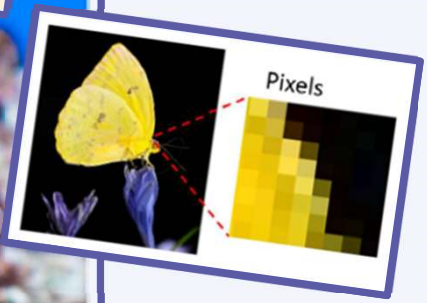
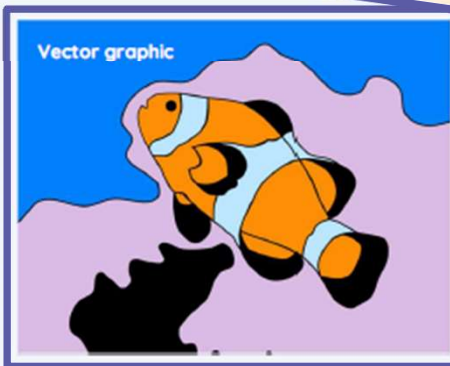
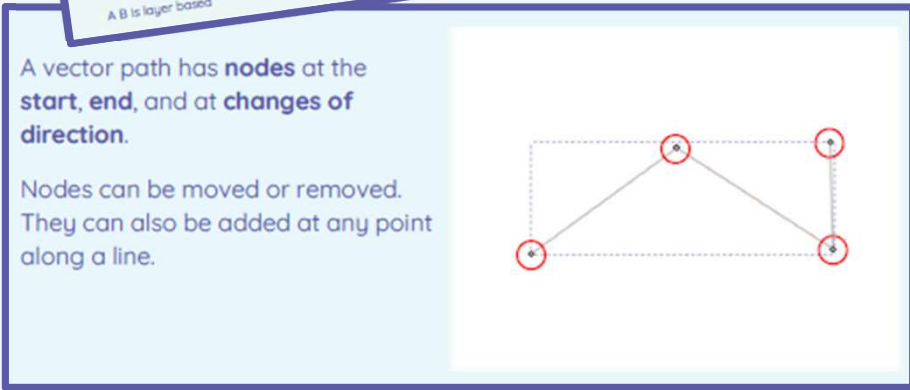
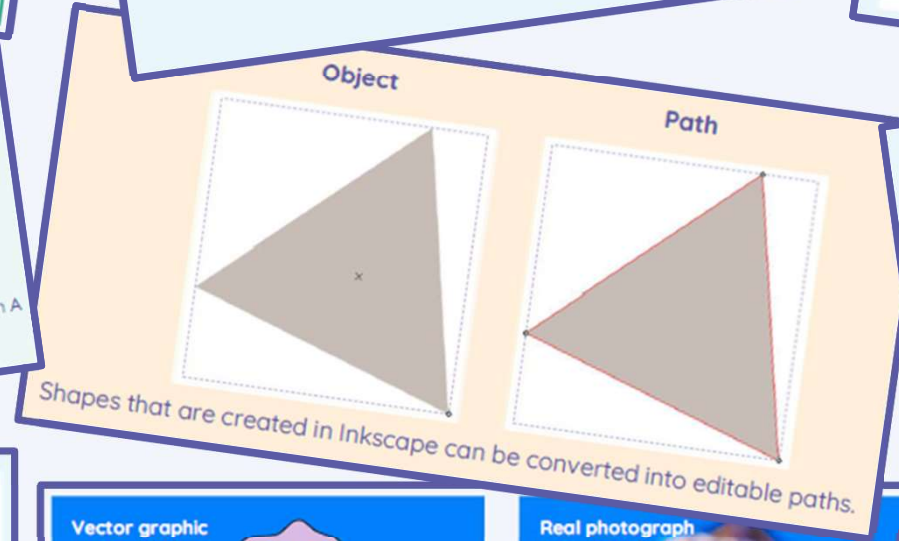
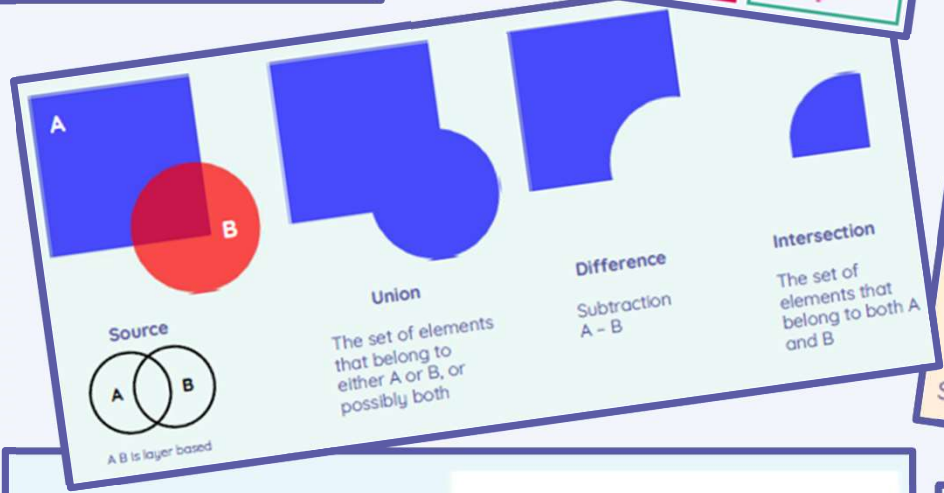
