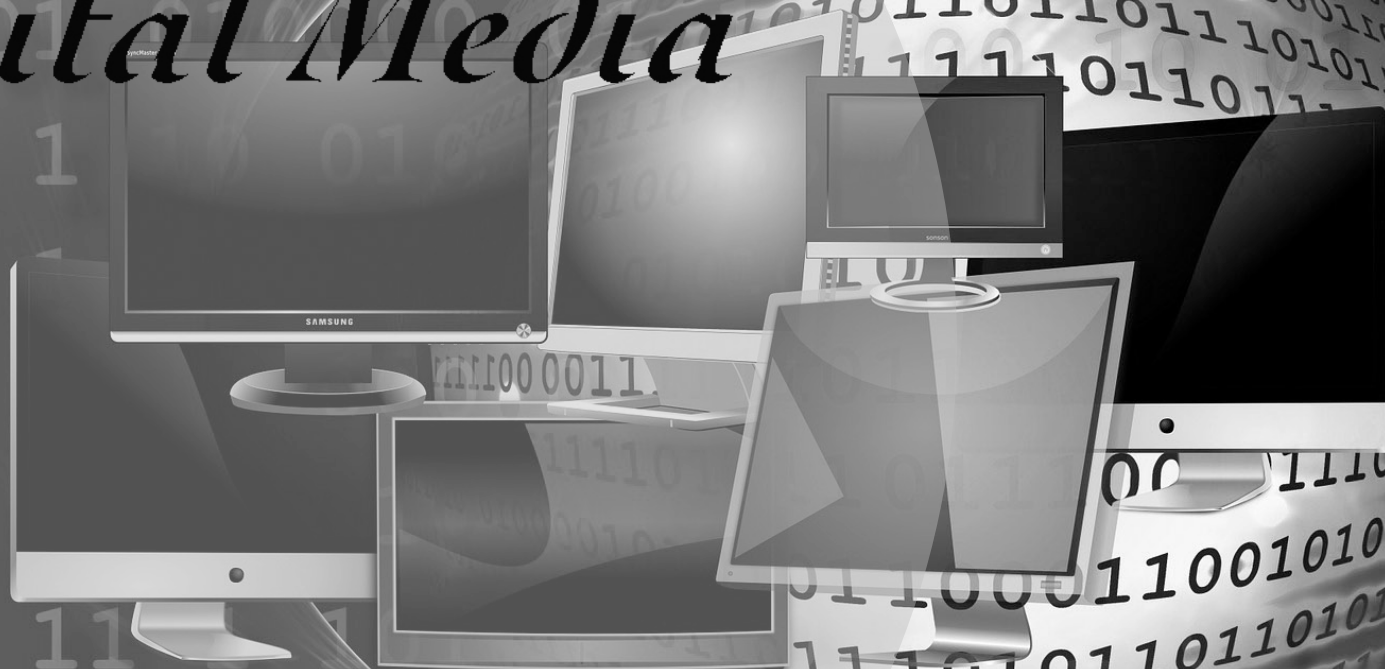




**ExplorNet's**

# *Digital Media*



Objective 102.04

Utilize appropriate tools and methods to produce digital graphics.



# **FREE TRANSFORM**

- Change by using rotate, scale, skew, distort, or perspective in one continuous operation. Instead of choosing different commands, you simply hold down a key on your keyboard to switch between transformation types.
- Rotating an object turns it around a fixed point that you choose.
- Hold Shift while resizing to keep the proportions or use Scale instead.



