Stage 6 Mathematics Life Skills

## MLS – F2 Earning Money

### Overview

| MLS-F2 Earning Money | Unit Duration |
| --- | --- |
| The topic Financial Mathematics involves the development of students’ basic number and calculation skills and the application of these to problems of earning, spending, saving and borrowing money in real-life situations. |  |

| Subtopic focus | Outcomes |
| --- | --- |
| This subtopic explores the different ways you can earn money and looks into related issues, such as taxation and solving income-related problems. The knowledge, skills and understanding in this subtopic builds on Life Skills Years 7–10 outcomes and content for Number and Algebra | A student:* explores mathematical concepts, reasoning and language to solve problems MALS6-1
* demonstrates understanding of money MALS6-5
* explores money management and financial decision-making MALS6-6
* engages with mathematical skills and techniques, including technology, to investigate, explain and organise information MALS6-13
* communicates mathematical ideas and relationships using a variety of strategies MALS6-14
 |
| Related Mathematics Standard outcomes | ****Related Numeracy CEC outcomes**** |
| MS11-1, MS11-5, MS11-9, MS11-10, MS1-12-1, MS1-12-5, MS1-12-9, MS1-12-10, MS2-12-1, MS2-12-5, MS2-12-9, MS2-12-10 | N6-1.1, N6-1.2, N6-1.3, N6-2.4, N6-3.1, N6-3.2 |

All outcomes referred to in this unit come from the [Stage 6 Mathematics Life Skills Syllabus](https://educationstandards.nsw.edu.au/wps/portal/nesa/11-12/stage-6-learning-areas/stage-6-mathematics/mathematics-life-skills-2017)
© NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales, 2017

### Adjustments

Examples of adjustments can be found on the NESA website under [Adjustments](https://www.educationstandards.nsw.edu.au/wps/portal/nesa/11-12/Diversity-in-learning/stage-6-special-education/adjustments).

|  |  |
| --- | --- |
| Student’s name | Adjustments |
| e.g. John Smith | Requires learning material to be printed on blue paper. |
|  |  |

### Unit of learning

| ContentStudents learn to: | Suggested teaching strategies and resources | Differentiation and modifications | Date and initial |
| --- | --- | --- | --- |
| F2.1 Types of income and work* identify and describe a range of types of employment, for example:
* full-time
* part-time
* casual
* self-employed
* volunteer
* identify and describe a range of types of work-related income, for example:
* Wages
* Salary
* Commission
* Piecework Literacy icon Work and enterprise icon
 | Identify and describe a range of types of employment* Teacher to lead a discussion about the various types of employment. For teacher clarification or students to investigate the definitions can be found at the [Fairwork website](https://www.fairwork.gov.au/employee-entitlements/types-of-employees).
* Students to go to the [job search website](https://jobsearch.gov.au/job/search) and find 5 advertised jobs for each of the categories full-time, part-time and casual.
* Why are some jobs full-time and others part-time? List some jobs advertised as casual only.
* Students to conduct an analysis of the advantages and disadvantages of different forms of employment.

**Resource:** f2-types-of-employment.DOCX* Students to set up [ESSI Money](https://www.financialbasics.org.au/essi-money/about-register.aspx). Set up class to enable it to be used throughout the unit (Provide each student with game link and they must register individually)

