

# UNIT OVERVIEW & LEARNING JOURNEY

## YEAR 8 – COMPUTING: TERM 1 (1<sup>st</sup> half term)



### MEDIA VECTOR GRAPHICS

Welcome, future digital artists! Get ready to dive into the amazing world of Vector Graphics! In this unit, you'll learn how to create awesome digital designs like illustrations, logos, and icons that can be scaled huge without ever looking blurry. You'll use special software like Inkscape (it's free and super cool!) to bring your creative ideas to life.

You'll discover the secrets behind professional designs, learn how to build images piece by piece, and become a master at making your digital creations look perfect for any purpose. This unit is all about giving you the power to create stunning, super-sharp digital art!

#### Your artist's toolkit: what you'll learn and achieve!

What I Already Know! (My Digital Superpowers from before!)	New Adventures This Term! (What We'll Learn!)	Where We're Heading Next! (Your Future Digital Journey!)
How to use digital devices and basic creative tools	How to use tools to draw and change shapes	Create even more advanced digital work (like animations or complex illustrations)
You might have used vector drawing before in Year 5	How to understand z-order (layers) to make sure things are visible	Use a wider range of vector tools and techniques confidently
Basic ideas of objects, layers, and grouping	How to work with multiple objects by aligning, distributing, and grouping them	Design and create vector graphics for specific purposes, like marketing or game design
You can make simple digital presentations	How to combine shapes using "union," "intersection," and "difference"	Understand how vector graphics are used in different industries (e.g., animation, web design)
	How vector graphics are made of "paths" and "nodes"	Create projects that focus on professional quality and user experience
	How to change shapes into paths and edit them	Explain how vectors can be scaled without losing quality
	How to make straight and curved paths	Describe how vector images are stored using "markup"
	How to explain what "markup" is and change it to modify an object	Evaluate and improve your own vector graphics
	How to choose a project, plan a design, and combine tools to create a vector image	Explain the key differences between vector and bitmap images
	How to evaluate your project against its purpose	Identify when to use vector graphics

## Weekly missions: Developing your digital art skills

<b>Week 1: Shape Shifters</b> - Discover how to create and transform basic shapes to build an image			
<b>Skills:</b>	<b>Key words:</b>		
<ul style="list-style-type: none"> <li>Use tools to draw and change shapes (like circles, squares, stars)</li> <li>Change the position and rotate your shapes</li> <li>Understand how "z-order" (layers) decides what you can see</li> </ul>	Vector   Fill   Stroke   Rotate   Reposition   Z-order   Layer   Handle		
<b>RAG</b> rate your confidence with this lesson	☹	☺	😊
<b>Week 2: Object Organizers</b> - Learn to arrange multiple shapes and objects perfectly			
<b>Skills:</b>	<b>Key words:</b>		
<ul style="list-style-type: none"> <li>Use tools to line up (align) and spread out (distribute) objects</li> <li>Explain how "grouping" helps you work with many objects</li> <li>Combine two shapes using "union," "intersection," and "difference"</li> </ul>	Object   Select   Group   Ungroup   Align   Distribute   Combine   Union   Difference   Intersection		
<b>RAG</b> rate your confidence with this lesson	☹	☺	😊
<b>Week 3: Pathfinders</b> - Explore the "paths" and "nodes" that make up vector graphics and create awesome superhero faces			
<b>Skills:</b>	<b>Key words:</b>		
<ul style="list-style-type: none"> <li>Explain that vector graphics are made of paths</li> <li>Create and change straight and curved paths</li> <li>Turn your shapes into paths and then edit them in new ways</li> </ul>	Path   Node   Freehand   Object		
<b>RAG</b> rate your confidence with this lesson	☹	☺	😊
<b>Week 4: Project Power Up</b> - Start your very own open-ended vector graphics project, choosing what you want to create.			
<b>Skills:</b>	<b>Key words:</b>		
<ul style="list-style-type: none"> <li>Choose a project and plan your design</li> <li>Combine different tools and techniques to create a vector image</li> <li>Think about how well your project meets its goal (purpose)</li> </ul>	Logo   Illustration   Icon		
<b>RAG</b> rate your confidence with this lesson	☹	☺	😊
<b>Week 5: Code Commanders</b> - Peek behind the scenes to see how vector images are stored and improve your projects			
<b>Skills:</b>	<b>Key words:</b>		
<ul style="list-style-type: none"> <li>Explain how "markup" describes what a vector graphic looks like</li> <li>Change an object by editing its "markup" code</li> <li>Plan and make improvements develop your project further</li> </ul>	Vector   Path   Markup   Scalable   svg (scalable vector graphic)		
<b>RAG</b> rate your confidence with this lesson	☹	☺	😊
<b>Week 6: Showcase Superstars</b> - Compare vector and bitmap images, make final touches, and share your amazing work			
<b>Skills:</b>	<b>Key words:</b>		
<ul style="list-style-type: none"> <li>Explain the main differences between vector and bitmap images</li> <li>Decide which image type is best for different situations</li> <li><b>Review your image using a "success checklist" (rubric)</b></li> </ul>	Bitmap   Logo   Illustration   Icon		
<b>RAG</b> rate your confidence with this lesson	☹	☺	😊



Ad Astra

★ SINCERE ★ THOUGHTFUL ★ ASPIRATIONAL ★ RESILIENT ★ SOLIDARITY ★

STARS