**EMERALD ROYAL INT’L SCHOOL**

**LESSON PLAN/NOTE FOR WEEK 5 ENDING: 2ND JUNE, 2023**

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| **Term** | | 3rd | | |
| **Week** | | 5 | | |
| **Class** | | SS2 | | |
| **Date** | | 02/05/2023 | | |
| **Subject** | | Data Processing | | |
| **Topic** | | Object transformation | | |
| **Sub-Topic** | | Object shaping | | |
| **Period** | | 5th | | |
| **Time** | | 10:50 – 11:20 | | |
| **Duration** | | 30minutes | | |
| **Number in class** | | 4 | | |
| **Average age** | | 15years | | |
| **Sex** | | Mixed | | |
| **Specific Objectives** | | By the end of the lesson, students should be able to:   1. Explain object shaping 2. Adjust/manipulate shapes of objects | | |
| **Rationale** | | To enable students know how to transform objects | | |
| **Previous knowledge** | | Students have been taught object shaping in their previous lesson | | |
| **Instructional material** | | Computer set, CorelDraw software | | |
| **Reference** | | Data Processing for Senior Secondary Education (SS1 – 3) by Hiit Plc | | |
| **STEPS** | **TEACHER’S ACTIVITIES** | | **STUDENTS’ ACTIVITIES** | **LEARNING POINTS** | |
| Introduction | The teacher introduces the lesson by asking the students to explain how objects are shaped. | | Students participate in the class discussion. | To arouse the students interest for the lesson. | |
| Step I | *Teacher explains object shaping as thus:*  There are 7 tools in the Edit Shape tool group. They are: Shape, Smooth, Smear, Twirl, Attract and Repel, Smudge brush, and Roughen brush. These tools can be used to shape different parts of an object or text by manipulating nodes and control handles.  The Edit Shape tool group can be found just below the Pick tool in the Toolbox.  IMG_256 | | Students pay attention as the teacher demonstrates the steps. | To ensure proper understanding of the steps. | |
| Step II | *Teacher explains how to shape objects as follows:*   1. **The Shape tool**   The Shape tool, can be activated with the F10 key on the PC, and the A key on the Mac.  To start changing the shape of an object, click it with the Shape tool to display its nodes and control handles. You can adjust the shape of the object by moving one or more of the nodes.  Each type of object provides a specialized set of shaping methods. For example, when you click on a rectangle with the Shape tool, nodes appear at each corner and there are options on the property bar for corner editing.  IMG_256  Dragging any corner node changes all corners, either as rounded, scalloped, or chamfered.  IMG_257   1. **The Smooth Tool**   The Smooth tool is used to remove jagged edges or sharp corners, by “brushing away” or removing nodes.   1. For this tool and the others, the Nib Size can be set on the property bar, or changed by dragging the mouse left or right while holding the Shift key. You can also adjust the Rate of applying the effect, either on the property bar, or by holding the Alt key while dragging left or right. These tools also have a Pen pressure icon which can be enabled by tablet users.   IMG_256  Clicking the shape that you want to smooth displays its nodes, and you can drag over the edges and repeat as needed to get a more smooth, organic-looking shape.  IMG_257  Increasing the nib size and dragging repeatedly increases the smoothing effect.   1. **The Smear Tool**   We’ll be using this simple drawing to show how the Smear, Twirl, Attract and Repel, Smudge brush, and Roughen brush tools can be used.  IMG_256  With the Smear tool, you can shape an object by pulling out extensions or making indents along its outline, and these extensions narrow toward their ends.  We’ll start with the ellipse in the center. Once you activate the Smear tool, there are options on the property bar to change the Nib size and use a Smooth smear or Pointy smear.  IMG_256  Dragging from inside the shape pulls out extensions, dragging from outside creates indentations.   1. **The Twirl Tool**   The Twirl tool adds a swirl effect to outlines. If you click and hold without moving your mouse, the Twirl tool will create a static twirl – the longer you hold down your mouse button, the more rotations your twirl will have.  You can also click and drag to pull the swirl outward. On the property bar you can choose Counterclockwise Twirl or Clockwise Twirl.  IMG_256   1. **The Attract and Repel, Smudge Brush, and Roughen Brush Tools**   **The Attract and Repel tool** lets you shape objects by attracting nodes or pushing nodes away. To control the shaping effect, there are settings on the property bar to adjust the Nib size, the Rate (which sets the speed at which the effect is applied), and switch between the Attract tool and the Repel tool.  **The Smudge brush tool** is similar to the Smear tool, but the extensions and indents it creates have a uniform thickness depending on the Dryout value that you set on the property bar. A positive dryout (1 to 10) narrows the effect towards the end of the stroke, and a negative dryout (-1 to -10) widens the effect towards the end of the stroke. Setting the Dryout value to 0 maintains an even stroke width.  In this example, we used the Smudge brush tool to add “rays” to the sun.  IMG_256  **The Roughen brush tool** can be used to add a jagged or spiked edge to objects. On the property bar you can adjust the Nib size and the Frequency of spikes. In this example, we dragged along the edge of the green rectangle several times to create random spikes for grass, varying the tools settings each time.  IMG_257 | | Students practicalize the processes carried out by the teacher | To create a platform where all students are carried along. | |
| Summary | *Teacher summarizes the lesson as thus:*  Filling Tools Gradient and Paint Bucket Tools are used to fill a selected object, area, or layer with color and are called filling tool. It is also a type of painting tool. Paint Bucket Tool The Paint Bucket tool is used to fill a selected area with a color or pattern by clicking on a pixel in that area. | | Students pay attention and copy the note into their exercise books. | For reference purpose | |
| Evaluation | The teacher evaluates the lesson by asking the students to explain object shaping. | | Students answer the question orally | To ascertain the students level of understanding of the lesson | |
| Conclusion | The teacher corrects the students where necessary. | | Students take note of the correction(s) made. | To ensure proper understanding of the lesson | |
| Project | The teacher groups the students in two pairs and gives the following project.   1. Using coreldraw software, shape the moon and stars and apply. 2. Describe the processes involved in shaping the objects. 3. Write down your observations or difficulties. | | Students copy the assignment in their exercise books | To encourage studying at a home. | |



25/5/2023

Principal Head Instuctor