

New South Wales Commerce and Mathematics

Module 7 Managing finances



Financial Literacy
Curriculum Resource
2008 Revised Edition

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Introduction

The Commonwealth Bank has been supporting education for more than 70 years, since the introduction of school banking in 1931. In 2003, we strengthened our commitment to education through the establishment of the Commonwealth Bank Foundation.

The Foundation seeks to encourage developments in education, particularly the financial literacy skills of young Australians, and aims to create awareness, skill and understanding of the benefits of a more financially literate community.

By helping our young people understand money management, we will empower them to take effective decisions to achieve their financial goals.

With this in mind, we are pleased to announce the availability of a national financial literacy curriculum resource which has been developed to support the teaching of financial literacy in the classroom.

Developed by a National Steering Committee comprising representatives across a broad range of state and territory education departments, sectors and professional teachers' associations, the curriculum materials have been designed to support the teaching of financial literacy in Years 7 to 10.

This practical and relevant curriculum resource has been designed to be easily incorporated into a number of subject areas and has been mapped to the curriculum in each state and territory.

There are twelve modules covering:

- Earning an income
- Spending and saving
- Consumer decisions
- Consumer protection
- Buying a car
- Financial services
- Managing finances
- Consumer awareness
- Personal investment
- Planning and running a business
- Impact of technology
- Economics of everyday finance

The resource materials can be easily downloaded via the Commonwealth Bank Foundation's website www.commbank.com.au/foundation

We hope you find this resource a valuable tool to use in your classroom.

The Commonwealth Bank Foundation Team



Module 7: Managing finances

Background scenario

The case studies are developed around two families: the Drivers and their relatives the Fullbricks; as well as their friends and workmates. The Drivers, Ilse and Laurie, have two teenagers: Elizabeth, aged 15, and Nathan, aged 17. Both work part-time. Ilse has ongoing medical problems and Laurie works for a small trucking company. Grandmother Josefina lives with the family. The second family is the Fullbrick family, to whom they are related through Uncle Frank, Ilse's wealthy brother. Frank Fullbrick runs a construction company, and his partner Sella is a marketing manager.

Teacher notes

This topic will address the following issues:

- sources and types of income for individuals and families;
- maximising income from an established source;
- managing changing financial circumstances;
- risks and benefits of investment options;
- factors to be considered when borrowing money; and
- evaluating financial expectations against financial opportunities.

Stimulus material provided:

- H.7.1 Lifestyle decisions.
- H.7.2 Sources of income.
- H.7.3 Spreadsheet for interest rate calculation and comparison.
- H.7.4 Fixed versus compound interest calculations.
- H.7.5 Sample credit card statement.
- H.7.6 Household debt.
- H.7.7 Investment risk.
- H.7.8 Investment returns.

There are also general teacher notes available at the beginning of the units.

Key terms and definitions

Blue chip shares	Shares in reliable and well-established companies. They are considered a safe investment.
Compound interest	When you receive (or pay) interest on both the principal and any existing accumulated interest.
Debt	An amount of money that is owed.
Dividends	If you own shares, the business may pay some of its profits to you as a percentage of the originally issued value of the share.
Financial adviser	A professional person who is qualified to give advice on financial matters.
Financial institutions	A business that handles money for people. It could hold money in a savings account or it may lend money out for a range of purposes. Types may include: banks, credit unions, finance companies, friendly societies.
Fixed interest	The interest rate is unchanged for the period agreed.

Incentive scheme	A scheme attached to some credit cards where rewards are offered for spending money using the card. This may take the form of points redeemable for goods and services. Examples include Fly Buys or frequent flyer schemes.
Income	Money received during a certain period; mainly as wages or salary, interest, rent, dividends, social security.
Interest	This can mean two things. When you <i>receive</i> interest it is a type of income - such as the "interest" that the bank will give you when you let them hold onto your money. However, when you <i>pay</i> interest, it is the cost of borrowing - the extra amount you must pay back when you take out a loan.
Investment	An asset acquired for the purpose of producing or generating an income.
Principal	The original amount that is borrowed or invested.
Reducible/variable interest	When a financial institution changes the interest rate it charges (or pays) its customers, in response to a change in economic conditions.
Rent	Payment made for the use of property.
Return	The amount of money received from savings or an investment. It is usually expressed as a percentage.
Risk	The level of uncertainty of a particular investment. Often, the higher the risk, the higher the return.
Royalties	When the work of an individual or group (e.g. musician, novelist, scientist) is used by others, the creator of the work or owner of the royalties should receive a payment. For example, when someone writes a book, they can negotiate to receive a royalty for each copy that is sold. A musician or band gets money each time a radio station plays their music. Royalties are not necessarily owned by the creator of the work in question. For example, the royalties for a scientist's work are often owned by the organisation he or she works for, or royalties may be bought by someone else.
Salary	The annual amount that you receive for working, divided into regular, equal payments, e.g. each fortnight. People who are earning a salary (as opposed to a wage) are usually not entitled to overtime or shift allowances, but they will generally receive a higher pay rate.
Salary sacrifice	This is paying for some things before income tax is deducted from wages or salary.
Taxation	Money paid to governments used to provide mainly services, such as defence, schools, roads and hospitals.
Term deposit	Financial institutions offer the customers the opportunity to "lock their money away" in a term deposit. This means that you can't get it back for a certain period without losing some or all the interest, but you will receive an agreed amount of interest if it remains in deposit for the agreed period.
Wage	The amount of money you are paid on an hourly rate. It is usually paid as a weekly or fortnightly amount for working. It can also include amounts for overtime, penalty rates and shift allowances.

