



Integrated ICT Learning Unit

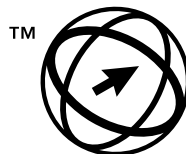
Volume 5
Soccer Special – Going for Goal

An interactive soccer game interface titled 'Laduma!' and 'ACTION REPLAY'. The top banner shows a group of cheering cartoon fans. Below is a soccer field with a goal on the right. A player in a white jersey with the number 13 is about to kick a ball. A player in a black jersey is nearby. Two orange traffic cones are on the field. Dotted lines connect the goal, cones, and players to the 'ACTION REPLAY' text. At the bottom, there are input fields for 'Name:' and 'Grade:'.

Laduma!

ACTION REPLAY

Name: Grade:



Endorsed by the
ECDF Foundation

Overview

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

Lesson format:

- 10 minutes Educational game (optional; at the discretion of the teacher)
- 5 minutes "Tech Talk" which introduces ICT terminology
- 5 minutes Touch Typing skills which develops essential 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 GOING FOR GOAL

INTEGRATED LESSON	
Prior Learning Requirements	
Concept / Topic: No pre-requisite knowledge required	
ICT Skills: Drawing custom motion paths; copy and paste	
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	
Touch Typing	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
DRAWING TOOLBAR A toolbar is a computer "toolbox" or bar (at the top, bottom or edges of your screen) which contains tools which we use to draw shapes.	
Integrated Activity	20 Min
Learners create a custom motion path of varying speeds	
Resources Used	
Software: MS PowerPoint	
Prerequisite: None	
Template: laduma.ppt	
WWW: None	
Learning Outcomes	
<ul style="list-style-type: none"> • Languages LO 1 • Mathematics LO 3 	
Additional Learning Opportunities	
Concept / Topic: 5.3 Seats for Sale	
ICT Skills: 5.21 Germination and Growth	
Beyond the ICT Centre	
<ul style="list-style-type: none"> • Create a "goal post" over the recycling bin in your classroom and score everytime you add some paper to the bin 	

Learner name:	Class	
Integrated Activity: Learners create a custom motion path of varying speeds		
Theme/Topic: Going for Goal	Integrated Activity	
Learning Outcomes & Assessment Standards	Practice	Assess
Language		
5.1.1 Enjoys listening to different kinds of oral texts		
<i>Comment:</i>		
Mathematics		
5.3.4 Recognises, describes and performs rotations (turns), reflections (flips) and translations (slides) using geometric figures		
<i>Comment:</i>		
Concepts and Skills		
Line		
Form and shape		
Drawing		
Presentation		
4 = Exceeded Requirements 3 = Satisfied Requirements 2 = Partially Satisfied Requirements 1 = Has Not Satisfied Requirements		

Learner name:	Class	
Integrated Activity: Learners create a custom motion path of varying speeds		
Theme/Topic: Going for Goal	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 etc) on keyboard		
2.4 Recognising icons		
2.5.1 Open / Exit programmes Using Shortcuts		
2.5.2 Open / Exit programmes Using Start Menu		
2.7.3 Navigating within a file		
2.7.4 Opening Files		
2.7.5 Saving Files		
2.7.6 Closing Files		
4 = Exceeded Requirements 3 = Satisfied Requirements 2 = Partially Satisfied Requirements 1 = Has Not Satisfied Requirements		

Learner name:	Class	
Integrated Activity: Learners create a custom motion path of varying speeds		
Theme/Topic: Going for Goal	Integrated Activity	
e-Learner Skills	Practice	Assess
Unit 6 - Presentations		
6.1 Open programme		
6.2.2 Opening presentation		
6.2.3 View slide show		
6.3.1 Insert new slide		
6.4.1 Insert graphics		
6.4.2 Move graphics		
6.4.3 Resize graphics		
6.4.4 Copy / Paste graphics		
6.4.5 Delete graphics		
6.5.2 Type text into text boxes		
6.7 Save		
6.10 Exit		
<p style="text-align: center;">4 = Exceeded Requirements 3 = Satisfied Requirements 2 = Partially Satisfied Requirements 1 = Has Not Satisfied Requirements</p>		

Integrated Lesson Going for Goal (Microsoft PowerPoint)



EDUCATIONAL GAME: (10 minutes)

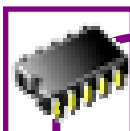
A suitable educational game, as per Appendix A, may be used as an optional activity at any point during the course of the lesson at the discretion of the ICT or class teacher



TOUCH TYPING: (5 minutes)

Check that all learners know how to:

1. Sit up straight so that their forearms are parallel to the work surface
2. Have their eyes in line with the monitor
3. Locate the home row of keys



TECH TALK: (5 minutes)

DRAWING TOOLBAR

A toolbar is a computer “toolbox” or bar (at the top, bottom or edges of your screen) which contains tools which we use to draw shapes.



