



Integrated ICT Learning Unit
 Volume 1
 1.7 Snake Add

Add down the snakes

<p>6 3 << 8 4 1 9 7 38 ☺</p>	<p>7 4 << 8 3 9 2 6 39 ☺</p>	<p>6 5 << 8 4 6 9 3 41 ☺</p>	<p>9 2 << 8 5 7 8 7 46 ☺</p>
<p>19 3 << 23 24 10 9 11 99 ☺</p>	<p>15 10 << 5 11 10 12 6 69 ☺</p>	<p>19 7 << 23 10 8 9 11 87 ☺</p>	<p>19 11 << 12 12 13 8 18 93 ☺</p>



Endorsed by the
ECDL Foundation

Overview

This integrated ICT learning unit consists of one activity which explores the concept of **developing essential mathematical skills – snake add**.

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 L06
Learning Areas	L01	L02	L03	L04	L05	
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

1.7 SNAKE ADD

INTEGRATED LESSON	
Prior Learning Requirements	
Concept / Topic: Knowledge of basic addition	
ICT Skills: Inserting data into cells; Effective control and use of the mouse	
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
CELL We call one "block" in a spreadsheet a cell	
Integrated Activity	20 Min
Learners complete an "Add Snake" in a spreadsheet and create their own sums.	
Resources Used	
Software: MS Excel	
Prerequisite: None	
Template: Snake Add.xls	
WWW: None	
Learning Outcomes	
<ul style="list-style-type: none"> • Mathematics LO 1 • Language LO 1 	
Additional Learning Opportunities	
Concept / Topic: 1.2 Better Bonds 1.12 Spider Sums	
ICT Skills: 1.2 Better Bonds 1.12 Spider Sums	
Beyond the ICT Centre	
<ul style="list-style-type: none"> • Use a calculator to test your friend to see what bonds they know or do not know. • Learn to count in a foreign language 	

Learner name:	Class:	
Integrated Activity: Complete an "Add Snake" in a spreadsheet and create their own sums.		
Theme/Topic: Snake Add	Integrated Activity	
Learning Outcomes & Assessment Standards	Practice	Assess
Mathematics		
1.1.10 Performs calculations involving addition and subtraction		
<i>Comment:</i>		
Language		
1.1.1 Listens attentively to instructions and responds appropriately.		
<i>Comment:</i>		
Concepts and Skills		
Computation		
Hand eye co-ordination		
Problem solving		
4 = Exceeded Requirements 3 = Satisfied Requirements 2 = Partially Satisfied Requirements 1 = Has Not Satisfied Requirements		

Learner name:		Class:	
Integrated Activity: Complete an "Add Snake" in a spreadsheet and create their own sums.			
Theme/Topic: Snake Add		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			
2.3.3 Cursor Keys on keyboard			
2.5.1 Open / Exit programmes Using Shortcuts			
2.7.1 Navigating through folders / Folder structure			
2.7.3 Navigating within a file (scrollbar / hyperlinks)			
2.7.4 Opening Files			
2.7.6 Closing Files			
Unit 5 - Spreadsheets			
5.1 Open programme			
5.2.2 Opening workbook			
5.3.1 Insert data			
5.10 Print			
5.11 Exit			
4 = Exceeded Requirements 3 = Satisfied Requirements 2 = Partially Satisfied Requirements 1 = Has Not Satisfied Requirements			

Integrated Lesson Snake Add (MS 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)

Click, drag and draw

Demonstrate exactly how to:

1. Hold the mouse properly
2. Which finger is used to click
3. How to drag and draw by holding the left mouse button down and dragging it



TECH TALK: (5 minutes)

CELL

We call one "block" in a spreadsheet a cell.

6. Add the numbers starting at the beginning of the snake and moving in a downwards direction → **click in the cell above the face and type your answer** → **if the answer is correct, the face will smile!**
7. Complete all the sums to make lots of smilly faces!
8. When you have finished → if you would like to print your sums → **click in a cell underneath your sums and type your name** → **remember to hold the shift key on the keyboard while typing the first letter of your name** → **file** → **print** → **active sheet** → **OK**
9. If you would like to make a new sheet for a friend to do → **click in each block** and type your own numbers → no number bigger than 10. (*Note to educator: this will depend on the level of your learners*)
10. Change places with a friend and solve the sums your friend has set for you
11. Close the programme when you are finished → **when the programme asks if you want to save** → **click on no**

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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?			
	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