Task 1: Lifestyle decisions

Teacher notes

Task 1B asks students to examine the terms and conditions of credit cards. You may wish to provide copies for use in class from the websites of a number of financial institutions or students can look at the documents online in class. One suggestion is provided.

Tasks 1C and 1D ask students to look at mobile phone brochures, with 1D focusing specifically on “2 for 1” deals. Students can bring brochures into class or information can be found using the internet. 1C also sees students examining mobile phone accounts (phone bills). Before doing this task you will need to obtain a number of mobile phone accounts and copy them for class use ensuring personal details and all phone numbers are covered up.

Scenario

Sella’s younger sister Esther has just finished university. She gets together with some friends, Costa and Jasna, to discuss financial issues she should be thinking about now.

Andrew joins the group with his dog, Joker. The first thing he wants to know is, “What have you guys all been talking about?” When he hears about the discussion he confides about his financial problems. Andrew’s mate is putting pressure on Andrew to come with him on the overseas trip he has already booked. Andrew decides to use credit to pay for his overseas trip now; then pay for it when he gets back. The friends offer advice.

Student activities	Learn about, <i>Learn to</i>
<p>Task 1A. Setting financial goals</p> <p>Read the conversation in <i>H.7.1 Lifestyle decisions</i>. As a class, identify and discuss Andrew’s wealth related to his quality of life. Include the impact that peer pressure, media and advertising could have had on lifestyle decisions Andrew chose to make. Identify the contribution Andrew has made to the social capital and environmental sustainability of the community.</p> <p>Use the following questions to help clarify the larger issues of lifestyle choices.</p> <ol style="list-style-type: none"> List all of Andrew’s sources of income. Explain why Andrew is in this financial situation, and identify specific spending and saving problems he has, even though he is very well paid. Identify other ways he could increase his income (legally of course). For Andrew’s benefit what could his short-, medium- and long-term financial goals be? Relate these goals to some personal values you would like Andrew to have in making a positive contribution to the wider community. Make several suggestions as to how Andrew could achieve each of these goals. Present as a table. 	<p>Commerce</p> <p>1.1 Consumer choice Commerce and choice</p> <ul style="list-style-type: none"> decisions affecting the quality of our lives <ul style="list-style-type: none"> consumer, financial, business, employment, legal environmental <i>recognise the consequences of commercial and legal decisions on the quality of our lives and the environment</i> <p>1.2 Personal finance Earning and income</p> <ul style="list-style-type: none"> types of income <ul style="list-style-type: none"> from work, investments, business ventures and social welfare programs <p>Option 5 Towards independence Lifestyle issues</p> <ul style="list-style-type: none"> maintaining priorities <ul style="list-style-type: none"> study entertainment fitness <i>develop lifestyle plans</i>

5. As a class share and discuss the suggestions for Andrew's short-, medium- and long-term goals. Include in the discussion the need to set personal and financial goals.
6. Write a list of tips for young people on "Managing your personal finances". Include information from a range of sources.

Task 1B. To credit or not to credit?

1. As a class, discuss the following:
 - a. Is using a credit card a suitable way for Andrew to pay for his overseas trip? Why/why not? Identify the personal and financial responsibilities related to using credit in this situation.
 - b. What alternatives to using a credit card does Andrew have?
 - c. Will a credit card help Andrew achieve his financial goals established in Task 1A?
2. What are the terms and conditions of using a credit card? Obtain information from the website of a financial institution, such as <http://www.commbank.com.au/personal/credit-cards/default.aspx>. Using this information discuss the following questions in small groups.
 - a. What terms and conditions can you identify that are important for Andrew to be aware of?
 - b. Where could Andrew obtain a credit card with a limit to meet his expenses? Decide the implications of this credit limit.
 - c. What is the cost of borrowing \$5,000 at the identified credit interest rates for two years?
 - d. If you were in Andrew's situation would you choose to use credit? Why/why not?
3. With a partner, script a conversation with Andrew about using credit for his overseas trip, include your recommendations in the conversation. Perform some of the conversations for the class.

Task 1C. Financial consequences of personal decisions

Collect some mobile phone brochures and mobile phone accounts (ensuring all personal details and phone numbers are hidden) to make comparisons.

1. In small groups develop a PMI (pluses, minuses and interesting chart) on mobile phones. Reflect on the financial, personal, social and environmental consequences of mobile phone use. Present and discuss the PMI's. Include in the discussion:
 - a. What is the effect of peer pressure, community expectations and advertising on mobile phone selection and usage?
 - b. What are the ethics and associated costs of using mobile phone messages to 'vote' on aspects of media entertainment?
 - c. Identify alternatives to 'owning' a mobile phone.
 - d. The 'life' of a mobile phone before it needs to be

- short term
- long term

1.1 Consumer choice

Payment choices

- methods of payment
- *identify the criteria that should be considered when determining methods of payment for different suppliers*

1.2 Personal finance

Borrowing money

- getting a loan
 - types of loans, lending institutions, ability to pay, credit rating
- *identify specific situations in which individuals should and should not borrow money*
- *identify factors affecting an individual's credit rating*

Mathematics

NS5.1.2 Consumer Arithmetic

- calculating and comparing the cost of purchasing goods using:
 - cash
 - credit card
- calculating a "best buy"
- *realise the total cost and/or hidden costs involved in some types of purchase agreements*
- *make informed decisions related to purchases eg determining the best mobile plan for a given situation*
- *interpret the GST on receipts*

NS5.2.2 Consumer Arithmetic

- determining and using the formula for compound interest, $A = P(1 + R)^n$
- *solve problems involving discounts and compound interest*
- *analyse promotional and advertising material that is collected from a variety of sources including the Internet*

Commerce

1.1 Consumer choice

Consumer decisions

- comparison shopping
- choosing where to buy
- *research consumer information from a variety of sources*

replaced.