# QUESTIONS TO CONSIDER

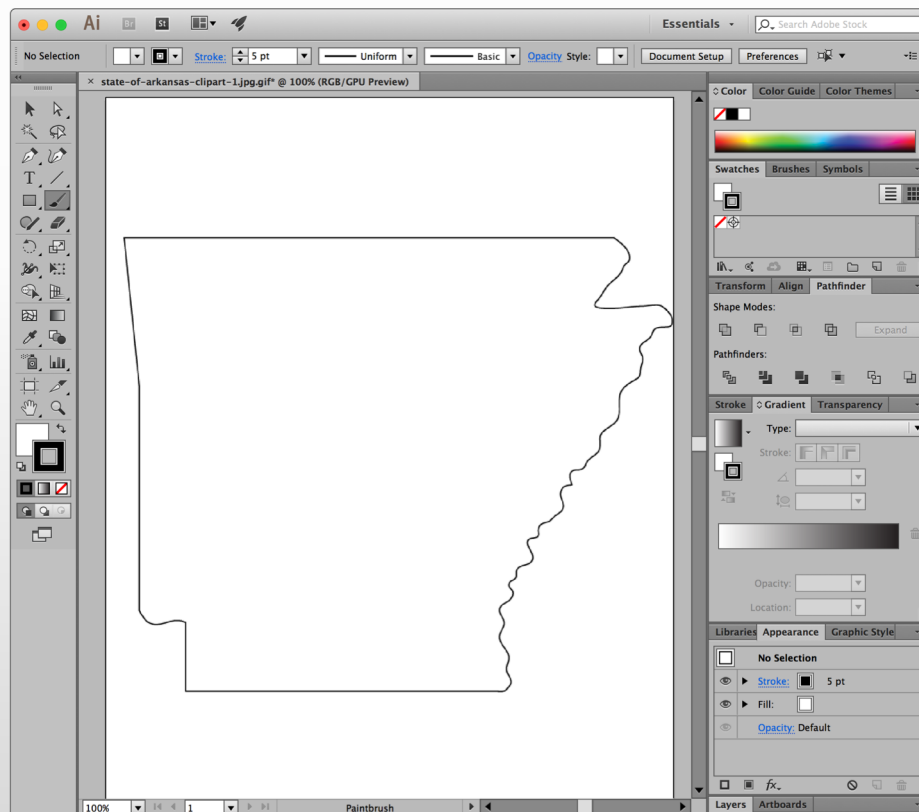
- Explain how scaling an image can change it along the x axis, y axis or both.
- Predict the changes in an object when rotating, flipping, reflecting and resizing.



# PANELS IN ILLUSTRATOR WORKSPACE

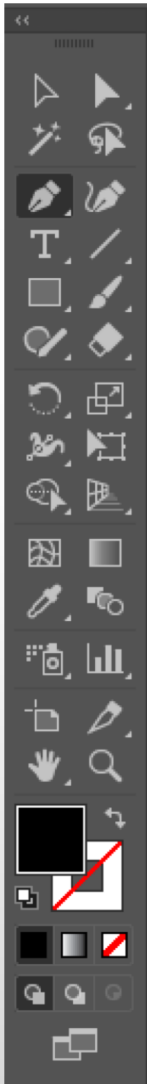
The workspace is same as Photoshop with a few new tools and panels.

- Options Bar
- Document Panel
- Tools Panel
- Color Panel
- Layers Panel



# DM TOOLS PANEL

## Tools panel overview



- A Selection tools**
- Selection (V)
  - Direct Selection (A)
  - Group Selection
  - Magic Wand (Y)
  - Lasso (Q)
  - Artboard (Shift+O)

- B Drawing tools**
- Pen (P)
  - Add Anchor Point (+)
  - Delete Anchor Point (-)
  - Convert Anchor Point (Shift+C)

- Line Segment (L)
- Arc
- Spiral
- Rectangular Grid
- Polar Grid
- Rectangle (M)
- Rounded Rectangle
- Ellipse (L)
- Polygon
- Star
- Flare
- Pencil (N)
- Smooth
- Path Eraser
- Perspective Grid (Shift+P)
- Perspective Selection (Shift+V)

■ Indicates default tool

\* Keyboard shortcuts appear in parenthesis

- G Type tools**
- T Type (T)
  - Area Type
  - Type On a Path
  - Vertical Type
  - Vertical Area Type
  - Vertical Type On a Path

- D Painting tools**
- Paintbrush (B)
  - Blob Brush (Shift+B)
  - Mesh (U)
  - Gradient (G)
  - Eyedropper (I)
  - Measure
  - Live Paint Bucket (K)
  - Live Paint Selection (Shift+L)

- E Reshaping tools**
- Rotate (R)
  - Reflect (O)
  - Scale (S)
  - Shear
  - Reshape
  - Width (Shift+W)
  - Warp (Shift-R)
  - Twirl
  - Pucker
  - Bloat
  - Scallop
  - Crystallize
  - Wrinkle
  - Free Transform (E)
  - Shape Builder (Shift+M)
  - Blend (W)

- F Symbol tools**
- Symbol Sprayer (Shift+S)
  - Symbol Shifter
  - Symbol Scruncher
  - Symbol Sizer
  - Symbol Spinner
  - Symbol Stainer
  - Symbol Screener
  - Symbol Styler

