# The secrets to keeping more money

Students explore how taxable income is calculated and the factors that contribute to it increasing and decreasing. They investigate how to reduce taxable income to pay less tax.

## Visible learning

### Learning intention

* To understand how taxable income is calculated.

### Success criteria

* I can identify examples of earnings that individuals need to pay tax on.
* I can identify spendings that classify as an allowable tax deduction.
* I can calculate an individual’s taxable income.
* I can explain how to reduce an individual’s taxable income.

### Syllabus outcomes

A student:

* develops understanding and fluency in mathematics through exploring and connecting mathematical concepts, choosing and applying mathematical techniques to solve problems, and communicating their thinking and reasoning coherently and clearly **MAO-WM-01**
* solves financial problems involving simple interest, earning money and spending money **MA5-FIN-C-01**

[Mathematics K–10 Syllabus](https://curriculum.nsw.edu.au/learning-areas/mathematics/mathematics-k-10-2022) © NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales, 2022.

## Activity structure

### Launch

1. Use slides 3 to 8 from the PowerPoint *The secrets to keeping more money* for this activity.
2. Students will be presented with a scenario of 2 people, Riley and Luca, their income and some related work conditions. The students will need to decide which person should pay more tax.
3. Label each side of the room, ‘Riley’ and ‘Luca’. Slowly reveal each slide of the PowerPoint and ask students to move to which side of the room they believe is the person that should be taxed the most. Students' answers may continually change.
4. Randomly select students who swap sides throughout the reveal to justify why.

The final table is shown below.

|  |  |
| --- | --- |
| Riley | Luca |
| Income = $100 000 p.a. | Income = $100 000 p.a. |
| Has $12 000 in a savings account, gaining interest monthly. | Has $25 000 in a savings account, gaining interest monthly. |
| Was given a phone by their employer to use for work purposes. | Uses their own personal phone for work purposes 30% of the time. |
| Travels at least 350 km in their private car for work. | Has a company car that they use during the week for work. |
| Has a work uniform and is paid an extra $7.45 per week as laundry allowance. | Purchases their own work clothes and gets no laundry allowance. |
| Donates $10 per month to a charity. | Purchased $50 worth of raffle tickets at a fundraiser event for a charity. |

Students may need a brief discussion and/or explanation as each row is revealed. For example, they may need an explanation on what interest is from a savings account and what having more money in a savings account may mean.

The aim of this activity is not to give too much instruction and an explanation as to how each work condition affects an individual’s taxable income; it is to spark interest.

### Explore

1. Arrange students into visibly random groups of 3 ([bit.ly/visiblegroups](https://bit.ly/visiblegroups)). Each group will need a printout of the cards from Appendix A ‘Tell or keep’. Students will be working through scenarios of receiving and spending money and categorising them into which one of the following they believe it might be:
2. Receiving money you must pay tax on.
3. Receiving money you do not have to pay tax on.
4. Spendings you can claim as a tax deduction.
5. Spendings you can’t claim as a tax deduction.

This activity is best done at a vertical non-permanent surface ([bit.ly/VNPSstrategy](https://bit.ly/VNPSstrategy)) with the scenarios cut out and adhered to the surfaces with adhesive putty so they can move scenarios easily from one category to another. Vertical non-permanent surfaces also mean that students can view other groups’ work.

1. Students should be encouraged to do a gallery walk ([bit.ly/DLSgallerywalk](https://bit.ly/DLSgallerywalk)).
2. Conduct a class discussion around where each scenario belongs before revealing the answers which can be found in the sample solutions at the end of this document. Students should be encouraged to debate with each other, where they believe the scenarios should be placed.
3. Explain to students what each of the categories refers to by giving a brief definition. More information can be found on the Moneysmart website ([moneysmart.gov.au/income-tax](https://moneysmart.gov.au/income-tax)).

Students should gain an understanding that individuals are not just taxed on their income or earnings from their job, but many other variables come into play.

1. Pose the question, and have students discuss in their previous groups of 3, the advantages and disadvantages of:
2. Earning extra money that needs to be taxed.
3. Spending money on goods and services that are a tax deduction.
4. Explain to students that the more you earn, the more tax you must pay and the more tax deductions you have, the more it reduces the amount you need to pay tax on.
5. Reveal to students what taxable income is and how it is calculated, that is:
6. The amount of yearly income that is used to calculate an individual’s or company’s payable income tax.
7. Taxable income = Total earnings − allowable tax deductions
8. The smaller your taxable income, the less tax you will pay.

### Summarise

1. Students make notes to their future forgetful self ([bit.ly/notesstrategy](https://bit.ly/notesstrategy)) on how taxable income is calculated as well as some examples of allowable tax deductions.
2. Students can then complete the questions in Appendix B ‘Same income, different tax’, which uses variation theory ([variationtheory.com/introduction/](https://variationtheory.com/introduction/)).