- e. What are some of the ways to pay for a mobile phone?

Background information on mobile phones is available at:

- Mobile phone information by the Australian Communications and Media Authority (ACMA): <http://www.acma.gov.au/web/> (copies can be obtained for class use)
- Telstra Mobile phone bill demonstration: <http://www.telstra.com.au/mobile/plans/index.html>

2. Copy (with personal details and all phone numbers covered) and review the mobile phone accounts. Identify the different components of the account:
 - a. Locate the timeframe, how many days is this bill for?
 - b. Locate any plan charges, GST, tax, insurance or other additional charges.
 - c. Identify the calls that were made in the morning (am) and in the afternoon and evening (pm). Are calls concentrated at a particular time?
 - d. Does the account have special call rates - what are they? What is the cheapest time to make a call? Evaluate how convenient this is.
 - e. Work out the average number of calls per day and the average time spent on mobile phone calls each day for the account period?
 - f. Does the account have a 'flag fall' or call connection fee? How is this affecting call costs?
 - g. Locate the SMS (text mail, text messages) charges. What is the cost of each message? Are there any special rates? How much is spent on text messages each day?
 - h. Average the cost of phone calls and text messages per day.
 - i. Evaluate if the daily cost is 'value for money'.
3. Use the mobile phone brochures to analyse and compare call rates. Select a plan to suit the needs of low, moderate and high users and justify choices. Return to the mobile phone account analysed earlier, compare the call charges on the account to other mobile phone plans. Decide if the mobile phone plan is the correct one for the type of use demonstrated in the account.

Task 1D. Mobile phone case study

Before beginning this task you will need to collect some brochures on "2 for 1" mobile phone offers either from a store or from the Internet (search using "mobile phone offers").

Susan (Andrew's girlfriend) signed up for a "2 for 1" mobile phone offer and gave one to Andrew. She and Andrew talked to each other often at a special call rate. They agreed to pay their component of the monthly account. Their relationship is now over and Andrew is running up a huge bill that he is refusing to pay for.

1. Read through and discuss the information on "2 for 1" phone offers.

- *select and apply appropriate criteria to rank alternative purchasing options*
- *explain the factors influencing decisions to buy*

1.1 Consumer choice Consumer decisions

- key factors affecting consumer decisions
- *explain the factors affecting consumer decisions*

Option 2 Promoting and selling

Targeting consumers

- legal and ethical issues associated with product promotion strategies
- *identify how promotion strategies target particular groups in the community*

Current issues

- *identify and investigate current issues relating to the promotion and selling of goods and services and the impact on consumers*

-
2. Select a “2 for 1” phone plan that Susan could have agreed to. This will be the model ‘deal’ for the task. Are there any special terms and conditions that need to be considered?
 3. Identify the legal responsibilities Susan agreed to when she signed the contract. These can be found in the terms and conditions of the deal you selected as the model for the task.
 4. What are Andrew’s responsibilities?
 5. What could be the effect on Susan if the current situation continues, i.e. Andrew continues to use the phone a lot under the contract that Susan has with the mobile phone company.
 6. What action(s) could Susan take to address the situation? Develop a flow chart to show possible actions and their effects.
 7. Calculate the cost of cancelling the plan you selected in (2) after 6 months.

Task 2: Personal income

Teacher notes

The focus of this task is for students to recognise the link between the different types of income and the work or investment that will be required to earn that income. Students also need to recognise that effective financial management involves careful planning, evaluation of alternative uses and sources of income and diversification of income or investments to maximise income.

Students will need computer access for some tasks, including spreadsheet use. Some explanation may be necessary, as the calculations can be challenging. For older students, look at the formula used to avoid doing the calculation at the end of each month. [Outcome = Principal \times (1 + interest rate)ⁿ, where “n” is equal to the number of periods. For example, if the principal is \$1,000, the interest rate is 5 per cent per annum and the investment period is five years then, Outcome = 1,000 \times 1.05⁵].

Show a graph of the effect of compound interest over several years on both savings and on debt. Explain the benefits of compound interest on savings to enhance wealth.

Task 2C asks students to perform a calculation based on the average personal income of the class. The decision to ask students how much they earn, either through employment or pocket money, will need to be made at the teacher’s discretion, based on a perceived likelihood of student discomfort. In cases where the teacher feels this will be inappropriate, a reasonable amount can be provided for the task instead.

Scenario

Sella’s younger sister, Esther, has just finished university. She thinks it is time for her to improve her lifestyle and start living. In particular, she wants a good car, a nice place to live, nice clothes and to go out more often. The sooner all of this can happen, the better.

She gets together for lunch with a few of her friends to see what they do. She chats with Jasna who started full time work two years ago. Jasna thinks it is a good idea to have a variety of income streams, rather than just relying on one.

