool. | I need help to identify needs and wants. | I can identify one need or want within the framework of a budget. | I can identify several needs and wants of individuals, whānau or groups to be included in a budget. | I can analyse what elements are required. I can plan the outcome and apply the wants and needs to the budget framework. | I can create an individual, whānau or group budget which prioritises needs and wants and can support others in budgeting and making financial plans. |
| | I cannot identify or use a management tool without support. | l can identify a financial management tool. | I can use budget templates to help monitor budgets. | I can use online management tools and explain the importance of using them to monitor and track the progress of a budget. | I can respond to impacts and adjust my budget when necessary by using the online financial management tools. |

Mathematics and Statistics Achievement Objective Descriptors

Learners will use their mathematical knowledge and toolbox of strategies to solve a problem(s). Problem solving involves the finding out what works and what doesn't and clearly communicating the strategy and skills they used to solve the problem.

| In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to reason with linear proportions. | I am able to: • express any number as a decimal, fraction, or percent • compare the size of two percents • compare the size of two fractions • compare the size of two decimals • compare and contrast any number as a decimal, fraction, or percent • calculate fractions with different denominators • use limits of accuracy in problems. |
|---|--|
| In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to understand operations on fractions, decimals, percentages, and integers. | I am able to: perform operations on decimal numbers perform operations on fractions perform operations on percentages perform operations on integers identity percentages of amounts increase and decrease quantities by a given percentage perform calculations with percentages perform calculations with GST calculate the original amount after a percentage increase or decrease calculate simple interest use limits of accuracy in problems. |
| In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to know commonly used fraction, decimal, and percentage conversions. | I am able to: identify common fractions (½. ½. ½. ½) in decimal and percentage form convert between commonly used fractions, decimals and a percentages rearrange percentage calculations use limits of accuracy in problems. |

| In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to use rates and ratios. | I am able to: • identify equivalent rates • identify currency rates • calculate amounts using currency rates • use equivalent rates to compare given rates (eg. currency) • compare given ratios by expressing ratios as equivalent fractions • use limits of accuracy in problems. |
|--|---|
| In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to know and apply standard form, significant figures, rounding, and decimal place value. | I am able to: round decimals sensibly round decimals to a specified accuracy estimate the solution to a problem by rounding decimals to an appropriate level of accuracy and by taking into account the operation(s) being performed investigate the effect of rounding when performing different operations with decimals use limits of accuracy in problems. |
| In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to form and solve linear and simple quadratic equations. | I am able to: • solve equations in more than 1 step • create a new subject from an original formula. |