

## Week 1 - Get into Shapes

### Core Knowledge

- **Paths:** A path can be a line, or many paths can be combined to create shapes
- **Vector Shapes:** vector shapes can be altered, allowing vector graphics to be easily edited.
- **Inkscape:** Inkscape is an open source and cross-platform application for editing vector graphics.

### Key Literacy Vector Graphic

**Definition** - Vector graphics are digital images that are created using paths.

**Associated terms** - Paths, No Pixels, Scalable, Polygon, Shapes

- The student created a logo using **vector graphics** so it could be scaled.
- **Vector Graphics** can be made out of multiple different shapes.

## Week 2 - Paths United

### Core Knowledge

- **Group Tool:** the grouping tool allows us to group multiple shapes together and move them as one object.
- **Alignment Tool:** the alignment tool allows us to set the alignment of one or multiple shapes at a time to different parts of the page.
- **Union Tool:** The union tool allows us to merge multiple shapes into one solid object by merging their paths.

### Key Literacy Path

**Definition** - A path is a line in vector software that is used to make up shapes.

**Associated terms** - Line, Shape, Curve, Smooth

- The students' shapes were made up of multiple **paths**.
- The student used the different tools available to manipulate the **paths** of the shape.

## Week 3 - Icon Challenges

### Core Knowledge

- **Distribution Tool:** The distribution tool allows us to distribute shapes apart at equal amounts so we can position elements correctly.
- **Nodes:** Nodes are the parts of the path that appear that start and the end. On a ready formed shape they are the corners of the shape and are used to manipulate the shape.

### Key Literacy Icons

**Definition** - Icons are graphical representations used to visually express an object.

**Associated terms** - Applications, Emojis, Shapes, Symbol, Representation

- The application used an **icon** to display itself on the phones home screen.
- You can click the house **icon** on a web browser to return to the homepage.

## Week 4 - What will you Make

### Core Knowledge

- **Logos:** Logos are a graphic that is used to represent something like a company or a brand
- **Icon:** Icons are graphical representations used to visually express an object.
- **Illustration:** Illustrations are graphics that are used on things like book covers or the pictures inside picture books or comic books

### Key Literacy Node

**Definition** - Nodes are the part of a path that allow you to manipulate the shape.

**Associated terms** - Corners, Shape, Path, Polygon, Manipulate, Warp

- The student used the node selection tool to manipulate their shape.
- The node of a path can be used to warp the line into different shapes.

## Week 5 - Vector vs Raster Graphics

### Core Knowledge

- **Raster Image:** A raster image is usually much higher detail than a vector image these are also known as a form of bitmap. An example of a raster image would be a photograph.
- **Bitmap:** Bitmap images are made up of small individual squares of colour called pixels and these will number in the thousands.
- **Scalability:** Vector images are capable of being scaled infinitely where as raster images will start to pixelate and lose quality.

### Key Literacy Raster Image

**Definition** - A raster image is an image that is also known as a bitmap this is an image that is formed using thousands of pixels and usually has much higher detail.

**Associated terms** - Camera, Photograph, Realistic, Bitmap, Pixels

- When someone takes a picture with a digital camera it creates a raster image.
- A raster image is much higher quality than a vector image.

## Week 6 - Showcase

### Core Knowledge

- **Active Feedback:** this is feedback that is given and received as the development of a project goes on meaning the design can be actively improved.
- **Branding:** Branding is when you develop a brand for a company or product this will be things such as the logo.

### Key Literacy Scalability

**Definition** - How much an image can be scaled before it loses quality.

**Associated terms** - Enlarge, Shrink, Scale, Small, Stretch

- A raster image does not have very good scalability as it will lose quality.
- A vector image has excellent scalability and will not lose quality when enlarged.



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