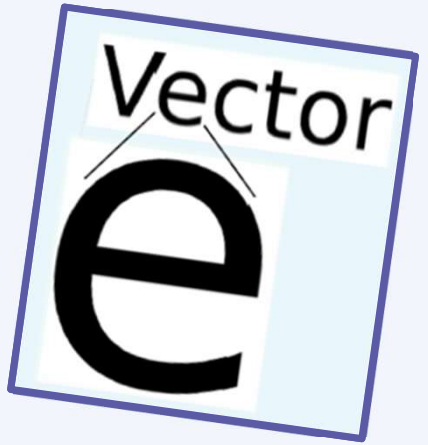
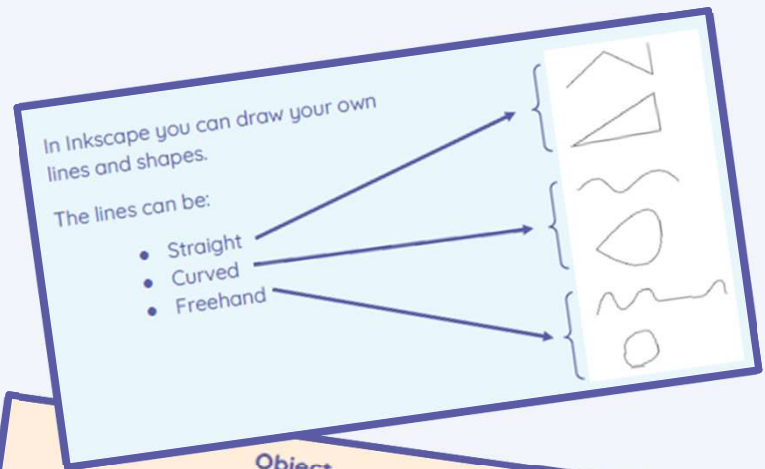
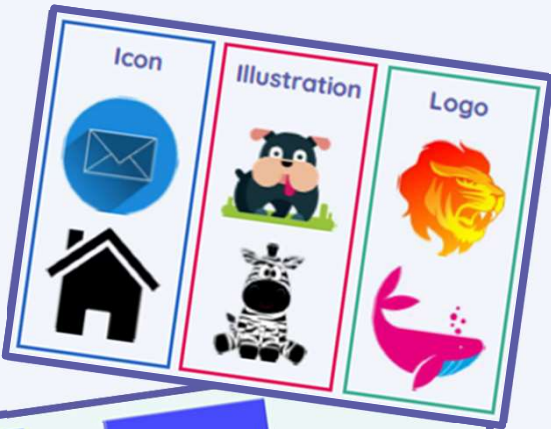
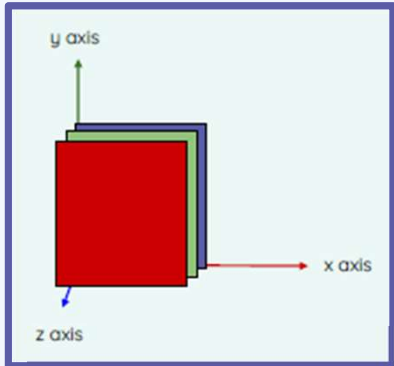