**Resource:** f2-essi-money-setup-guide.DOCXIdentify and describe a range of types of work-related income* Students to create a table to compare the differences between the main income types.
* Students to review the job options within [ESSI Money game](https://www.financialbasics.org.au/essi-money/about-register.aspx) - discuss the different job categories and what they each pay as a weekly/fortnightly/annual wage. Initially these jobs include:
* Labourer- 3 days/week
* Fitness instructor part time 5 days/week
* Regional Membership consultant -fulltime 5 days
* Barista- casual 4 days
* Discuss which job they feel is best? And why?
* Select a job and begin earning money
 |  |  |
| * read and interpret pay advice notifications Work and enterprise icon
 | Read and interpret payslips* Teacher to lead a discussion about job experience. Stimulate the discussion using the following prompting questions and stimuli:
* Does anyone in the room already have a job?
* Do you receive a payslip?
* Look at a [smart money payslip activity](https://static.moneysmart.gov.au/teaching/resources/first-job/index.htm) and discuss key elements.
* Students to review [ESSI Money game](https://www.financialbasics.org.au/essi-money/about-register.aspx) payslips, which students will receive related to their selected job via their in-game email. Have students discuss components shown on slip.
 |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| * identify and describe forms of income other than work-related income, for example
* pocket money
* social security payments
* interest on investments
* profits from operating a business Personal and social capability icon
 | Identify and describe other forms of income* Teacher to lead a brainstorm of what other types of income people may receive.
* Where else can you receive money from?
* Students to investigate pocket money using the quiz at [studyladder](https://www.studyladder.com.au/games/activity/earning-pocket-money-20639). This site requires a login, and teachers and students can select to sign up for free. The class may benefit from questioning surrounding the various scenarios in the quiz.
* Why do some people earn more pocket money than others?
* Is anyone able to be paid more often than others?
* Teacher to set up and manage online accounts based on reward systems in the classroom at either the [Bankaroo](https://www.bankaroo.com/) or [my kids bank](http://mykidsbank.org/) websites.
* Teacher to explain the definition of [profit](https://www.youtube.com/watch?v=zC4-AZ-hKUk), [profit from investments](https://www.abc.net.au/btn/classroom/the-business-of-shares/10488732) and the [share market](https://www.youtube.com/watch?v=F3QpgXBtDeohttps://www.youtube.com/watch?v=F3QpgXBtDeo) via these linked videos.
* Students to classify the sources of the income as earned from work, passive from investments, transfer payments from social and welfare sources or unearned from gifts or gambling.
* Students to complete pages 10 to 12 of [Module 2 - Income](https://www.financialbasics.org.au/modules/income-where-does-it-come-from) from the Financial Basics Foundation on Identifying sources of income
 |   |  |
| * read and interpret tables related to income, eg wage tables, tables of payments from Centrelink Work and enterprise icon
 | Read and interpret tables related to income* Teacher to lead a discussion around wages as a factor in their decisions of future employment. Direct students to the [hospitality award](https://www.fwc.gov.au/documents/documents/modern_awards/award/ma000009/default.htm) and [aged care award](https://www.fwc.gov.au/documents/documents/modern_awards/award/ma000018/default.htm). Discuss any items that students notice, before directing attention to minimum rates or minimum weekly wage.
* Students to select two careers and review their awards by searching at the [Fairwork website](https://www.fwc.gov.au/awards-and-agreements/awards/modern-awards/modern-awards-list#E).
* Which career has a higher introductory level pay?
* Which career has greater earning potential?
* Students to go to the [Centrelink website](https://www.servicesaustralia.gov.au/individuals/centrelink). By clicking on ‘individuals’ at the top of the screen, students select the different groups who can claim a benefit and review the conditions for receiving these payments.
* Students to compare payments from those using [JobSeeker](https://www.servicesaustralia.gov.au/individuals/services/centrelink/jobseeker-payment/how-much-you-can-get), [age pension](https://www.servicesaustralia.gov.au/individuals/services/centrelink/age-pension/how-much-you-can-get), [disability support](https://www.servicesaustralia.gov.au/individuals/services/centrelink/disability-support-pension/how-much-you-can-get/payment-rates) and [Youth Allowance for students and apprentices](https://www.servicesaustralia.gov.au/individuals/services/centrelink/youth-allowance-students-and-australian-apprentices/how-much-you-can-get).
* What does the amount you receive depend on?
* Are these payments enough to support a person’s needs alone?
* Students can select a situation and engage with the DESMOS payslip simulation to investigate.