Student activities	Learn about, <i>Learn to</i>
<p>Task 2A. Types and sources of income</p> <p>People make lifestyle choices that reflect their personal values and attitudes. Most people consider the effect different decisions will have on their quality of life. The view on what is ‘quality of life’ varies greatly. Undertake a short pair and share activity identifying what ‘quality of life’ means to you. Include aspects of quality of life related to home, family, friendship, health, work, leisure, community, which are just some you can consider. Some factors affecting quality of life are dependant on income. Income can have a variety of sources.</p> <ol style="list-style-type: none"> 1. Discuss the different types of income that people can receive. 2. Match the recipients with the types of income in <i>H.7.2 Sources of income</i>. 3. List other ways to earn and save money including: 	<p>Commerce 1.2 Personal finance Earning an income</p> <ul style="list-style-type: none"> • types of income <ul style="list-style-type: none"> - from work, investments, business ventures and social welfare programs <p>Mathematics NS5.1.2 Consumer Arithmetic</p> <ul style="list-style-type: none"> • calculating earnings for various time periods from different sources including: <ul style="list-style-type: none"> - wage, salary, commission, piecework, overtime, bonuses, holiday loadings, interest on investments • calculating simple interest using the formula $I=PRT$

- doing extra jobs;
 - saving money;
 - selling items;
 - setting up your own small enterprise.
4. Write the text of an email to Esther. In your email, explain to her different types of income, and how she can go about trying to receive income from a range of sources. Give reasons for your choices. Use the text at the bottom of *H.7.2 Sources of income* as a starting point.

Task 2B. Bank accounts: savings accounts versus term deposits

Esther and her friend Costa are sitting over coffee and discussing different investment options, when Jasna joins them. She says that some of their ideas are really great, but they will cost a lot of money. Perhaps a better idea would be to practice saving money first, to see if Esther can manage regular financial commitments, before she considers investments.

To be able to maximise interest paid on your savings, you need to know what options are available to you. In this task, you will look at two different types of savings accounts, and two different ways in which interest can be paid to you. Financial institutions offer a variety of accounts to suit different purposes. The interest available, terms and conditions and fees and charges vary between the institutions and the accounts.

A savings account is a simple account. You can deposit and withdraw money as often as you like, and you can use automatic teller machines or go into any branch and ask a customer service assistant to help you. Generally, the financial institution will give you a very low rate of interest on a savings account, but you will have immediate access to your money at all times.

A term deposit is a special type of account. With a term deposit, you agree to let the financial institution hold on to your money for a nominated period of time (or term). The organisation will pay you a higher rate of interest if you have a term deposit, but you won't have immediate access to your money until the term has passed. Your money may be accessible during the term, however a penalty will apply.

1. Which account do you think is best for each of the people in the table below? Give reasons for your choices.

Person	Reasons for and against using	
	Savings account	Term deposit
Student receiving Youth Allowance		
Someone with savings of \$8,000		
A retired person with substantial savings and investments		

- applying the simple interest formula to problems related to investing money at simple interest rates
- calculating the compound interest on investments using a table
- *compare simple interest with compound interest in practical situations eg loans*
- *interpret spreadsheets or tables when comparing simple interest and compound interest on an investment over various time periods*

Commerce
1.2 Personal finance
Investing money

- *analyse reasons for saving and investing and postponing consumption for future gain*

Mathematics
NS5.2.2 Consumer Arithmetic

- calculating earnings for various time periods from different sources including interest on investments
- *question the advantages of interest being calculated on the basis of different time periods eg monthly rather than yearly*
- *analyse promotional and advertising material that is collected from a variety of sources including the Internet*

Commerce
Option 1 Investing
Investment options

- the range of investment options
- *research the range of options and identify appropriate options for individuals in different situations*

A retired person receiving Age Pension		
A family of four with both parents in well paid jobs		
A family with one parent working		
A young person who has just started working full time		
A young person studying and working part time		
A second year apprentice		
A small business owner with high cash flow		

2. Undertake an internet search about a range of accounts to keep your money. Use web addresses included in the telephone listing of financial institutions that are part of the local community. In groups analyse a range of accounts from a number of different institutions (e.g. bank, credit union). Select an account suitable for one of the people included in the table above.
3. How do bank accounts compare with credit unions? Compare with a jar in the backyard.
4. What are some of the other differences between banks and credit unions? Can anyone open an account with a credit union?
5. Why do banks pay less in interest than they charge when you borrow?
6. Could banks actually pay exactly the same or even more for deposits to encourage savings as they make their money from lending deposits out more than once, as well as the fees and charges added?

Task 2C. Choosing the 'right' account to maximise return

Develop a table or spreadsheet exercise showing the difference between simple and compound interest.

1. Using *H.7.3 Spreadsheet for interest rate calculation and comparison*, calculate how long it would take to save \$1,000 based on the average pay rate or pocket money amount that people in the class receive, assuming a 5 per cent interest rate.
2. List and discuss the options of what could be done with the saved \$1,000.
3. Use *H.7.4 Fixed versus compound interest calculations*, to analyse different rates of interest.
 - a. Explain the compounding benefit of including a small

-
- additional amount, e.g. \$50. Compare effect of investing \$1,000 compared to \$1,050.
- b. Using \$1,000 identify the point at which compound interest exceeds fixed interest. Then use other amounts.
 - c. Enter \$2,500 into the spreadsheet, invested at 7.5 per cent per annum. How much interest will you earn in one year if you have invested in a compound interest account rather than a simple interest account? Calculate the figures for the next three years. Write a conclusion about your results.
 - d. Visit the website of two different financial institutions such as a bank and a credit union. Describe the most common type of interest paid on a savings account and on a term deposit with each of these financial institutions. Compare the amount of interest paid.
 - e. Financial institutions and the services they offer are chosen by their customers for lots of different reasons. Brainstorm and list reasons for choosing one type of account and a particular institution over another.
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Task 3: Managing changed circumstances

Teacher notes

Students are to read the scenario and consider all the financial problems of the character. Sensitivity will be required in some communities.

