

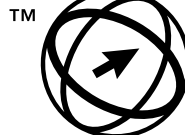


Integrated ICT Learning Unit

Volume 2

2.10 Shopping

	<u>Description</u>	<u>Cost</u>
1	Apples	R 5.00
2	Bananas	R 6.99
3	Grapes	R 8.99
4	Butter	R 5.50
5	Jam	R 7.00
6	Bread	R 3.99
7	Coffee	R 18.95
8	Tea	R 11.45
9	Milk	R 4.50
10	Sugar	R 8.99
TOTAL		R 81.36
Dominique		



Endorsed by the
ECDL Foundation

This integrated ICT learning unit consists of one activity which explores the concept of **Shopping**.

Lesson format:

- 10 minutes Educational game (optional; at the discretion of the teacher)
- 5 minutes "Tech Talk" which introduces ICT terminology
- 5 minutes Mouse skills which develop essential mouse and keyboard/touch typing techniques
- 20 minutes+ Integrated activity involving tasks, which relate to relevant content being covered in the classroom

ICT applications used in this Learning Unit:

Word Processing	Graphics	Spreadsheets	Databases	Internet	E-mail	Presentations	Drawing	Web design	Information Organiser	Simulations & design	Desktop Publishing	Operating Systems	Programming & logic
		√										√	

Structure of the Learning Unit:

Integrated Activity

This lesson is aimed at integrating ICT into current, relevant class curriculum. Using this approach enables learners to use the computer not only as a working tool but also as a relevant learning tool to learn new concepts and skills or consolidate previously learnt work. This activity will take between 20 – 60 minutes (or 1-3 lessons) to complete depending on the ability of the learners and the time available.

e-Learner Assessment

The required assessment for each unit is completed by the ICT teacher by means of evaluating each skill on the skills matrix. The ICT teacher can indicate on the skills matrix whether the skill is being practised or developed by inserting a tick in the appropriate column next to the appropriate skills. Should the teacher wish to formally assess the skills, a symbol of 1, 2, 3 or 4 is inserted into the matrix in the assess column next to each skill assessed. The corresponding skills should also be marked off on the e-Learner Administration System and forwarded to Head Office when completed. As a pre-requisite for accreditation, all the required skills for each e-Learner unit need to be mastered. In this way, the level of ICT competency as well as the progress of each learner can be monitored. This matrix may be printed or photocopied for each learner.

LEARNING OUTCOMES ADDRESSED IN THIS INTEGRATED ICT LEARNING UNIT						
Learning Areas	LO1	LO2	LO3	LO4	LO5	LO6
Languages	Listening	Speaking	Reading & viewing	Writing	Thinking & reasoning	Language Structure and use
Mathematics	Numbers, operations & relationships	Patterns, functions & algebra	Space & shape (Geometry)	Measurement	Data Handling	
Natural Sciences	Investigate relationships & solve problems in scientific, technological & environmental contexts	Interpret & apply scientific, technological and environmental knowledge	Relationship between science, technology, society & environment			
Social Sciences - History	Historical Enquiry	Historical Knowledge and Understanding	Historical interpretation			
Social Sciences - Geography	Geographical Enquiry	Geographical Knowledge and Understanding	Exploring Issues			
Arts and Culture	Creating, Interpreting and Presenting	Reflection	Participation and Collaboration	Expression and Communication		
Life Orientation	Health Promotion	Social Development	Personal Development	Physical Development and Movement	Orientation to World of Work	
Economics and Management Sciences	Economic Cycle	Sustainable Growth and Development	Managerial, Consumer & Financial Knowledge & Skills	Entrepreneurial Knowledge & skills		
Technology	Technological Processes & Skills	Technological Knowledge & Understanding	Technology, Society & the Environment			