**Resource:** DESMOS Activity [Payslip Simulator](https://teacher.desmos.com/activitybuilder/custom/5fa766febf0aa43530d913cb?collections=5fa5c4d2080d830d048140d3) |  |  |
| * recognise the link between a person having sufficient income and being able to buy the things they need and want Personal and social capability icon
 | Develop an appreciation for the role of budgeting* Teacher to introduce the concept of needs and wants via this [Teach Me About Money video](https://www.youtube.com/watch?v=el40d2gyWaI). Challenge students to construct lists of their own needs and wants.
* Which are the most important needs and why?
* What happens if there are insufficient fund?
* Students to estimate and add up the cost of their top 5 wants and needs.
* How much money do you need to earn?
* How much money would you like to earn to be able to afford all luxuries.
* Students to use the weekly planner function in their [ESSI Money game](https://www.financialbasics.org.au/essi-money/about-register.aspx) to monitor their spending.
* Students to play the online game [Spent](http://playspent.org/) to learn about poverty and the challenges it brings. Students need to make a series of decisions which impacts their income.
* Teacher to use a [classroom economy](http://myclassroomeconomy.org/grades/grade11-12.html) to support understanding of budgeting and insufficient income –allocate jobs/earn money/spend money

**Related topic:** MLS-F2 Spending Money. It is suggested that this concept is explored with in the MLS-F2 unit of learning. |  |  |
| F2.2: Income calculationsStudents:* calculate earnings based on wages or salaries, for example:
* calculate income given an hourly rate and a number of hours worked or calculate weekly income given an annual salary
* read and interpret a timesheet to calculate wages for the time period covered on the sheet Personal and social capability icon
* calculate earnings based on piecework Work and enterprise icon
* calculate earnings based on percentage commission Work and enterprise icon
* calculate total income for a given time period, taking into account regular pay, overtime pay and other allowances Work and enterprise icon
 | Calculate income given payment conditions* Students perform calculations of their chosen careers from the [Fairwork website](https://www.fwc.gov.au/awards-and-agreements/awards/modern-awards/modern-awards-list#E) to calculate weekly pay given an hourly rate of pay.
* How many hours would you need to work per week to ensure you earn enough to afford your needs?
* Students to look on [Job Search](https://jobsearch.gov.au/job/search) for careers of interest to find the advertised salary. Students use these salaries to calculate a weekly income.
* Students to watch “How to read a payslip” [video](https://www.youtube.com/watch?v=8rzI5dpwJ2M) to experience a real Australian payslip with award name, overtime, tax, penalties.
* Students view a range of occupations that are [commission](https://www.seek.com.au/commission-only-jobs) based e.g. real estate
* Teacher to lead a discussion about overtime and the ways in which people earn overtime. Refer to awards for [Hospitality](https://www.fwc.gov.au/documents/documents/modern_awards/award/ma000009/default.htm) and [Aged Care](https://www.fwc.gov.au/documents/documents/modern_awards/award/ma000018/default.htm) to discuss when overtime is paid and who receives it.
* Why is overtime important?
* Students practise reading payslips and ensuring their accuracy by completing the following activities