- G Graph tools**
- Stacked Column Graph (J)
  - Column Graph
  - Bar Graph
  - Stacked Bar Graph
  - Line Graph
  - Area Graph
  - Scatter Graph
  - Pie Graph
  - Radar Graph

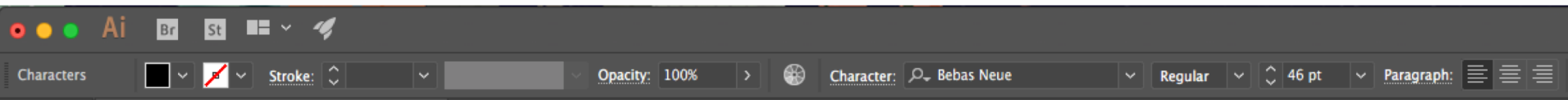
- H Slicing and cutting tools**
- Slice (Shift+K)
  - Slice Select
  - Eraser (Shift+E)
  - Scissors (C)
  - Knife

- I Moving and zooming tools**
- Hand (H)
  - Print Tiling
  - Zoom (Z)

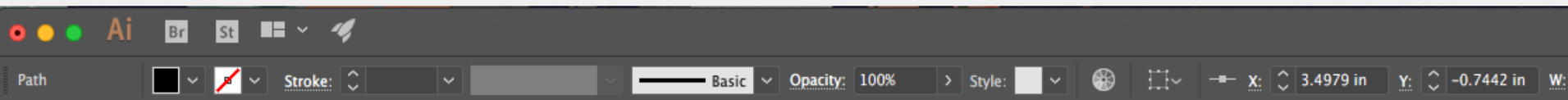
- Tools grouped and hidden similar to Photoshop.
- The majority of tools have a keyboard shortcut to activate a tool.

# DM OPTIONS BAR

- Displays options for the currently selected tool.



Options Bar with Type Tool selected

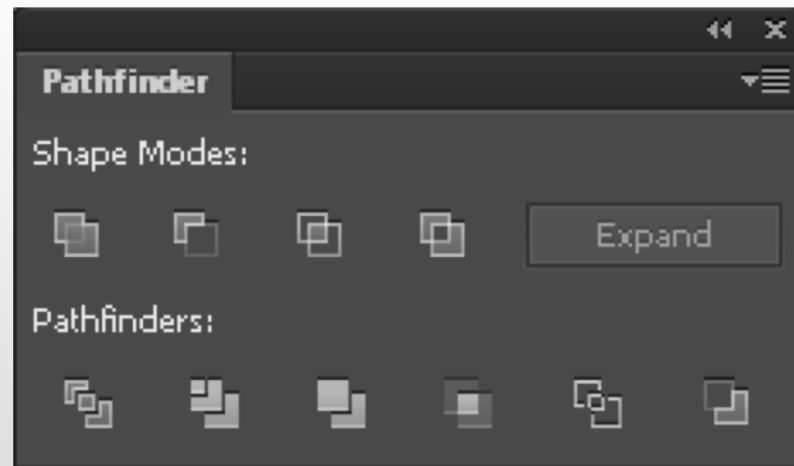


Options Bar with Pen Tool selected



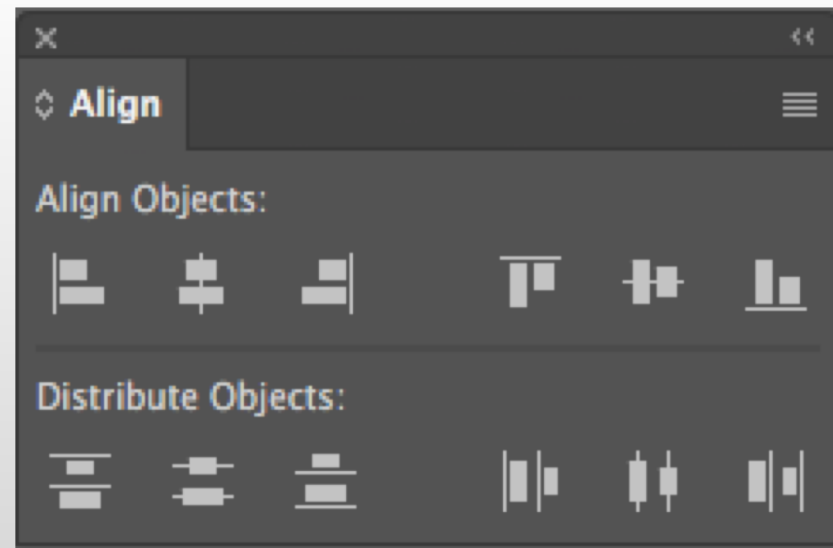
# PATHFINDER PANEL

- Use to combine objects into new shapes.
- Use the top row of buttons in the panel to make paths or compound paths.



