

A TICKET TO INDEPENDENCE?



Teacher
Resource

OVERVIEW

This unit focuses on answering the question – ‘Is buying a car really a ticket to independence? Students research issues posed by this question and design, prepare and present a report based on their evaluation of the evidence.

DESIGN CONNECTIONS

Design in ICT

Design process (Planning, Producing, Evaluating)

Design elements

Design principles

SUMMARY OF STUDENT TASKS

Students:

- analyse the steps involved in deciding to buy a car
- evaluate their financial ability to purchase and maintain a car
- model the steps involved in purchasing a car
- present a report on their findings and decision.

LINKS TO THE ESSENTIAL LEARNING STANDARDS

This unit provides opportunities for students to develop and/or demonstrate the following knowledge and skills identified in the relevant standards statements for Level 6.

STRAND	DOMAIN	DIMENSION	KEY ELEMENTS OF STANDARDS
Physical, Personal and Social Learning	Personal Learning	Managing personal learning	‘... allocate appropriate time and identify and utilise appropriate resources to manage competing priorities and complete tasks, including learner-directed projects, within set time frames.’
Discipline-based Learning	Economics	Economic knowledge and understanding	‘... demonstrate the skills required to successfully plan and manage personal finances.’
	English	Reading	‘... read, view, analyse and discuss a wide range of informative and persuasive texts ...’

	Mathematics	Number Working mathematically	<p>‘... carry out arithmetic computations involving natural numbers, integers and finite decimals ...’</p> <p>‘Choose, use and develop mathematical models and procedures to investigate and solve problems set in a wide range of practical, theoretical and historical contexts ... They judge the reasonableness of their results based on the context under consideration. They select and use technology in various combinations to assist in mathematical inquiry, to manipulate and represent data ...’</p>
Interdisciplinary Learning	Information and Communications Technology (ICT)	ICT for creating	‘... use ICT to devise detailed plans that sequence tasks to be done, resources needed, and timelines for completion. They annotate their plans to explain changes made during the project.’
	Thinking Processes	Reasoning, processing and inquiry	‘... discriminate in the way they use a variety of sources. They generate questions that explore perspectives. They process and synthesise complex information and complete activities focusing on problem solving and decision making which involve a wide range and complexity of variables and solutions. They employ appropriate methodologies for creating and verifying knowledge in different disciplines. They make informed decisions based on their analysis of various perspectives and, sometimes contradictory, information.’

TEACHING ADVICE

Introduction

In this unit, students use a design brief prepared by the teacher as a starting point.

Students should be able to complete this unit in 5–6 hours. This unit could be taught in an elective focusing on financial literacy or as part of Mathematics. Students will participate in whole class discussions and activities and complete independent research and reporting.

Prior learning

Mathematics domain: designing and using formulas in a spreadsheet to calculate and compare costs.

ICT domain: creating graphs and charts for use in a presentation from data in a spreadsheet.

Task 1: Should I buy a car when I get my licence?

Key focus

Students:

- are introduced to the design brief (Worksheet 1)
- discuss the requirements and steps involved in purchasing a car
- develop a timeline and action plan for completing tasks in this unit.

Design connections

Design process (Planning)

Teaching and learning

This task involves students:	This task involves teachers:
<ul style="list-style-type: none">• participating in class discussions• completing Worksheet 1: My ticket to independence?• completing a project plan using Worksheet 2: Sequence table.	<ul style="list-style-type: none">• introducing the unit, for example by:<ul style="list-style-type: none">- relating anecdotal situations- inviting students to relate car 'stories'- discussing regulations for 'P-plate' drivers• outlining timeline for the unit including dates for presentations• discussing the requirements of the design brief in Worksheet 1: My ticket to independence?• facilitating a whole class discussion about:<ul style="list-style-type: none">- 'dream cars'- the realities of car ownership.

Task 2: My Dream Car

Key focus

Students:

- describe the design features of their dream car
- analyse advertisements for cars.