INTEGRATED ACTIVITY (20 – 60 MINUTES)

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

- **Have any of you played soccer before?**
- **How does one score points in a soccer match?**
- **Can any member of the team score goals in a soccer match?**

A short discussion takes place about the game of soccer and how points are scored by kicking the ball into the goal which is usually defended by the goal keeper. Goals can be scored by a simple straight kick into the goal or sometimes they can be spectacular where the ball is bounced off the scorer's head or enters the goal via an incredibly tricky path.

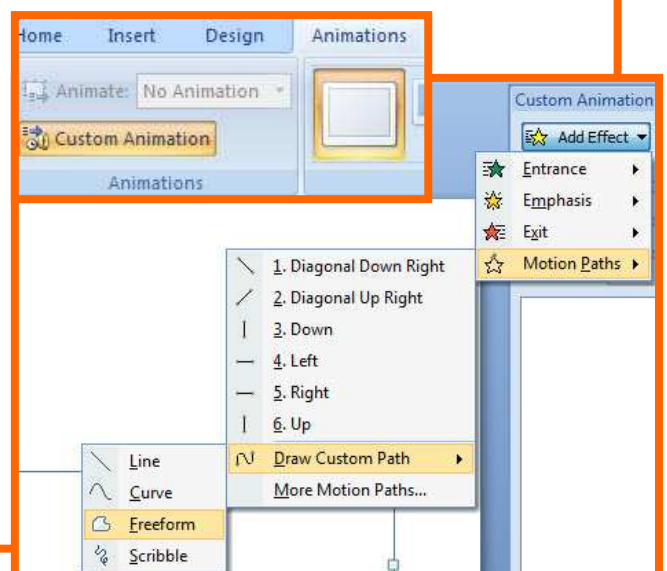
Usually in a sports event, such as a soccer match, when a spectacular goal is scored an action replay is shown which shows how the goal was scored in slow motion so everyone can appreciate the complexity of the goal. Explain to the learners that today they are going to create a spectacular goal and then create an action replay of the goal.

Task: Today you are going to create a path for a super spectacular goal where the ball goes through various fantastic twists and turns before landing in the goal.

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:
4. 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. On the first slide you will see a soccer player and the ball as well as various other items such as the goals, a referee and a couple of cones. We will create a motion path for the soccer ball from the soccer player to the goal, but the soccer ball will bounce off various items on the field first before landing in the goal.
6. You may reposition the player, referee or cones on the field if you wish. To move any of these images, position your cursor over the image. Your cursor will change into a **four-headed arrow**.
7. **Click and hold the left mouse button down and drag** the image into position on the soccer field. **Release the left mouse** button to drop the image in place.
8. You may also **resize** the images if you wish. Click on the image you wish to resize. **Blue adjustment handles** will be present around the image. Click on any of the adjustment handles at the **corners and hold down the Shift key**. Drag the adjustment handle inwards to make the image smaller or outwards to make the image bigger.
9. You may also copy the images of the cones if you wish to place more cones around the soccer field. **Right click on the cone image → copy → right click on a blank area of the soccer field → paste.**
10. The copied image will be pasted onto the soccer field. Drag it into position in the same way as you positioned your other images.
11. Once you have positioned the elements you require on your soccer field it is time to create that spectacular goal.
12. **Click on the soccer ball → Select the Animations Toolbar → Custom Animation**
13. Once the animations box appears to your right, **select "Add Effect" → Motion Paths → Draw Custom Path → Freeform.**



14. Your cursor will change into a **crosshair shape**. **Click and hold the left mouse button down** as you trace the path of the soccer ball, bouncing off as many items as you can and finally landing in the goals.

Remember, this must be a fantastically spectacular goal!

15. **Double click** to finish drawing your custom motion path.

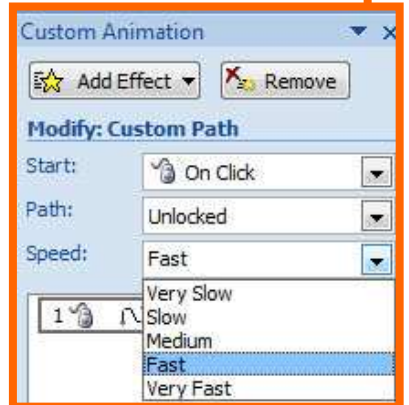
16. *Note to Educator: As this line has to be drawn as **one continuous line** it may take a few attempts to get this line correct. The learner may delete and re-draw the line until they are happy with the line.*



17. Your motion path will appear on your soccer field. We will change the speed so that the ball travels quickly. (After all, this was a spectacular goal!)