# DM **ALIGN PANEL**

- Align or distribute selected objects along the axis you specify.
- Can use either the object edges or anchor points as the reference point, and you can align to a selection, an artboard, or a key object.







# QUESTIONS TO CONSIDER

- Explain how creating compound shapes using the pathfinder panel allows you to add, subtract, intersect and exclude.
- Discuss how rotations of  $45^\circ$  and  $90^\circ$  could be quicker when holding down the SHIFT key.
- Summarize the difference between positioning objects in relation to each other using the Align panel versus gridlines.



Raster (PNG)



Vector (SVG)

## VECTOR IMAGES

Use mathematic equations and geometric elements (points, lines, and shapes) to create art.

Can be scaled infinitely, without any loss of quality or fidelity.

Watch this video:

<https://helpx.adobe.com/illustrator/how-to/what-is-illustrator.html?set=illustrator-get-started->

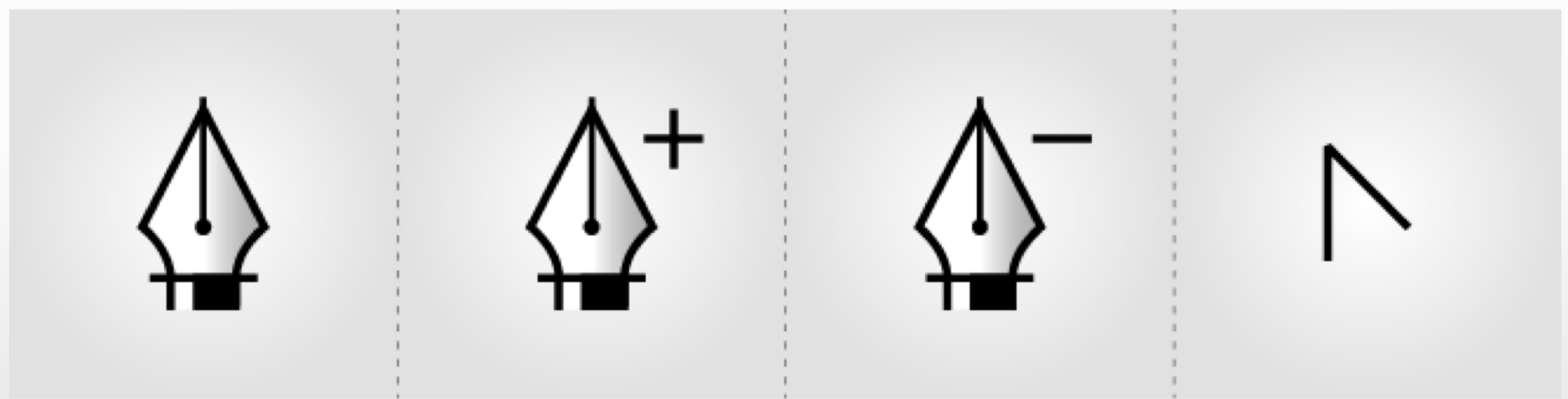


# DM SYMBOLS

- A symbol is an art object that you can reuse in a document.
- If you create a symbol from a leaf, you can then add instances of that over and over again without actually adding the image multiple times.
- Each symbol instance is linked to the symbol in the Symbols panel or to a symbols library.
- Using symbols can save you time and greatly reduce file size.

# DM PEN TOOL

- Use the pen tool to add and delete anchor points.



Pen Tool  
(P)

Add Anchor Point Tool  
(+)

Delete Anchor Point Tool  
(-)