### Apply

1. In groups of 3, students are to research other ways individuals can reduce the tax they pay. Examples that they can research include:
2. salary packaging
3. tax offsets.
4. Students could be directed to the information on Moneysmart – Income tax ([moneysmart.gov.au/income-tax](https://moneysmart.gov.au/income-tax)) which has links to the relevant ATO websites.
5. Students should be encouraged to share their ideas and understanding with the class.

## Assessment and differentiation

### Suggested opportunities for differentiation

**Launch**

* Students may need a class discussion as each row is revealed. For example, they may need an explanation on what interest is from a savings account and what having more money in a savings account may mean.

**Explore**

* Encourage students to view each other’s work in the activity section and discuss why some groups may have placed cards in different categories.

**Apply**

* Students that need to be challenged may find benefit in exploring some of the really niche deductions available for specific professions and industries that can be found and explored on the ATO site.

### Suggested opportunities for assessment

**Explore**

* Monitor student conversations to check for understanding and to address any misconceptions.
* During the class discussion, be sure to ask for student reasoning, particularly when the class had a card in different categories.

**Summarise**

* Collect Appendix B to check for student understanding.

## Appendix A

### Tell or keep?

Cut out the cards below and categorise them as either:

* Receiving money you must pay tax on.
* Receiving money you do not have to pay tax on.
* Spendings you can claim as a tax deduction.
* Spendings you can’t claim as a tax deduction.

|  |  |  |
| --- | --- | --- |
| Your earnings from working at the local café. | Personal phone bills when work has supplied a work phone. | Money spent on a desk and office chair that will be used when working from home. |
| Money received for winning a reality TV show. | Cash that you get in a card from your grandparents on your birthday. | Money spent on a desk and office chair that will be used to do school/university work. |
| Kilometres travelled using your private car when using the car for work purposes. | Cash in-hand that you receive from mowing lawns as a part-time job. | Money from winning the lottery. |
| Money you receive in your account from a friend when you paid for their movie ticket. | Payment for a course that work is making you attend for training purposes. | The amount spent on morning tea and lunch when at work. |
| Money spent on protective gear that is needed for work, including glasses and boots. | Pocket money given to you from your parents. | Money gained from interest in your savings account |
| Money spent on stationary that you use at school/university. | Money received from rent on your investment property. | Electricity and internet bill when working from home. |
| A gift voucher for the local shopping centre that you won in a raffle at a fundraiser. | Money spent on professional memberships that are required for your job. | Money spent on raffle tickets at a fundraiser. |
| Money received through child support. | Income received from owning shares, that is dividends. | Receipts of money spent on casual clothing worn to work. |

## Appendix B

### Same income, different tax?

1. Dimitra works as a registered nurse. Calculate their taxable income if they:
2. Earned an income of $98 000 p.a.
3. Made $200 in interest from their savings account.
4. Paid $150 for their nursing registration.
5. Bought a new stethoscope that cost $160.
6. For each of the following individuals, compare their scenario to Dimitra’s. Explain what has changed, make a prediction on what effect this change will have on their taxable income and then calculate their taxable income.

|  |  |  |
| --- | --- | --- |
| Individual’s scenario | Changes and predictions | Calculate the taxable income |
| **Clay works as a construction manager he:*** **earns $98 000 p.a.**
* **made $200 in interest**
* **paid $150 in registration fees**
* **spent $100 on new work boots that are needed for his day-to-day job.**
 |  |  |
| **Jason works as an executive assistant, he:*** **earns $98 000 p.a.**
* **made $14 000 from his investment property**
* **paid $150 in registration fees.**
 |  |  |
| **Shalveena works as a dietitian, she:*** **earns $98 000 p.a.**
* **made $400 in interest**
* **paid $650 in professional equipment.**
 |  |  |

## Sample solutions

### Appendix A – tell or keep?

#### Receiving money you must pay tax on

* Your earnings from working at the local café.
* Money received for winning a reality TV show.
* Cash in-hand that you receive from mowing lawns as a part-time job.
* Money gained from interest in your savings account.
* Money received from rent on your investment property.
* Income received from owning shares, that is dividends.

#### Receiving money you do not have to pay tax on

* Cash that you get in a card from your grandparents on your birthday.
* Money from winning the lottery.
* Money you receive in your bank account from a friend when you paid for their movie ticket.
* Pocket money given to you from your parents.
* A gift voucher for the local shopping centre that you won in a raffle at a fundraiser.
* Money received through child support.