Year 8 Computer Science Vector Graphics Knowledge Organiser

Key Word	Definition
Vector	Graphics are made up of lines and shapes.
Fill	To apply colour to a graphics object such as a rectangle, circle or polygon.
Stroke	A line that wraps around a layer. Also referred to as a border.
Rotate	A process of changing the angle of the object.
Reposition	Changing the position of a graphics object.
Layer	The different levels at which one can place an object or image file.
Handle	The small black boxes that appear around or on an object, which you can use to size or move the object.
z-order	An ordering of overlapping two-dimensional objects.
Object	An item within a graphic.
Select	To choose an object so that you can manipulate it in some way.
Group	A collection of graphical objects.
Ungroup	Remove objects from a collection so you can change parts individually.
Align	Lining up text or graphics on a page.
Distribute	To move text or shape objects so that their centres are equally distant from each other.
Combine	To join multiple images into a single one.
Union	An operation to modify two or more objects into one object
Difference	When the top object is removed from that of the bottom one.
Intersection	When you perform an intersection of two objects, all that will remain is the area that was overlapping in both objects.

Year 8 Computer Science Vector Graphics Knowledge Organiser

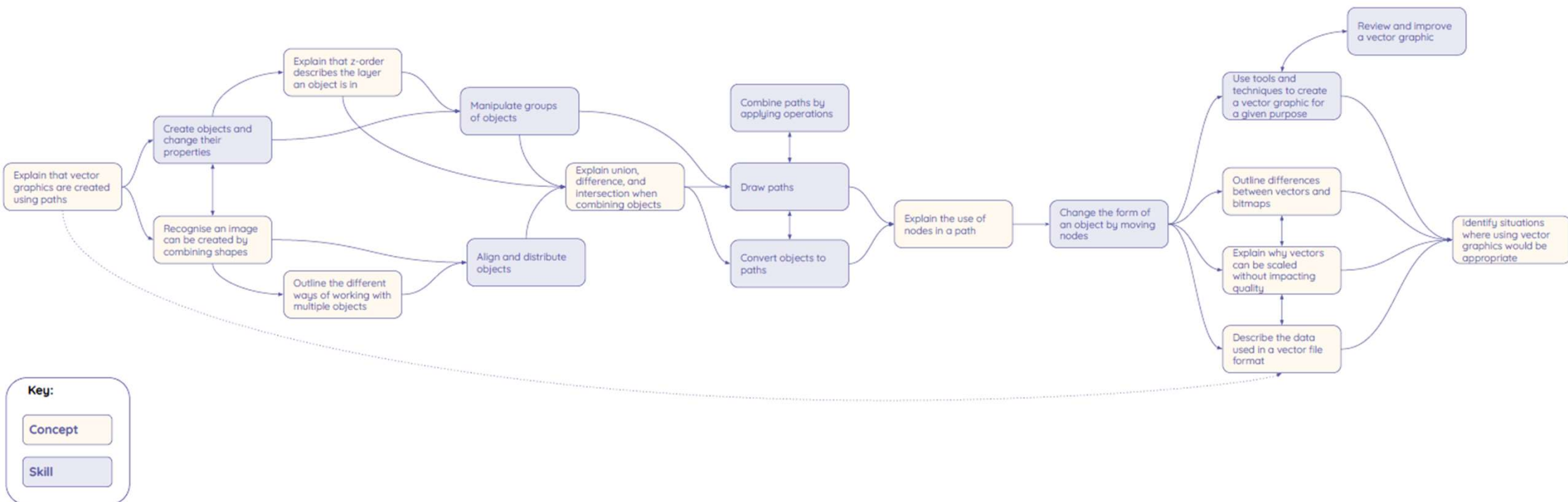
Key Word	Definition
Path	A route between two points and it can be straight or curved.
Node	The basic building blocks of images created in Inkscape. They are points that, when connected with lines, create shapes and figures.
Object	An item within a graphic.
Freehand	Drawing directly onto the canvas using the mouse.
Logo	A symbol made up of text and images that identifies a business.
Illustration	A picture or diagram that helps make something clear or attractive.
Icon	A small graphical representation of a program, feature, or file.
Vector	A simple digital image created using paths.
Markup	A programming language that is in a graphic to control its structure, formatting, or the relationship between its parts
Scalable	When an object or image is able to be made bigger or smaller.
svg	(scalable vector graphic) A vector image format for 2D graphics
Bitmap	An image made up of small individual squares of colour called pixels.