The Queensland Teacher's Credit Union has produced some excellent finance booklets on a range of topics including one on credit called "Play your cards right: a guide to managing credit cards". This, along with the other booklets can be found at:

http://www.qtcu.com.au/assets/files/cuscal/Play_your_cards_right.pdf

Scenario

Esther and her friends are enjoying lunch when she sees Jane, a friend from Uni. Jane joins them for coffee. After the others have left, Esther and Jane catch up.

Jane quietly asks why life is so unfair. Jane explains that she has lost her job as the firm she has been working for moved off shore. It was a large firm and employed a lot of people in her community. The closure will affect everyone, not just those who worked there.

Jane is worried about making ends meet. She has very little savings to live on until she gets another job and she has lots of expenses.

She is very worried about her credit card, already at the \$5,000 limit. Jane has been using the credit card for some of her living expenses. She is not sure why she owes so much as she always makes sure she pays the minimum amount each month.

Jane also doesn't know what will happen to the additional superannuation payments she has been making.

Student activities	Learn about, <i>Learn to</i>
<p>Task 3A. Jane's credit dilemma</p> <p>Using, <i>H.7.5 Sample credit card statement</i>, answer the following questions about Jane's spending habits.</p> <ol style="list-style-type: none"> 1. What type of items has Jane purchased on her credit card? What benefits has Jane had from the things she has bought? 2. How much interest has been charged on Jane's credit card? Do you consider this a lot of money each month? What do you think would happen if Jane only ever pays the minimum payment? Will she ever pay it off? What about the need for more groceries and other things? 3. Identify the items on the bill that you think should not be purchased with credit? Give reasons. 4. Jane has an incentive scheme (see key terms and definitions) attached to her credit card. How will this affect the way she uses her credit card? List the strategies she needs to use to make the most of the incentive scheme. 	<p>Commerce</p> <p>1.2 Personal finance</p> <p>Borrowing money</p> <ul style="list-style-type: none"> • reasons for borrowing • <i>discuss the reasons for and against borrowing money</i> • <i>evaluate the borrowing options for making a substantial purchase</i> • <i>identify specific situations in which individuals should and should not borrow money</i> <p>Mathematics</p> <p>NS5.1.2 Consumer Arithmetic</p> <ul style="list-style-type: none"> • calculating the compound interest on investments using a table • calculating and comparing the cost of purchasing goods using: <ul style="list-style-type: none"> - cash - credit card

-
- | | |
|--|---|
| <ol style="list-style-type: none">5. How could Jane deal with her current situation?6. In pairs develop an explanation on how using a mobile phone is (or is not) like having a credit card.7. In groups, and then as a class, discuss this statement. "Jane is a victim of her own making. She has not managed her money well."8. (Extension task) Develop a spreadsheet to show the effect on interest of only paying the minimum payment and then using the available balance to purchase other items. | <ul style="list-style-type: none">• <i>interpret spreadsheets or tables when comparing simple interest and compound interest on an investment over various time periods</i>• <i>realise the total cost and/or hidden costs involved in some types of purchase agreements</i> |
|--|---|

Task 4: Household debt

Teacher notes

Students will need to refer to *H.7.6 Household debt* for this task. The information is aimed at presenting the average household indebtedness in Australia. It is important for students to understand that this is an *average*, and that their situation may differ significantly. *Figure 1* graphically shows that for every \$100 earned \$102.30 is spent.

Student activities	Learn about, <i>Learn to</i>
<p>Task 4A. Types of household debt</p> <p>Refer to <i>H.7.6 Household debt</i>, Figure 2. Study the breakdown of household debt and complete the following.</p> <ol style="list-style-type: none"> Which category has the highest percentage of household debt? List the types of items that may fall into the “other” category. In Australia, what percentage is credit card debt? Would you consider this to be a large amount? Explain. In groups, brainstorm reasons why families get into debt. Include manageable and unmanageable debt. In the same group use the following as discussion starters or to develop a role-play on one of the following situations (the teacher will ensure all situations are covered by the class): <ul style="list-style-type: none"> The Driver family wants to give Elizabeth a fabulous 16th birthday. They don’t really have the money but don’t want to let her down in front of her friends. Nathan has just passed his driver’s licence test. He wants a new car and says, “I refuse to drive an unsafe heap of junk!” Ilse wants to move house as her friends tell her she really needs to live in a better suburb. The Drivers already have a big mortgage. Laurie is worried. Elizabeth’s best friend, Sally, wants the newest mobile phone so she can accessorise. She gets \$200 worth of free text messages; however the plan is \$80 per month and she only earns \$30 a week from her Saturday morning job. Share the discussion or observe the role-plays and take notes on the type of credit (e.g. loans) the characters are likely to need. Identify possible personal, social or environmental problems, and whether the character could get into financial trouble. Analyse the effect advertising and peer pressure has on 	<p>Mathematics DS4.1 Data Analysis and Evaluation</p> <ul style="list-style-type: none"> reading and interpreting tables, charts and graphs <i>read and comprehend a variety of data displays used in the media and in other school subject areas</i>

the situations in (6). Evaluate the effect of these situations on the 'quality of life' of the characters involved.

