



Integrated ICT Learning Unit

Volume 1

Soccer Special – Jabulani Jive



Endorsed by the
ECDL Foundation

Overview

This integrated ICT learning unit consists of one activity which explores the concept of **the Jabulani soccer ball**.

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
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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	L01	L02	L03	L04	L05	L06
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 JABULANI JIVE

INTEGRATED LESSON	
Prior Learning Requirements	
Concept / Topic: Basic knowledge of shapes	
ICT Skills: Drag and drop; adding fill and line colour	
Educational Game	10 Min
A suitable educational game 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
A suitable activity should be selected by the ICT or class teacher to ensure continuity and progression of appropriate skills	
Tech Talk	5 Min
AUTOSHAPPE	
A group of ready-made shapes which include rectangles and circles plus a variety of lines and connectors, block arrows, flowchart symbols, stars, banners and speech bubbles	
Integrated Activity	20 Min
Learners arrange hexagons to create a soccer ball	
Resources Used	
Software: Microsoft Word	
Prerequisite: None	
Template: jabulani.doc	
WWW: None	
Learning Outcomes	
<ul style="list-style-type: none"> • Language LO 1; LO 3; LO 5 • Mathematics LO 3 	
Additional Learning Opportunities	
Concept / Topic: 1.3 My Home 1.4 Fly the flag	
ICT Skills: 1.10 My School 1.15 Granny and Grandpa	
Beyond the ICT Centre	
<ul style="list-style-type: none"> • Create a collage of various different types of balls used for various sports • See if you can create a "ball alphabet" – using cut out pictures of balls to make the letters of the alphabet 	

Learner name:	Class:	
Integrated Activity: Learners arrange hexagons to create a soccer ball		
Theme/Topic: Jabulani Jive	Integrated Activity	
Learning Outcomes & Assessment Standards	Practice	Assess
Language		
1.1.1 Listens attentively to instructions and announcements, and responds appropriately		
1.3.1 Uses visual cues to make meaning		
1.5.4 Processes information		
<i>Comment:</i>		
Mathematics		
1.3.1 Recognises, identifies and names two-dimensional shapes and three-dimensional objects		
<i>Comment:</i>		
Concepts and Skills		
Shape		
Creativity		
Colour		
Alignment and positioning		
4 = Exceeded Requirements 3 = Satisfied Requirements 2 = Partially Satisfied Requirements 1 = Has Not Satisfied Requirements		

Learner name:	Class:	
Integrated Activity: Learners arrange hexagons to create a soccer ball		
Theme/Topic: Jabulani Jive	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		
2.7.4 Opening Files		
2.7.5 Saving Files		
2.7.6 Closing Files		
Unit 4 - Word Processing		
4.1 Open programme		
4.2.2 Opening document		
4.3.1 Insert text		
4.5.2 Format graphics		
4.5.3 Move graphics		
4.8 Save		
4.10 Print		
4.11 Exit		
4 = Exceeded Requirements 3 = Satisfied Requirements 2 = Partially Satisfied Requirements 1 = Has Not Satisfied Requirements		

Integrated Lesson Jabulani Jive (Microsoft Word)



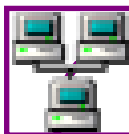
EDUCATIONAL GAME: (10 minutes)

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. Make sure learners are sitting up straight.
2. Learners should have their eyes in line with the monitor.
3. Make sure their fingers are correctly positioned over the mouse.



TECH TALK: (5 minutes)

AUTOSHAPPE

A group of ready-made shapes which include rectangles and circles plus a variety of lines and connectors, block arrows, flowchart symbols, stars, banners and speech bubbles.



INTEGRATED ACTIVITY (20 - 60 MINUTES)

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

- **Do you know what a 5 and 6-sided shape are called?**
- **What shaped pieces of leather are used to make a soccer ball?**
- **Do you think there are soccer balls made with other shaped pieces?**

A short discussion takes place about the traditional soccer ball and how it was made by using 5-sided (pentagon) and 6-sided (hexagon) shaped pieces. Later, designers started experimenting with other shapes and now soccer balls are made with a variety of shaped pieces such as the jabulani soccer ball which is the official match ball for 2010.

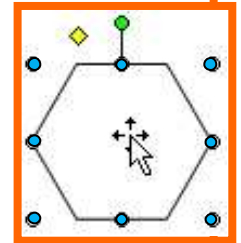
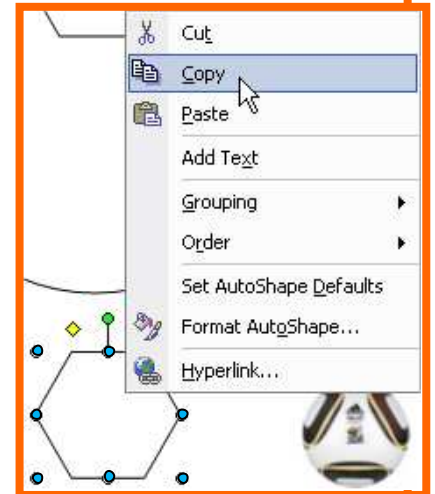
Explain to the learners that today they are going to create a soccer ball with hexagon (6-sided) shaped pieces. After they have made the soccer ball, they will colour each of the pieces to make a "rainbow" ball fit for a rainbow nation. The flags of the participating countries have also been included on the template so that learners can use these colours in the ball if they wish.