18. Under the **“Speed”** drop down menu, select **Fast**

19. To view your slide show press F5 on your keyboard. To start your ball rolling, click the mouse on the screen.



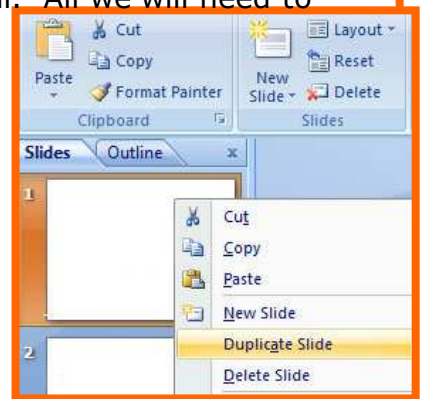
20. Press **“Escape”** on your keyboard to return to your PowerPoint presentation.

21. Enter your name in the **“Name”** textbox and your grade in the **“Grade”** textbox at the bottom of the slide

22. Now we will need to create the **action replay** of this goal. All we will need to do is to duplicate the slide we have already created and slow the motion of the ball down.

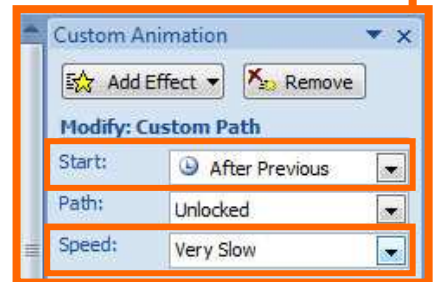
23. Click on the Slides tab → Select the slide you want to Duplicate → Right click on the slide → Duplicate Slide

24. Your second slide in your presentation will now be a duplicate of the first slide. We will now change the speed of the motion path so that it is slower than on the first slide.



25. Click on the soccer ball → under the **“Speed”** drop down menu, select **Very Slow**

26. To start the soccer ball rolling as soon as the second slide starts, select **Start → After Previous**



27. Now we will add in a heading indicating that this is an action replay.
 28. Click on the **WordArt icon** on the **Insert Toolbar**



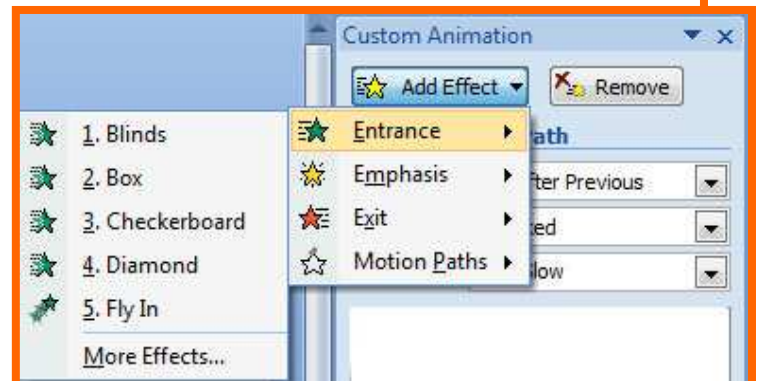
29. In the drop down window **select a WordArt Style** → **OK**
 30. Enter the words **"ACTION REPLAY"** → **OK**
 31. Your WordArt will be placed in the centre of your second slide. You may resize and move the ACTION REPLAY wording to a section of the slide where it will not obscure the motion path you have drawn for your soccer ball.



32. If you wish to colour your ACTION REPLAY wording a different colour, **right click on the WordArt** → **Format Text Effects** → **Text Fill and Text Outlines tab** → **select a Fill colour** → **select a Line colour** → **OK.**

33. Now we will add some custom animation to the ACTION REPLAY wording.

34. **Right click on the ACTION REPLAY wording** → **custom animation.**

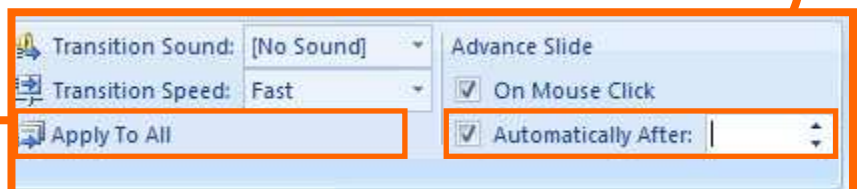


35. From the custom animation menu select **Add Effect** → **Entrance** → **select the effect you wish to apply to the wording.**

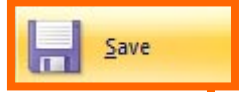
36. You may adapt this custom animation further by choosing a **Direction** and a **Speed.**