9. Suggest alternatives to the situations (6) to maintain or improve quality of life without getting into serious debt.

Task 4B. Levels of household debt

1. Refer to *H.7.6 Household debt*, and use the following questions to guide a brief class discussion:
 - a. What is household debt?
 - b. What does it mean to the average family?
 - c. How could 'household debt' affect the quality of life of different families? Is household debt necessary? When is it positive and when is it negative?
 - d. What could be the effect of household debt, particularly a high level of debt, on the relationships of family members?
2. Mortgages are the major component of most household debt. Refer to *H.7.6 Household debt*, Figure 3.
 - a. What has happened to the average Australian mortgage (for the case of amount borrowed to build own house) in the ten year period?
 - b. Why would this figure have changed this much in this time?
 - c. Do you think this would be reflective of mortgages generally? Why/why not?

Task 5: Inheritance

Teacher notes

This topic will examine the management of financial situations where a family receives an inheritance. The students are given options and are asked to make a decision regarding investment options.

Scenario

Kate Winner is Laurie's sister. She is a single mum working two jobs so she can pay her mortgage and pay for the basic needs of her family. She has three children: Oliver, Paula and Rachel. Oliver is 15 years old and in Year 10. He likes to play soccer with his mates and plays competitively on weekends. He has a casual job at a local fast food store. Paula is 14 and likes to hang out with her friends. She plays in a netball competition on Saturdays and trains two nights per week. Rachel is 12 and likes to stay home most of the time. She plays computer games and listens to music.

Kate receives an inheritance of \$10,000. At first Kate is very excited, but then she learns that there is a condition about the use of the money that says, "the money must be invested for maximum family benefit."

Kate calls an important family meeting to discuss what should be done with this money. The children want the money invested so that they get lots of money really fast. Kate is very worried that if they are too greedy they may end up losing money.

Student activities

Task 5A. Investing an inheritance

1. Refer to *H.7.7 Investment risk* and complete the following table in your books.

Type of investment	Risk	Return

2. In groups, list the advantages and disadvantages of each investment.
3. After careful consideration, where would you invest the money if you were part of this family? Write down your investment option and participate in a class discussion about this decision.

Task 5B. Consequences of investment decisions

The Winner children decide they want to make a lot of money on their investment. Kate is unsure because she doesn't want to lose any of the money. However, in the end, she agrees with the children and they invest in the ostriches. Everything goes well for a few months... but then things change.

Learn about, *Learn to*

Commerce

Option 1 Investing

Investing

- investment decisions
- *analyse the reasons why individuals and businesses invest*

- financing investment
 - savings and borrowing

- *identify a range of ways to finance investment*

- ethical investments

- *investigate the issues relating to ethical investment*

Investment options

- the range of investment options

- *research a range of options and identify appropriate options for individuals in different situations*

- *construct an investment plan for an individual*

- risk and return

- *assess the relationship between risk and return for a*

1. Refer to *H.7.8 Investment returns* to find out what has happened with the ostrich farm. What do you think will happen to the money the Winners have invested?
2. Identify the best case and worse case scenario of this investment. Explain what will happen to the \$10,000 in each case.
3. Return to your groups. Did you make the best investment decision? In other words, did you put your money in the right place? Compare your investment decision with the rest of the class.
4. Individually or in groups develop a scenario as to how the Winners could best use the \$10,000 for maximum family benefit. If necessary make some additional assumptions based on the family information provided.

range of investment options

- *examine expenses arising from particular investment options*

Mathematics

NS5.1.2 Consumer Arithmetic

- calculating earnings for various time periods from different sources including interest on investments
- *make informed decisions related to purchases*

H.7.1 Lifestyle decisions

Esther, Costa, Jasna and Andrew are having a conversation about lifestyle decisions with financial consequences.

Esther: Sit down Andrew! How have you been? I love your hair - you look great! How is everything?

Andrew: Things could be better. I have been planning a trip to Europe with my mate. We are supposed to be going soon. He has paid for his trip but I can't afford to pay for mine. I just can't seem to find the money!

Esther: Oh Costa, this is Andrew, a friend of mine. He's been working at Channel 8 in production for the last few years! Jasna you remember Andrew don't you?

Jasna: I certainly do! I remember that party when you brought along the Idol winner - it was so funny when he was found asleep in the dog kennel the next morning after it rained all night!

Esther: Well Andrew, why can't you go overseas with your mate?

Andrew: Well I'm not sure. I earn a good income, but I do have to dress fairly well for my job because I'm dealing with celebrities all the time. We also tend to go out a lot, so I need to go to restaurants and bars quite often. I've got quite a large car loan too. This makes it hard to save!

Costa: Where do you live?

Andrew: I've got a two bedroom townhouse near work.

Jasna: Channel 8 is right on the water near the centre of the city isn't it? Do you live very close to work?

Andrew: Yeah, I live around the corner. It's really good because I often work late at night, when I play with my band.

Costa: But your rent must be massive!

Andrew: Yes it is.

Esther: You could take in a tenant! Didn't you have one before?

Andrew: Yes I will have to think about that, I know. The last tenant I had was awful - he used to work on his motorbike inside and left grease marks everywhere! If I don't find a way to save for this ticket, my mate will be really upset!

H.7.2 Sources of income

People can receive income from many different sources.

Draw a line linking the recipient of income to the type of income.