STRUCTURE OF LESSON 2.10 SHOPPING

INTEGRATED LESSON	
Prior Learning Requirements	
Concept / Topic: Knowledge of prices of shopping	
ICT Skills: Inserting data into cells	
Educational Game	10 Min
A suitable educational game, as per Appendix A, may be used as an optional activity at any point during the course of the lesson at the discretion of the ICT or class teacher	
Keyboard / Mouse Skills	5 Min
Ensure continuity and progression as per Appendix B	
Tech Talk	5 Min
MODEM A device that allows you to connect to the Internet. It converts the text and graphics that you want to read or send into sounds and sends them along the telephone line. Who has a modem at home?	
Integrated Activity	20 Min
Learners create a spreadsheet that will help them total their purchases from a shop	
Resources Used	
Software: Microsoft Excel	
Prerequisite: Prices of 10 shopping items	
Template: Shopping.xls	
WWW: None	
Learning Outcomes	
<ul style="list-style-type: none"> • Economic and Management Sciences LO 1 • Mathematics LO 1 	
Additional Learning Opportunities	
Concept / Topic: 1.13 Tuck shop	
ICT Skills: 1.2 Better Bonds	
Beyond the ICT Centre	
<ul style="list-style-type: none"> • Create a flier / advertisement for a local supermarket • Offer to go shopping for the elderly once a month • Research the price of a McDonald's Burger worldwide 	

Learner name:	Class:	
Integrated Activity: Learners create a spreadsheet that will help them total their purchases from a shop		
Theme/Topic: Shopping	Integrated Activity	
Learning Outcomes & Assessment Standards	Practice	Assess
Economic and Management Sciences		
2.1.3 Reads and identifies prices from price tags and labels		
<i>Comment:</i>		
Mathematics		
2.1.10 Performs calculations to solve problems		
<i>Comment:</i>		
Concepts and Skills		
2 and 3 D		
Collecting and organising data		
Processing information		
Calculation		
Design		
Working with dimension: 3D and plan view		
Thinking and reasoning		
4 = Exceeded Requirements 3 = Satisfied Requirements 2 = Partially Satisfied Requirements 1 = Has Not Satisfied Requirements		

Learner name:	Class:	
Integrated Activity: Learners create a spreadsheet that will help them total their purchases from a shop		
Theme/Topic: Shopping	Integrated Activity	
e-Learner Skills	Practice	Assess
Unit 2 - Files and Folders		
2.2.1 Right / Left click mouse		
2.2.2 Single / Double click mouse		
2.3.1 Alpha / numeric keys on keyboard		
2.3.2 Special Keys (Ctrl / Alt / Shift / Caps / Space etc) on keyboard		
2.5.1 Open / Exit programmes Using Shortcuts		
2.7.3 Navigating within a file (scrollbar / hyperlinks)		
2.7.4 Opening Files		
2.7.5 Saving Files		
2.7.6 Closing Files		
Unit 5 - Spreadsheets		
5.1 Open programme		
5.2.2 Opening workbook		
5.3.1 Insert data		
5.4.2 Autosum		
5.8 Save		
5.10 Print		
5.11 Exit		
4 = Exceeded Requirements 3 = Satisfied Requirements 2 = Partially Satisfied Requirements 1 = Has Not Satisfied Requirements		

Integrated Lesson Shopping (Microsoft Excel)



EDUCATIONAL GAME: (10 minutes)

A suitable educational game, as per Appendix A, may be used as an optional activity at any point during the course of the lesson at the discretion of the ICT or class teacher



KEYBOARD/ MOUSE SKILLS: (5 minutes)

1. Backspace key - deletes one or more characters to the left of the insertion point.
2. Delete Key – deletes one or more characters to the right of the insertion point.



TECH TALK: (5 minutes)

MODEM

A device that allows you to connect to the Internet. It converts the text and graphics that you want to read or send into sounds and sends them along the telephone line. Who has a modem at home?



INTEGRATED ACTIVITY (20 – 60 MINUTES)

In order to promote relevant discussion, the following questions are posed by the educator to the learners:

- **Who enjoys shopping?**
- **What sort of things do you buy at the shops?**
- **How do you work out what you can afford at the shops?**

A short discussion takes place about the variety of goods that are available at the shops, which shops sell which goods and how we can plan to be able to make the best purchases.

Today we are going to work out how to add up the amount of money we have spent when we go shopping. This is an introduction to MS Excel which will teach the learners to enter information into cells in the spreadsheet and add a column of numbers. Ideally the class teacher will have taken the students on a shopping trip and they will have priced 10 items. If not, you will have to do this in preparation.

*Note to the educator: This task requires the template: **Shopping.xls** which can be found by double clicking on the **Computers 4 Kids** shortcut on the desktop.*

Task: We will use a Spreadsheet to add up how much money we need to buy 10 things at the supermarket. Spreadsheets have *columns* and *rows* of little blocks called *cells* which we can type numbers and words into.



