

Brough Primary School – Curriculum Intention Plan 2021 - 2022



Subject: Computing Year Group: Year 5		Area of learning: Vector drawing (NCCE Y5)
Links to previous work/Remember when	<ul style="list-style-type: none"> • Paint programmes 	
Term	Year	Key Skills to be taught
Spring 1 2022 What the children should know at the end of this series of lessons	Y5	Learners use the skills they have gained in this unit to create a vector drawing for a specific purpose. They reflect on the skills they have used to create the vector drawing and think about why they used the skills they did. Learners then begin to compare vector drawings to freehand paint program drawings.

Vocabulary

Vector, drawing tools, object, toolbar, reflection, layers, order, copy, paste, group, ungroup, duplicate, reuse, zoom, select, rotate, align, resize, modify

Sequence of learning	Objectives and suggested details provided by the subject leader.
1	<p><u>The drawing tools</u></p> <p>In this first lesson, pupils are introduced to vector drawings and begin to understand that they are made up of simple shapes and lines. They use the main drawing tools within the Google Drawings application to create their own vector drawings. Pupils will discuss how vector drawings differ from paper-based drawings.</p> <p><u>Learning objectives</u></p> <ul style="list-style-type: none"> • To identify that drawing tools can be used to produce different outcomes • I can recognise that vector drawings are made using shapes • I can experiment with the shape and line tools

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	<ul style="list-style-type: none">• I can discuss how vector drawings are different from paper-based drawings <p>https://www.stem.org.uk/resources/elibrary/resource/505949/lesson-1-drawing-tools</p>
2	<p><u>Creating Images</u></p> <p>In this lesson, pupils begin to identify the shapes that are used to make vector drawings. They are able to explain that each element of a vector drawing is called an object. Pupils create their own vector drawing by moving, resizing, rotating, and changing the colours of a selection of objects. They also learn how to duplicate the objects to save time.</p> <p><u>Learning objectives</u></p> <ul style="list-style-type: none">• To create a vector drawing by combining shapes• 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>https://www.stem.org.uk/resources/elibrary/resource/505956/lesson-2-creating-images</p>
3	<p><u>Making effective drawings</u></p>

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	<p>In this lesson, pupils begin to increase the complexity of their vector drawings and use the zoom tool to add detail to their work. They are shown how grids and resize handles can improve the consistency of their drawings.</p> <p><u>Learning objectives</u></p> <ul style="list-style-type: none">● To use tools to achieve a desired effect● 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 a new image <p>https://www.stem.org.uk/resources/elibrary/resource/505957/lesson-3-making-effective-drawings</p>
4	<p><u>Layers and objects</u></p> <p>In this lesson, pupils gain an understanding of layers and how they are used in vector drawings. They discover that each object is built on a new layer and that these layers can be moved forwards and backwards to create effective vector drawings.</p> <p><u>Learning objectives</u></p> <ul style="list-style-type: none">● To recognise that vector drawings consist of layers● I can identify that each added object creates a new layer in the drawing● I can change the order of layers in a vector drawing● I can use layering to create an image <p>https://www.stem.org.uk/resources/elibrary/resource/505961/lesson-4-layers-and-objects</p>

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5	<p><u>Manipulating Objects</u></p> <p>In this lesson, pupils find out how to select and duplicate multiple objects at a single time. They develop this skill further by learning how to group multiple objects to make them easier to work with. Pupils then use this knowledge to group and ungroup objects, in order to make changes to and develop their vector drawings.</p> <p><u>Learning objectives</u></p> <ul style="list-style-type: none">● To group objects to make them easier to work with● I can copy part of a drawing by duplicating several objects● I can recognise when I need to group and ungroup objects● I can reuse a group of objects to further develop my vector drawing <p>https://www.stem.org.uk/resources/elibrary/resource/505962/lesson-5-manipulating-objects</p>
6	<p><u>Create a vector drawing</u></p> <p>In this final lesson, pupils use the skills they have gained in this unit to create a vector drawing for a specific purpose. They reflect on the skills they have used to create the vector drawing and think about why they used the skills they did. Pupils then begin to compare vector drawings to freehand paint program drawings.</p> <p><u>Learning objectives</u></p> <ul style="list-style-type: none">● To apply what I have learned about vector drawings● I can create a vector drawing for a specific purpose● I can reflect on the skills I have used and why I have used them● I can compare vector drawings to freehand paint drawings

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	https://www.stem.org.uk/resources/elibrary/resource/505966/lesson-6-create-vector-drawing
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Learning Outcome/product

They learn how to use different drawing tools to help them create images. Pupils recognise that images in vector drawings are created using shapes and lines, and each individual element in the drawing is called an object. Pupils layer their objects and begin grouping and duplicating them to support the creation of more complex pieces of work.

Assessment records	List only those children who have not achieved the expected outcomes
	Children working above.

End of unit assessment question

What is a vector drawing?
How do you create a vector drawing?