Recipient of income	Type of income
A landlord	Wage
A 16 year old student	Pocket money
A salesman getting 10% of sales made	Royalties
Someone depositing money into a bank account	Gifts
An elderly person who has retired from paid work	Compensation
Children doing work around the home	Youth Allowance
A business	Inheritance
An employee	Rent
A shareholder	Commission
An author of a book about pets	Interest
Someone receiving money through a relative's will	Pension
Someone whose relative helps out financially to start a business	Dividends
A person recovering from a work accident	Profit

Complete this email to Esther

Dear Esther,

I have heard that you are trying to make some extra money; so I thought I would write and tell you about some of the different types of income you can receive...

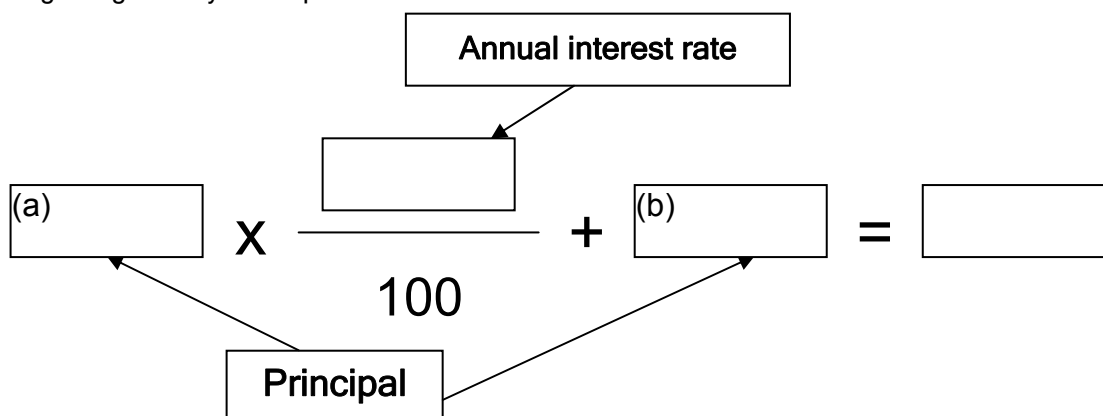
I hope all of this advice will help.

H.7.3 Spreadsheet for interest rate calculation and comparison

This item is supplied separately as an electronic document. The following handout, *H.7.4 Fixed versus compound interest calculations*, can be used for this task if in-class computer access is a problem.

H.7.4 Fixed versus compound interest calculations

Imagine that you have \$1,000 and you would like to save it in a term deposit for one year. You have been told that there are two options: one using fixed interest, the other compounding (both at 7 per cent). Use the tables below to help you decide which of these two options you will pick. Found below is a formula for calculating interest. For option 1 (fixed interest), the amount in the first principal box (a) is always the same: the original amount of the deposit (in this case \$1,000). The amount in the second principal box (b) is the amount in the account at the beginning of the year in question. In option 2 (compound interest) the figure in both principal boxes will be the amount in the account at the beginning of the year in question.



Remember that Principal (a) times the interest rate will give you the amount of interest earned in the year.

Option 1: Fixed interest

Use a calculator to figure out how much money you will have at the end of each year.

Year	Balance at the beginning of the year	Interest earned in that year	Balance at the end of that year
1	\$1,000		
2			
3			
4			
5			

Option 2: Compound interest

Use a calculator to figure out how much money you will have at the end of each year.

Year	Balance at the beginning of the year	Interest earned in that year	Balance at the end of that year
1	\$1,000		
2			
3			
4			
5			

The figure that you write in the bottom right hand corner of each table will be the amount that you will have in the account after five years.

So which account will you choose? And why?

H.7.5 Sample credit card statement

This is the name of the bank.

Bank of Australia

Ms Jane Smith
2 Smalls Lane
Communityville
7000

This is the person's name and address.

Page number 1 of 1
Statement begins 1 January 2008
Statement ends 31 January 2008
Account number 0000-1111-2222-3333

Payment due date 28 February 2008

Minimum amount due \$90.00

This is the smallest amount you must pay.

Credit card statement

	Transaction details	Amount (A\$)
	Balance brought forward	3560.50
2 Jan	Payment thank you	(100.00)
3 Jan	Glen's Pizza	156.00
3 Jan	Road Traffic Authority	470.00
3 Jan	Tim's mechanics	200.00
7 Jan	Seafood Spectacular	200.00
8 Jan	Jenny's Hair Creations	106.50
10 Jan	IGQ Groceries	265.95
12 Jan	Mobile Phone Plus, bill	110.10
22 Jan	Interest charged	85.00
	Closing balance	5054.05

This is the amount of interest charged for this month.

Credit limit \$5000

This is the total limit you can reach on credit.

Date paid

Write in the date the bill is paid here.

Amount paid

Write in the amount of money paid.

H.7.6 Household debt

Figure 1
Source: AMP and the University of Canberra's National Centre for Social and Economic Modelling (NATSEM).