Task: Create a soccer ball using the hexagon pieces and colour each piece using the colours in the flags of the participating countries for the 2010 soccer.

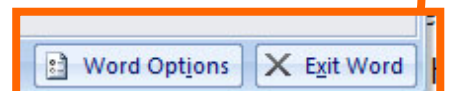
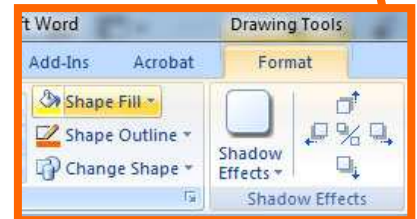
1. Double click on the **Computers 4 Kids** icon on your desktop and click on the relevant **volume number** and **lesson number**.
2. Click on the template hyperlink under the Template Linx heading.
3. The opened template will look like this:
4. Ask your teacher to help you **save** your **document** into your **digital portfolio**. **Office Button** → **save as** → **locate your portfolio** → **double click** → **type a suitable name in the file name box** → **save**



5. *Note to Educator: The official jabulani ball has been placed on the template so learners can see that soccer balls can be made up of various different shaped pieces.*
6. At the lower left hand corner is a sample of how the hexagon pieces should be arranged to complete the blank soccer ball in the centre of the page.
7. In the middle at the bottom of the template is a single hexagon piece which will be used to copy and paste from in order to complete the blank soccer ball in the centre of the page.
8. **Right click on the single hexagon piece → copy.**
9. **Right click on a blank area of the page → paste.**
10. You will now have a copy of the single hexagon piece on your page which you can drag into position within the blank soccer ball.
11. Place your cursor over the copied hexagon piece.
Your cursor will change into a **4 headed arrow**.
12. **Click and hold your finger down** on the left mouse button and **drag** the hexagon shape into position.
13. Release the left mouse button to drop the hexagon piece in place.
14. You may "fine tune" the position of the hexagon piece by **holding down Control** and using the **cursor keys** (arrow keys) to nudge the piece into position.
15. Once the hexagon has been placed in position you may paste another hexagon piece and move it into position in the same way.
16. As you have previously copied a hexagon piece you do not need to copy it again from the original hexagon piece at the bottom of the page. **Right click on the blank area of your page → paste**
17. Move this newly pasted hexagon piece into position in the same way.
18. Remember to use the ball at the lower left hand edge as a reference to see where the hexagon pieces should be placed.



19. Once all the hexagon pieces have been positioned on the blank soccer ball you can colour the pieces using the flags of the participating countries as a guide if you wish.
20. Double click on a hexagon piece. In the yellow **Format toolbar** that will pop-up select a colour to fill the shape ("**Shape Fill** ") and a colour for the outline "**Shape Outline**"
21. Select a colour for each from their **drop down colour palette** → **OK**. If you do not see a colour you like choose more outline colours or more fill colours from the drop down box.
22. Add a fill and line colour to the other hexagon pieces in a similar way.
23. When you have completed your soccer ball you may enter your name and grade in the appropriate textboxes.
24. Click in the textbox next to "Name" and enter your name.
25. Click in the textbox next to "Grade" and enter your grade.
26. **Save** your work by **clicking** on **Office Button** → **save**
27. To print your document, click on **Office Button** → **Print**
28. **Close Microsoft Word** by **clicking** on **Office Button** → **exit Word** or clicking on the top **X** at the top of your screen.



The worksheet is titled "Jabulani!" in large, blue, bubbly letters. At the top, a row of flags includes the Netherlands, Spain, Romania, Switzerland, Serbia, Portugal, USA, and Taiwan. Below the title, two cartoon soccer players are shown: a girl on the left in a red jersey with the number 7, and a boy on the right in a blue jersey with the number 5. Between them are two empty rectangular boxes for "Name:" and "Grade:". The central focus is a large soccer ball with seven colored hexagonal panels: blue, yellow, red, green, purple, orange, and cyan. Surrounding this ball are two vertical columns of flags. The left column includes Australia, South Korea, North Korea, North Vietnam, Guinea, Nigeria, South Africa, Haiti, and Mexico. The right column includes Argentina, Brazil, Taiwan, Romania, Uruguay, Australia, Denmark, England, France, Germany, Greece, and Italy. At the bottom, there are three images: a soccer ball with a hexagonal pattern, a single empty hexagon, and a realistic soccer ball.