Key Vocabulary and Definitions:

|  |  |
| --- | --- |
| Vector | computer images created using a sequence of commands. |
| Drawing Tools | A device used with a drawing application that allows the user to draw |
| Object | An item within a graphic, such as a graphic circle or a square |
| Toolbar | Icons on a computer display providing quick access to certain functions |
| Resize/Rotate | Changing the dimensions of an object, either smaller/larger or turning it. |
| Align | How text or an object is placed on the screen. |
| Group/Ungroup | Making multiple objects act as one, or separating multiple objects as individual |
| Duplicate/Copy | To create another version of the same object |
| Modify | To change or alter an object or drawing. |
| Layers | Different levels at which you can place an object or image. Can be stacked, merged or defined. |
| Order | The arrangement of layers or objects in a vector drawing. |
| ReuseA hand holding a green box  Description automatically generated | Using existing objects or software within a program. |
| Reflection  A close-up of a card  Description automatically generated | A transformation which produces a mirror. |

System, connection, digital, input, process, output

Overview

In this unit, learners start to create vector drawings. They learn how to use different drawing tools to help them create images. Learners recognise that images in vector drawings are created using shapes and lines, and each individual element in the drawing is called an object. Learners layer their objects and begin grouping and duplicating them to support the creation of more complex pieces of work. This unit is planned using the Google Drawings app, other alternative pieces of software are available.

National Curriculum:

**Computing**

* 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.
* Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems.

**Online Safety**

* Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Teaching Sequence

Introduction to Vector Graphics

1. To identify that drawing tools can be used to produce different outcomes.
2. To create a vector drawing by combining shapes.
3. To use tools to achieve a desired effect.
4. To recognise that vector drawings consist of layers.
5. To group objects to make them easier to work with.
6. To apply what I have learned about vector drawings.

Online Safety – Online Relationships

1. To give examples of technology-specific forms of communication (e.g. emojis, memes and GIFs).
2. To explain that there are some people online who may want to do harm.
3. To describe some of the ways people may be involved in online communities and describe how to make positive contributions to these.
4. To explain how to get help if there are problems online and identify when to tell a trusted adult.

Blooms Taxonomy – Specific Verbs to Use in Lesson Aims

Knowledge: Describe, find, identify, list, locate, name, recognise, retrieve Comprehension: Classify, compare, explain, infer, interpret, paraphrase, summarise Application: Carry out, implement, use Analysis: Deconstruct, Organise, outline, structure Synthesis: Construct, design, devise, invent, make, plan, produce, Evaluation: Appraise, assess, choose,