



Hartford Primary School

YEAR GROUP	5	SUBJECT	Computing - Vector Drawing		TERM	Autumn
National Curriculum Statements	<ul style="list-style-type: none">Select, use, and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems, and content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information.					
Prior Learning (What should they already know)	This unit progresses students' knowledge and understanding of digital painting and has some links to desktop publishing in which learners used digital images. They are now creating the images that they could use in desktop publishing documents.					
Software needed						
RETRIEVAL VOCABULARY			NEW VOCABULARY	vector, drawing tools, object, toolbar, vector drawing, move, resize, colour, rotate, duplicate/copy, zoom, select, align, modify, layers, order, copy, paste, group, ungroup, reuse, reflection		
Internet safety links	<ul style="list-style-type: none">Only use websites or apps that your teacher or school has approved.Never type in your real name, age, school name, or photos when using drawing tools. Use a nickname with permission.Always check with your teacher or adult before signing up for anything online.Always be respectful in shared docs or group work. No rude comments or edits.Only use free-to-use images or those your teacher provides.Don't post your art publicly without permission. Use safe sharing (e.g., Google Drive, Class Blog with approval).If anything looks wrong or makes you uncomfortable, tell an adult straight away.					

	Essential Learning for this lesson	Suggested teaching tasks/approaches	New Knowledge – What I'm leaving the lesson with
LESSON 1	<p>To identify that drawing tools can be used to produce different outcomes</p> <ul style="list-style-type: none"> I can recognise that vector drawings are made using shapes I can identify the main drawing tools I can discuss how vector drawings are different from paper-based drawings 	<p>NCCE lesson 1</p> <p>Introduction: In this lesson learners will be introduced to vector drawings and begin to have an understanding that they are made up of simple shapes and lines. Learners will use the main drawing tools within a software package. Learners will discuss how vector drawings differ from paper-based drawings.</p> <p>Activity 1: To evaluate the learners' current understanding of vector drawings.</p> <p>Activity 2: To assess the learners' ability to create a picture using physical shapes.</p> <p>Activity 3: To determine the learners' ability to select and change the colour of shapes. and lines.</p>	<p>A vector drawing is made using shapes.</p> <p>I can identify the drawing tools.</p> <p>Vector drawings are different from paper-based drawings as they can be moved, resized and rotated.</p>

LESSON 2	<p>To create a vector drawing by combining shapes</p> <ul style="list-style-type: none"> I can identify the shapes used to make a vector drawing I can explain that each element added to a vector drawing is an object I can move, resize, and rotate objects I have duplicated 	<p>NCCE lesson 2</p> <p>Introduction: During this lesson learners will begin to identify the shapes that are used to make vector drawings. They will be able to explain that each element of a vector drawing is called an 'object'. Learners will create their own vector drawing by moving, resizing, rotating, and changing the colours of a selection of objects. They will also learn how to duplicate the objects to save time.</p> <p>Activity 1: To assess the learners' ability to create their own vector drawing, using the rectangle and circle tools and duplicating shapes.</p> <p>Activity 2: To assess the learners' understanding that shapes can be rotated.</p> <p>Activity 3: To assess the learners' ability to combine the skills demonstrated during the lesson to replicate one of the vector drawings given by the teacher.</p>	<p>Shapes make a vector drawing. Each element added is called an object.</p> <p>Objects can be moved, resized and rotated.</p>
LESSON 3	<p>To use tools to achieve a desired effect</p> <ul style="list-style-type: none"> I can use the zoom tool to help me add detail to my drawings I can explain how alignment grids and resize handles can be used to improve consistency I can modify objects to create different effects 	<p>NCCE lesson 3</p> <p>Introduction: During this lesson learners will increase the complexity of their vector drawings, using the zoom tool to add detail to their work. They will be shown how grids and resize handles can improve the consistency of their drawings. Learners will also use tools to modify objects and create different effects.</p> <p>Activity 1: To assess the learners' ability to move shapes to create a given image.</p> <p>Activity 2: To assess the learners' ability to create their own drawing, based on a given design.</p> <p>Activity 3: To assess the learners' ability to use different effects, such as fill and line tools.</p>	<p>The zoom tool helps me add detail to my drawings</p> <p>Resize handles can be used to improve consistency.</p> <p>I can modify objects to create different effects.</p>
LESSON 4	<p>To recognise that vector drawings consist of layers</p> <ul style="list-style-type: none"> I can identify that each added object creates a new layer in the drawing I can identify which objects are in the front layer or in the back layer of a drawing I can change the order of layers in a vector drawing 	<p>NCCE lesson 4</p> <p>Introduction: During this lesson learners will gain an understanding of layers and how they are used in vector drawings. They will learn that each object is built on a new layer and that these layers can be moved forward and backward to create effective vector drawings.</p> <p>Activity 1: To assess the learners' ability to move objects forward and backward within a vector graphic.</p> <p>Activity 2: To assess the learners' ability to use layering to create their own vector drawings.</p>	<p>Every added object creates a new layer in the drawing.</p> <p>Objects can be in the front layer or in the back layer of a drawing and I can change the order of layers in a vector drawing.</p>
LESSON 5 & 6	<p>To group objects to make them easier to work with</p> <ul style="list-style-type: none"> I can copy part of a drawing by duplicating several objects 	<p>NCCE lesson 6</p>	<p>You can copy part of a drawing by duplicating several objects</p>

	<ul style="list-style-type: none">• I can group to create a single object• I can reuse a group of objects to further develop my vector drawing	<p>Introduction: During this lesson learners will be taught how to duplicate multiple objects. They will learn how to group objects to make them easier to work with, how to copy and paste these images, and then make simple alterations.</p> <p>Activity 1: To assess the learners' ability to group objects and then duplicate the images</p> <p>Activity 2: To assess the learners' ability to ungroup objects, change them (including rotation, colour, and size), and regroup them</p> <p>Activity 3: To assess the learners' ability to add a picture to the background of their piece of work</p>	<p>Multiple objects can be grouped to create a single object</p> <p>I can use all of the skills and tools learned to create an effective vector drawing.</p>
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