Design connections

Design elements

Design principles

Teaching and learning

This task involves students:	This task involves teachers:
<ul style="list-style-type: none">• participating in class discussion• describing their 'dream car' with reference to at least five design elements (line, tone, colour, texture, shape, form and/or sound, taste and smell) and two-three design principles (balance, unity, focus,	<ul style="list-style-type: none">• showing/providing access to the Design elements and Design principles sections• assisting students to access advertisements for cars – each student must include at least one second-hand car in their 'short list'.

<ul style="list-style-type: none"> space, rhythm) analysing three advertisements that have some links to the student's dream car. At least one advertisement must be for a second-hand car. completing Worksheet 3: My Dream Car. 	
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Task 3: Money, Money, Money

Key focus

Students:

- identify costs associated with purchasing and maintaining a car
- develop spreadsheets, charts and graphs to record and present this information.

Design connections

Design in ICT (Information products: Charts and graphs)

Teaching and learning

This task involves students:	This task involves teachers:
<ul style="list-style-type: none"> identifying costs involved in purchasing, registering, insuring, running and maintaining each of the cars selected in task 2 designing and completing a spreadsheet that presents this information using data from the spreadsheet to prepare charts and graphs for their report. 	<ul style="list-style-type: none"> teaching and/or revising functions, conventions and processes for designing and using spreadsheets to calculate and compare costs using the Design in ICT (refer to 'Design connections' above) to teach and/or revise conventions for different types of graphs and charts students might use to present information in their report developing instructions for students for this task – focusing on specific approaches to designing and using spreadsheets. This information will vary according to software application selected and students' level of experience in using spreadsheet functions such as formulas. For example, provide a summary sheet of key steps and access to relevant software manuals.

Task 4: Paperwork and forms

Key focus

- locating and completing forms required to purchase a car.

Teaching and learning

This task involves students:	This task involves teachers:
<ul style="list-style-type: none"> locating and completing each of the following forms. Completing the forms will also require you to provide 	<ul style="list-style-type: none"> facilitating students ability to access and complete relevant forms, for example where students do not have

<p>documentation such as evidence of income. Only one example of each form needs to be completed, so for each form, the most appropriate car from your 'short-list' should be selected.</p> <ul style="list-style-type: none"> - Vehicle Registration Transfer form - Certificate of Roadworthiness - Loan application 	<p>appropriate income, for example, from a part-time job, they will need to create 'equivalent' documentation for example a summary of income.</p> <p>References: Vic Roads: www.vicroad.vic.gov.au</p> <p>Note: Students who are investigating the purchase of a 'company' registered car will also need to complete a Notice of Acquisition form.</p>
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Task 4: Buying THE Car

Key focus

Students:

- develop a flow chart showing steps involved in a car purchase.

Design connections

Design process (Planning)

Teaching and learning

<p>This task involves students:</p> <ul style="list-style-type: none"> • deciding which car on their 'short-list' they will purchase • using information from tasks 1–3 to develop a flowchart that shows steps in the investigation and purchase processes. The flowchart should include step/s that could be taken if a case of consumer fraud occurs • adding comments to the flowchart outlining reasons for decisions. 	<p>This task involves teachers:</p> <ul style="list-style-type: none"> • teaching/revising approaches to using ICT to design and present a flow chart.
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Task 5: Reporting your decisions

Key focus

Students:

- prepare a report
- present the report.

Design connections

Design in ICT (Information products: Slideshows)

Teaching and learning

<p>This task involves students:</p> <ul style="list-style-type: none"> • reviewing materials from tasks 1–4 • creating a report that provides and answers the question 'Is buying a car really a ticket to independence?' The report should include evidence from each of tasks 1–4. 	<p>This task involves teachers:</p> <ul style="list-style-type: none"> • discussing report and presentation options with whole class • providing feedback about reports and presentations.
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Resources

Websites

RAVC

<http://motoring.racv.com.au/racvm/whichcar/index.cfm>.

Microsoft

<http://www.microsoft.com/education/Flowcharts.msp>x

VicRoads

www.vicroad.vic.gov.au

Victorian Curriculum and Assessment Authority

<http://www.vcaa.vic.edu.au/prep10/csf/support/icts/ictspd.html#ict>

Student materials

Worksheet 1: My ticket to independence?

Worksheet 2: Sequence table

Worksheet 3: My dream car

[Worksheet 4: Money, money, money](#)