**Resources:** * f2-checking-your-payslip-wages.DOCX
* f2-checking-your-payslip-commission.DOCX
* f2-checking-your-payslip-piecework.DOCX
 |  |  |
| F2.3: Tax and other deductionsStudents:* recognise the existence and purpose of income tax Civics and citizenship icon
* interpret and calculate tax and other deductions, for example:
* read and interpret weekly tax tables, either online or on paper, to determine the amount of tax that would be withheld from a worker’s weekly pay  Information and communication technology capability icon
* identify other typical deductions that may be taken from earnings, e.g. superannuation or union fees Work and enterprise icon
* calculate net pay, given amounts of gross pay, tax and deductions Work and enterprise icon
* understand that the Pay As You Go (PAYG) system of taxation is applied to most wage and salary earners Work and enterprise icon
 | Understand and recognise the purpose of income tax* Teacher to lead a discussion on income tax and its purpose.
* Watch the ATO animation [Village and the boy named tax](https://www.youtube.com/watch?v=QUs0mB7RqmM).
* Discuss what the taxes were used to pay for? Watch [video](https://youtu.be/FeqwZwQcrj8) [How does tax work in Australia](https://www.youtube.com/watch?v=FeqwZwQcrj8).
* Discuss the most common types of tax we pay, including GST and income tax
* List who collects tax. Shops, businesses & employers.
* When is income tax collected?
* Students to investigate the amount of tax that should be taken by their employer for each of the jobs available in the [ESSI Money game](https://www.financialbasics.org.au/essi-money/about-register.aspx). The amount of tax to be taken by your employer can be calculated in two ways at the [ATO website](https://www.ato.gov.au/rates/weekly-tax-table/?=top_10_rates).
* Click on the first link will open a spreadsheet to calculate the amount instantly based on weekly pay
* Clicking on the link titled “weekly withholding amounts” to view a large table to find the
* Raise the question “what happens if our employer takes too much or not enough tax from our pay”?
* Teacher to introduce the calculation of tax payable by watching the video [Calculating Income Tax](https://www.youtube.com/watch?v=H-0lXwor8t8).
 |  |  |
| * explain the term ‘financial year’ and identify why it is significant to workers Literacy icon
* recognise that workers need to submit a tax return annually Civics and citizenship icon
* Identify typical allowable tax deductions for different workers and understand the documentation needed if a worker wants to claim these deductions in their tax return, for example: Personal and social capability icon Work and enterprise icon
* tools for a tradesperson
* uniform laundering
 | Understand and recognise the need for tax return procedures* Teacher to lead discussion around the purpose of tax return procedures.
* Define the term financial year
* Why do we have a financial year? How does it differ from a calendar year? Compare with other countries e.g. USA tax year from January to December.
* Who must submit a tax return? Students to try a range of scenarios in the [ATO questionnaire](https://www.ato.gov.au/Calculators-and-tools/Host/?anchor=DINTL&anchor=DINTL/questions#DINTL/questions)
* In what ways can we complete a tax return?
* Students to review the possible jobs in the [ESSI Money game](https://www.financialbasics.org.au/essi-money/about-register.aspx) and consider the possible deductions and taxable income for each.
* Students to consider and discuss what qualifies as an allowable deduction. Look at approved [ATO deductions](https://www.ato.gov.au/Individuals/Income-and-deductions/Deductions-you-can-claim/) to confirm. This page includes a video explaining what allowable deductions are. Students can consider their chosen career and review what does and does not qualify as an allowable deductions specifically for this job at the [ATO website](https://www.ato.gov.au/Individuals/Income-and-deductions/Occupation-and-industry-specific-guides/?=redirected_occupations).
* Students to engage in discussions surrounding whether or not a specific item should be considered as an allowable deduction for their chosen career.
* Students to identify anything that could be considered a deduction in their [ESSI Money game](https://www.financialbasics.org.au/essi-money/about-register.aspx). Each job requires a purchase before applying which can be considered a deduction.
* What work-related expenses would be needed in your role?
* Students to receive a sample group certificate for work completed in either their [ESSI Money game](https://www.financialbasics.org.au/essi-money/about-register.aspx) or other classroom activities. They can then enter the details into the DESMOS activity to simulate the experience of submitting a tax return online.

**Resource:** f2-group-certificate.DOCX**Resource:** DESMOS activity [Completing a Tax Return](https://teacher.desmos.com/activitybuilder/custom/5f9fd42338da240cd24df623).* Students complete pages 32 and 35 of [Module 6 - Taxation](https://www.financialbasics.org.au/modules/taxation-everyone-pays) from the Financial Basics Foundation on how to lodge a tax return.