1. Double click on the **Computers 4 Kids** icon on your desktop and click on the relevant **volume number** and **lesson number**.
2. Click on the template hyperlink under the Template Link heading
3. The opened template will look like this:

	Description	Cost
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
	TOTAL	

4. **Save** your **document** into your **digital portfolio** → **file** → **save as** → **locate your portfolio**→ **double click** →**type a suitable name in the file name box** → **save**
5. RED - A *column* of 10 numbers.
6. GREEN - Next to each number is a big space for you to type the name of the 10 items you want to buy.
7. YELLOW – In this *column* you type the price of each item. Type Rands (or the denomination of your country) first, a full stop and then cents (4.50). **DON'T** type the Rand sign (R) the computer will add this for you.
8. PURPLE – In this cell we will add up all the prices to see what the total will be.
9. Start filling in the table by entering your first food item description in the first green row, next to the red number 1.

	Description	Cost
1	Apples	R5.00
10. Click in the first green cell and type a short description of the item.
11. Press the **TAB key** on the keyboard to move **across** to the yellow cell next to where you have just entered the description. Enter the amount for this item. Remember to enter the full mount using a decimal place.

	Description	Cost
1	Apples	R5.00
2	Bananas	R6.99
3	Grapes	R8.99
4	Butter	R5.50
5	Jam	R7.00
6	Bread	R3.99
7	Coffee	R18.95
8	Tea	R11.45
9	Milk	R4.50
10	Sugar	R8.99
TOTAL		R81.36
12. Continue entering the remaining item names and prices in a similar way.
13. When you have filled in ALL the names and prices the computer will add them up for you.

10	Sugar	
TOTAL		
	Domonique	
14. Click on the PURPLE cell. This is where we want the answer to be.
15. Click the **AutoSum** button on the toolbar at the top of the screen. It should show **=SUM (E3:E12)**. Press the **Enter** key. The total amount for the shopping should show up.
16. Add your name: Click on the cell underneath the **blue row**. Type your name into the space. Press **Enter**.
17. Print your document: Click on **file** → **print** → **OK**
18. Exit the programme → **file** → **exit**

	<u>Description</u>	<u>Cost</u>
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TOTAL		R 81.36
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Teacher Feedback Form

This Teacher Feedback Form serves as a

- ❖ Personal record of work covered with your class
- ❖ Feedback form about this lesson to your management
- ❖ Feedback form about this lesson to your colleagues

Place a relevant comment in each of the boxes.

Volume Number			
Learning Unit			
Integrated Lesson			
Educational Game			
Touch typing / Keyboard Skills			
Tech Talk			
I found this Learning Unit to be...			
Engaging?			
Relevant?			
Significant?			
Challenging?			
General Comment			
Name		Date	








This **Teacher Feedback Form** may be photocopied or found in digital format with the Educator Resources and at www.computers4kids.co.za

Self Assessment Form

This Self Assessment Form is a

- ❖ Record of my work covered during class
- ❖ Record of my progress

Place a tick (✓) in the correct boxes.

Volume Number				
Learning Unit				
About this Learning Unit ...				
	Before I did this task I knew...			
	I finished my task well...			
Q → A	I answered the questions...			
	I took pride and care in my work ...			
	After I did this task I knew...			
I have learnt to be...				
Caring		Principled		
Communicative		A Risk Taker		
Reflective		A Thinker		
Inquiring		Well-balanced		
Knowledgeable		Open-minded		
I have also learnt...				
Name		Date		








This **Self Assessment Form** may be photocopied or found in digital format with the Educator Resources and at www.computers4kids.co.za

Peer Assessment Form

This Peer Assessment Form is a

- ❖ Report to your peer about their work
- ❖ Record of your thoughts about your peers work

Place a tick (✓) in the correct boxes.

Peer's Name				
Volume Number				
Learning Unit				
About this Learning Unit ...				
	Did he/she finish the task?			
	Did he/she do the task well?			
Q → A	Did he/she answer the questions?			
	Did he/she take pride in their work?			
	Have you learnt anything new from your friends work?			
I think my friend has learnt to be...				
Caring		Principled		
Communicative		A Risk Taker		
Reflective		A Thinker		
Inquiring		Well-balanced		
Knowledgeable		Open-minded		
I feel my friend has also learnt...				
Name		Date		

This **Peer Assessment Form** may be photocopied or found in digital format with the Educator Resources and at www.computers4kids.co.za