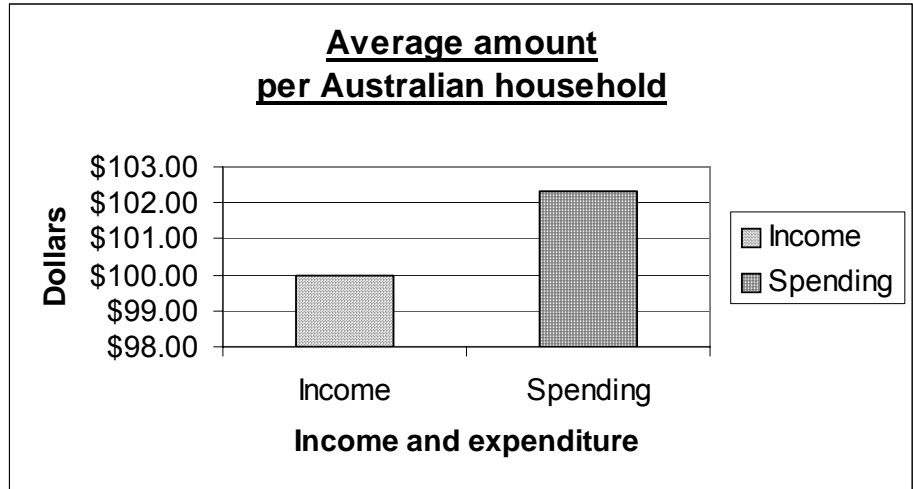


Figure 2
Source: ABS; RBA

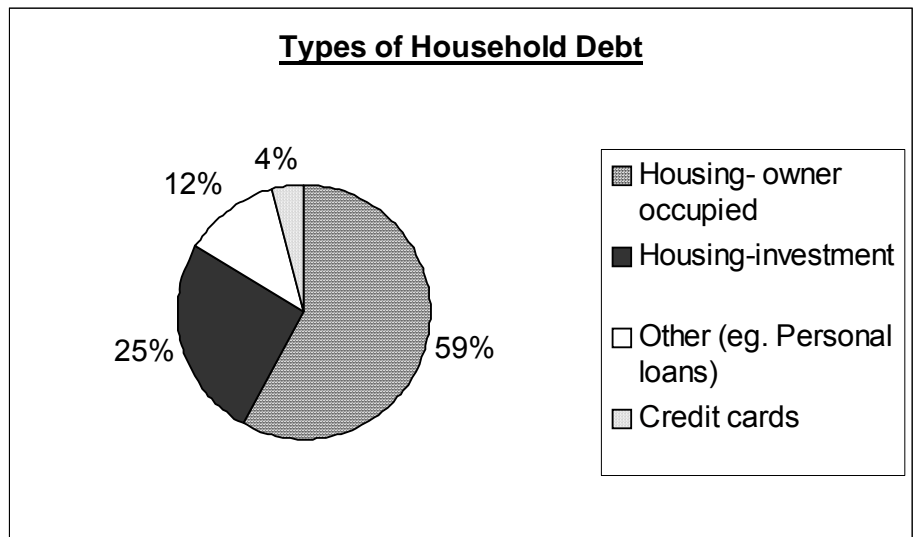
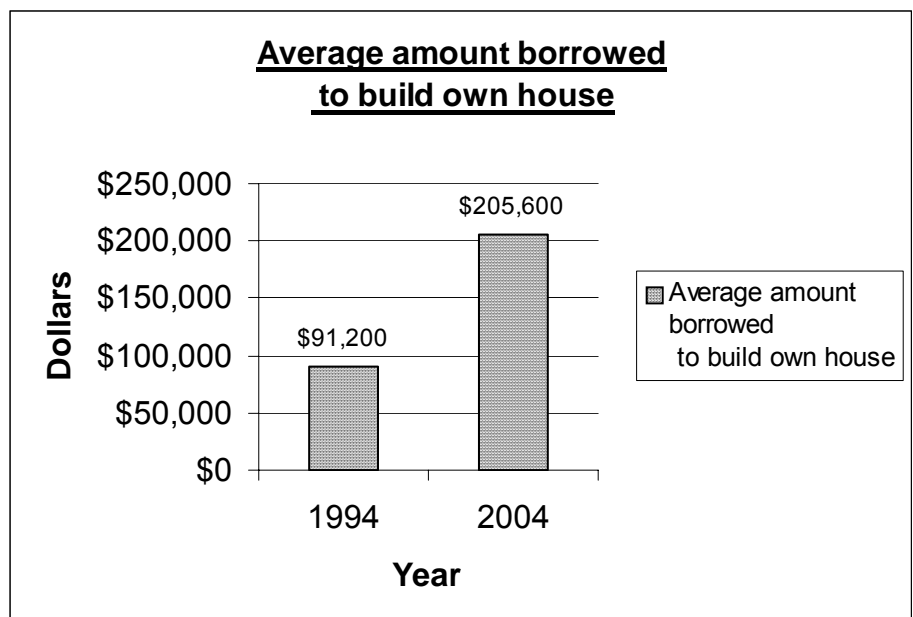


Figure 3
Source: AMP/NATSEM report



H.7.7 Investment risk

A bank term deposit is a **low risk investment...**

Thank you Mrs. Winner, you will receive 5 per cent interest on your money. You will have to leave your money in the bank for one year, but you will receive \$500 at the end of the year!

Blue chip shares are a **medium risk investment...**

You can buy blue chip shares, which will earn an interest rate of approximately 9 per cent per year. That means you will receive about \$450 every six months! The price of the shares can rise and fall at any time, so you are never really sure how much money you will make.

Ostriches are a **high risk investment**

If you invest in my ostriches you will earn a lot more money than the other two options. You may even make as much as 20 per cent, which is \$2,000! However, you will have to make sure that the ostriches stay healthy and that there are no droughts!

H.7.8 Investment returns

Six months have passed and the following events have occurred

- The ostriches have caught a rare disease and are beginning to die. This results in the **return** dropping dramatically.

Best case scenario	Worst case scenario

- The blue chip shares have not performed as well as anticipated. This results in a much lower **dividend**.

Best case scenario	Worst case scenario

- The term deposit remains unchanged.

Best case scenario	Worst case scenario