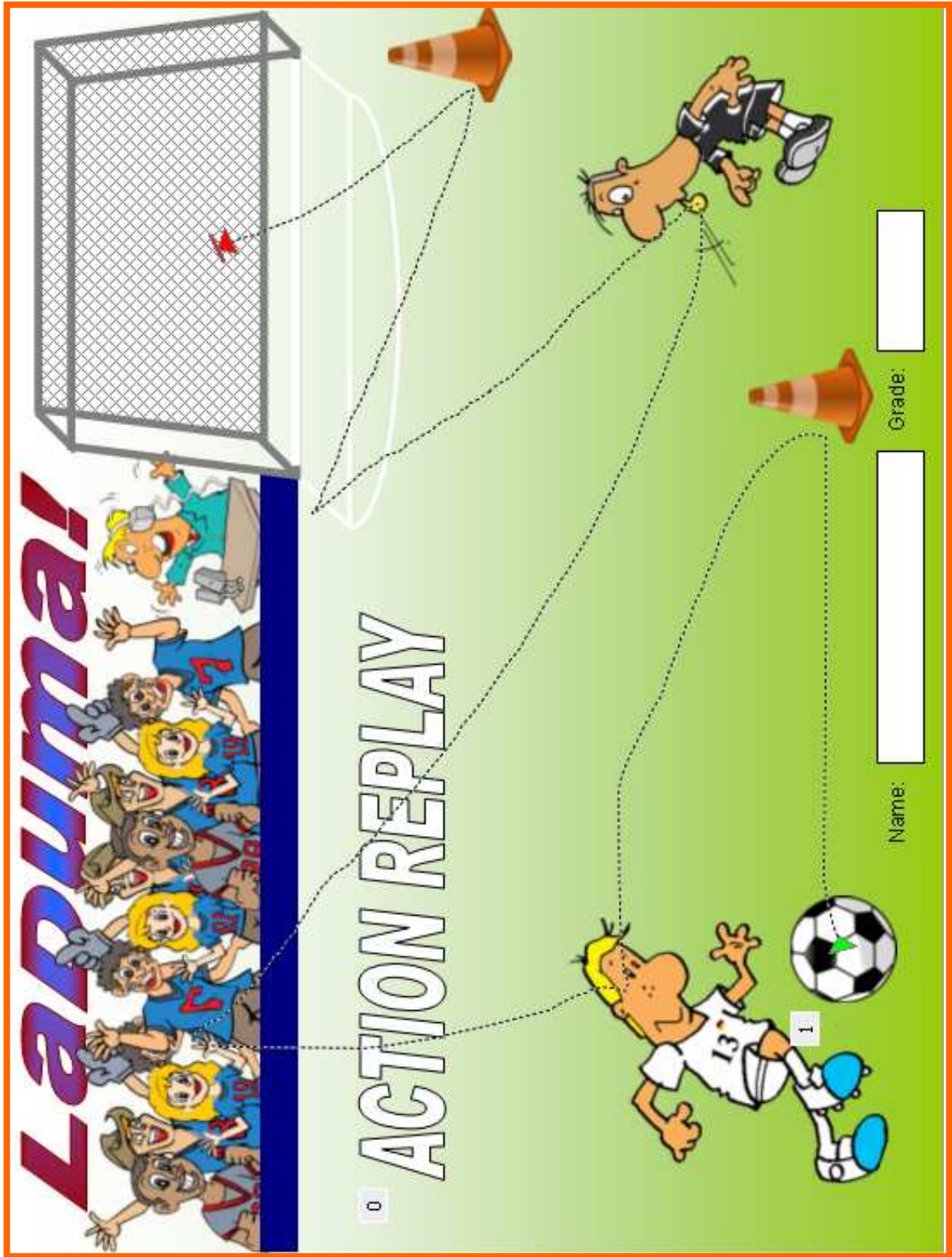
37. To make the wording and the ball movement start together in this second slide, select **Start** → **With Previous**

38. To make the two slides advance one after the other, select **Animations Toolbar Advance slide** → **automatically after** insert how many seconds you want before they advance → **apply to all**



39. To view your slide show press F5 on your keyboard. To start your ball rolling, click the mouse on the screen. Press Escape or click to exit the slide show.
40. **Save** your work by **clicking** on **Office Button** → **save**
41. **Close Microsoft PowerPoint** by **clicking** on **Office Button** → **exit Powerpoint** or clicking on the top **X** at the top of your screen.





LADUMA!

ACTION REPLAY

0

1

Name:

Grade:

The worksheet features a soccer field with a goal on the left. A crowd of cheering fans is on the left side. A player with yellow hair and a white jersey with the number 13 is shown kicking a soccer ball. A second player is shown running towards the goal. Two orange traffic cones are placed on the field. Dotted lines connect the crowd, the player with the ball, the player running, and the goal to the 'ACTION REPLAY' text. A small number '0' is next to the crowd and a small number '1' is next to the player with the ball.