#### Spendings you can claim as a tax deduction

* Money spent on a desk and office chair that will be used when working from home.
* Kilometres travelled using your private car when using the car for work purposes.
* Payment for a course that work is making you attend for training purposes.
* Money spent on protective gear that is needed for work, including glasses and boots.
* Electricity and internet bill when working from home.
* Money spent on professional memberships that are required for your job.

#### Spendings you can’t claim as a tax deduction

* Personal phone bills when work has supplied a work phone.
* Money spent on a desk and office chair that will be used to do school/university work.
* The amount spent on morning tea and lunch when at work.
* Money spent on stationary that you use at school/university.
* Money spent on raffle tickets at a fundraiser.
* Receipts of money spent on casual clothing worn to work.

### Appendix B – same income, different tax?

|  |  |  |
| --- | --- | --- |
| Individual’s scenario | Changes and predictions | Calculate the taxable income |
| **Clay works as a construction manager he:*** **earns $98 000 p.a.**
* **made $200 in interest**
* **paid $150 in registration fees**
* **spent $100 on new work boots that are needed for his day-to-day job.**
 | Clay’s allowable tax deductions are less than Dimitra’s. Prediction: Clay’s taxable income will be higher. |  |
| **Jason works as an executive assistant, he:*** **earns $98 000 p.a.**
* **made $14 000 from his investment property**
* **paid $150 in registration fees.**
 | Jason’s total earnings is significantly higher than Dimitra’s and Clay’s and has less allowable tax deductions.Prediction: Jason’s taxable income will be much higher than Clay’s and Dimitra’s. |  |
| **Shalveena works as a dietician, she:*** **earns $98 000 p.a.**
* **made $400 in interest**
* **paid $650 in professional equipment.**
 | Shalveena has the same total earnings as Dimitria and Clay, although her allowable tax deductions are higher. Prediction: her taxable income will be smaller than the other’s. |  |

## References

This resource contains NSW Curriculum and syllabus content. The NSW Curriculum is developed by the NSW Education Standards Authority. This content is prepared by NESA for and on behalf of the Crown in right of the State of New South Wales. The material is protected by Crown copyright.

Please refer to the NESA Copyright Disclaimer for more information [https://educationstandards.nsw.edu.au/wps/portal/nesa/mini-footer/copyright](https://aus01.safelinks.protection.outlook.com/?url=https%3A%2F%2Feducationstandards.nsw.edu.au%2Fwps%2Fportal%2Fnesa%2Fmini-footer%2Fcopyright&data=05%7C01%7CCaitlin.Pace1%40det.nsw.edu.au%7C9c2c1a9f59c94d2df30708dafa7edb23%7C05a0e69a418a47c19c259387261bf991%7C0%7C0%7C638097720042599463%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=BzQh0UsffVZE3eO22b2Xba3p0VMOBZSHfS21FGHXtZM%3D&reserved=0).

NESA holds the only official and up-to-date versions of the NSW Curriculum and syllabus documents. Please visit the NSW Education Standards Authority (NESA) website <https://educationstandards.nsw.edu.au/> and the NSW Curriculum website [https://curriculum.nsw.edu.au/home](https://curriculum.nsw.edu.au/).

[Mathematics K–10 Syllabus](https://curriculum.nsw.edu.au/learning-areas/mathematics/mathematics-k-10-2022) © NSW Education Standards Authority (NESA) for and on behalf of the Crown in right of the State of New South Wales, 2022.

**© State of New South Wales (Department of Education), 2023**

The copyright material published in this resource is subject to the *Copyright Act 1968* (Cth) and is owned by the NSW Department of Education or, where indicated, by a party other than the NSW Department of Education (third-party material).

Copyright material available in this resource and owned by the NSW Department of Education is licensed under a [Creative Commons Attribution 4.0 International (CC BY 4.0) license](https://creativecommons.org/licenses/by/4.0/).



This license allows you to share and adapt the material for any purpose, even commercially.

Attribution should be given to © State of New South Wales (Department of Education), 2023.

Material in this resource not available under a Creative Commons license:

* the NSW Department of Education logo, other logos and trademark-protected material
* material owned by a third party that has been reproduced with permission. You will need to obtain permission from the third party to reuse its material.

**Links to third-party material and websites**

Please note that the provided (reading/viewing material/list/links/texts) are a suggestion only and implies no endorsement, by the New South Wales Department of Education, of any author, publisher, or book title. School principals and teachers are best placed to assess the suitability of resources that would complement the curriculum and reflect the needs and interests of their students.

If you use the links provided in this document to access a third-party's website, you acknowledge that the terms of use, including licence terms set out on the third-party's website apply to the use which may be made of the materials on that third-party website or where permitted by the Copyright Act 1968 (Cth). The department accepts no responsibility for content on third-party websites.