**Related topic:** MLS-F2 Spending Money. It is suggested that this concept is explored with in the MLS-F2 unit of learning, with specific regard to work related expenses and deductions.  |  |  |

### Evaluation

|  |
| --- |
|  |

### Glossary

|  |  |
| --- | --- |
| Term | Description |
| Allowance | A sum of money paid regularly to a person to meet needs or expenses e.g. allowance to help cover cost |
| Budget  | An estimate of income and expenditure for a set period of time  |
| Casual  | Irregular number of hours per week, no guaranteed hours/week  |
| Deductions | An expense related to earning of income that lowers a person’s tax liability by lowering taxable income |
| Employment | Having paid work |
| Expenditure | An amount of money spent  |
| Financial year | A financial year is a period of twelve months, used by individuals, government, business, and other organisations in order to calculate their income, budgets, profits, and losses. |
| Freelance | Short term employment for multiple employers- maybe at same time  |
| Fulltime | Working maximum standard hours allowed by award; typically, max 38 hours per week at standard wage |
| Gross pay | Income received before any deductions are made from it |
| GST | The Goods and Services Tax (GST), in Australia, is a flat percentage of tax levied on most goods and services. The GST is a value added tax (VAT) |
| Human services (Centrelink)  | Organisation that manages Government payments to individuals who meet specific criteria  |
| Income  | Money received, especially on a regular basis, for work or through investments  |
| Needs | Require (something) because it is essential for life or very important rather than just desirable. e.g. food, accommodation.  |
| Net earnings | Net earnings, also referred to as net pay, is the remaining amount of gross pay after tax and other deductions have been made. E.g. tax, superannuation |
| p.a  | Per annum (year) |
| Pay as you go (PAYG) tax | Pay As You Go tax is a system for making regular tax instalments which are removed from gross pay towards the expected income tax liability for that financial year. |
| Part-time | Works less than 38 hours/week but work regular hours/week may work same shifts/week. Pro-rata benefits e.g. sick leave  |
| Pension | A regular payment made by the Government to people of or above the official retirement age, invalids, some widows and disabled people  |
| Piecework/outworkers  | Piecework is employment where a worker is paid a fixed rate for each item produced or action performed regardless of the time taken. |
| Pocket money  | An amount of money given to a child by their parents/carer, typically on a regular basis. Can be in return for completing chores at home  |
| Salary | A fixed regular payment, typically paid on a weekly/fortnight/monthly basis but often expressed as an annual amount e.g. $109,000 p.a.  |
| Self-employed | Works for self. Maybe the owner or work freelance  |
| Taxable income | Taxable income is the amount of yearly income that is used to calculate an individual’s payable income tax equal to gross income less allowable tax deductions. |
| Taxation | Money collected and paid to the government. Taxation is collected from individuals and corporate organisations.  |
| Tax return | A tax return is an annual statement of all income, allowable deductions, PAYG tax paid and other personal financial information so as to allow the Australian Taxation Office to calculate the amount of income tax an individual should pay for the financial year. |
| Wage  | A fixed regular payment earned for work or services can be paid daily/weekly/fortnightly/monthly  |
| Wants | Have a desire to possess, do something or wish for something. e.g. latest gaming system or newest phone  |

### Supplementary resources

* [Tax, Super and you](https://www.taxsuperandyou.gov.au/quiz/138/income-and-income-tax) – An Australian Taxation Office site with resources to support education of tax and superannuation.
* [Class Economy](http://myclassroomeconomy.org/grades/grade11-12.html) – Provides a framework for establishing a rewards system and whole classroom system that imitates the financial world.
* [Financial Basics Foundation Module 8](https://www.financialbasics.org.au/modules/investing-where-do-i-start) – Downloadable booklet that encourages students to consider attitudes to saving money, investment strategies and plans for future financial security.