Assessment Rubric

	Emerging [1-3]	Expected [4-7]	Exceeding [8-10]	Score
Task	<input type="checkbox"/> List some of the requirements of the task	<input type="checkbox"/> Explain the key requirements of the task	<input type="checkbox"/> Outline an approach to planning the task	
Design Decisions	<input type="checkbox"/> List some considerations of the chosen project <input type="checkbox"/> Create a sketch showing a possible solution for the task <input type="checkbox"/> Describe tools that might be useful in creating the design	<input type="checkbox"/> Explain important elements of the chosen project <input type="checkbox"/> Create a labelled sketch that details the image design <input type="checkbox"/> Indicate how some features of the design will be created as a vector	<input type="checkbox"/> Detail essential features the image of the chosen project should include <input type="checkbox"/> Design include a number of options, of which one is selected <input type="checkbox"/> Describe the likely sequence of steps required to create the image	
Implementation	<input type="checkbox"/> Use basic shapes <input type="checkbox"/> Resize and position shapes <input type="checkbox"/> Alter the fill colour of a shape <input type="checkbox"/> Group shapes to make them easier to work with	<input type="checkbox"/> Use shapes suitable for the project design <input type="checkbox"/> Rotate shapes <input type="checkbox"/> Modify the look and proportions of shapes <input type="checkbox"/> Create and edit paths <input type="checkbox"/> Alter the colour of shapes, strokes, and paths <input type="checkbox"/> Combine shapes	<input type="checkbox"/> Convert a basic shape to a path and repositions nodes <input type="checkbox"/> Change straight paths to curves <input type="checkbox"/> Use align and/or distribute to create uniformity <input type="checkbox"/> Alter the width of strokes and paths	
Evaluation	<input type="checkbox"/> Describe what was successful	<input type="checkbox"/> Evaluate how successful they were in meeting the task requirements	<input type="checkbox"/> Evaluate and reflect on the impact that changes have made on an image	
Project 1 – Icons Suitable for purpose	<input type="checkbox"/> The icons are mostly relevant to the text on the navigation buttons or menu items	<input type="checkbox"/> The icons are consistently relevant to the text on the navigation buttons or menu items	<input type="checkbox"/> The icons are effective and will make the navigation buttons/menu items more user-friendly	
Project 2 – Logo Suitable for purpose	<input type="checkbox"/> The logo uses mostly relevant symbols and text to represent a theme park with a space theme	<input type="checkbox"/> The logo consistently uses relevant symbols, text, and colours to represent a theme park with a space theme <input type="checkbox"/> The key elements of the logo are visible when it's scaled up or down	<input type="checkbox"/> The logo uses effective symbols, text, and colours to represent a theme park with a space theme <input type="checkbox"/> The logo is effective when scaled up or down <input type="checkbox"/> The logo is effective when converted to monochrome	
Project 3 – Illustration Suitable for purpose	<input type="checkbox"/> The illustration/s loosely resemble a lobster and/or a turtle	<input type="checkbox"/> The illustration/s are a clear representation of a lobster and/or a turtle	<input type="checkbox"/> The illustration/s effectively represent a lobster and/or a turtle <input type="checkbox"/> The illustration/s are suitable to be used for a children's book	
Total Score:				

Learning Graph



Creating Media

Drew and modified shapes

Changed the position, rotation and order of shapes

Combined objects to create images

Edited images in the form of paths

Combined tools and techniques to create an image

Responded to feedback by altering your work

Effective Use of Tools

Used tools to draw and modify shapes

Changed the position, rotation and order of shapes, using tools

Grouped objects and combined them

Changed shapes to paths, created and modified paths

Combined tools and techniques to create an image

Changed an object by modifying its markup