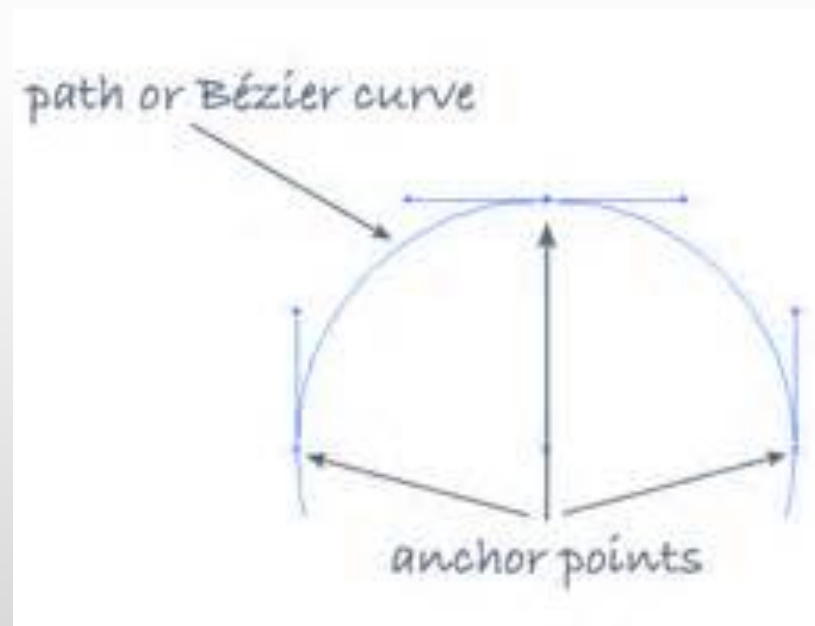
Convert Anchor Point Tool  
(Shift + C)

[vectortips.blogspot.com](http://vectortips.blogspot.com)



# ANCHOR POINT

- A point on a path that indicates a change of direction.
- You can add anchor points or delete anchor points to change the shape of a path.



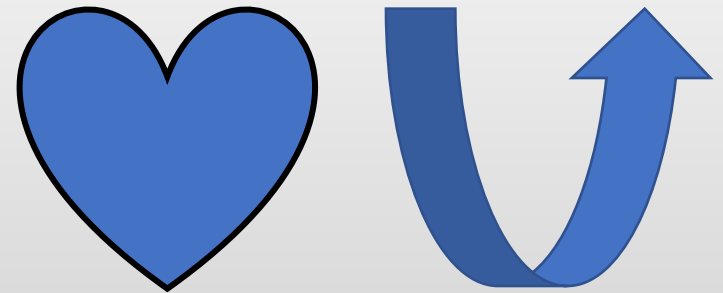
## Open Path

- Open paths do not end. They don't connect back to the original anchor point.



## Closed Path

- A closed path has the same beginning and ending point.
- It forms a complete shape that can be filled with color or text.

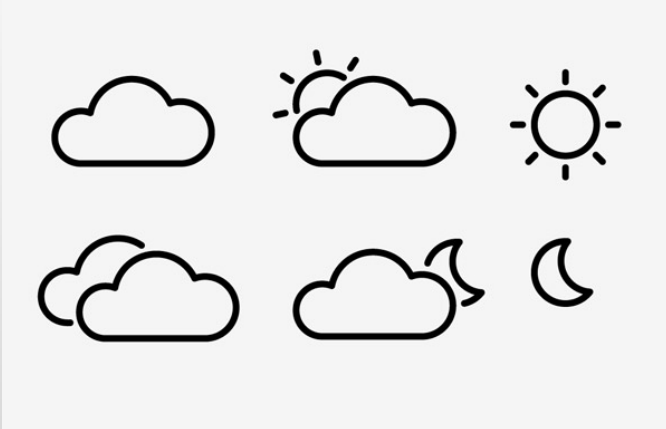




# FILL AND STROKE

## Stroke

- Stroke is the outline of a shape, text or image.
  - Weight
  - Color
  - Style



## Fill

- Fill is the inside color of a closed shape.



# DM PATTERNS

- A repeating pattern fills the image with a unique assortment of shapes and colors.





# DM IMAGE TRACE

- Use the Image Trace to trace and vectorize an image.
- Watch this video:
  - <https://youtu.be/NsHPoyyNKrY>



*Left: the original bitmap image.  
Right: after tracing it with the Live Trace  
command.*



# QUESTIONS TO CONSIDER

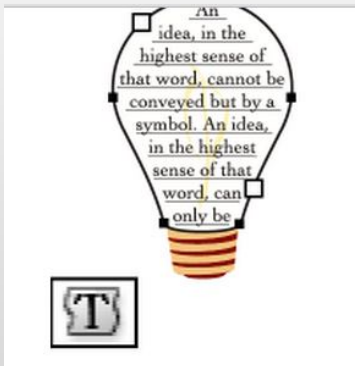
- Identify three or more raster graphic image file types that could be converted into vector artwork.
- Discuss how a strong understanding of the swatches panel is important when creating patterns.
- Differentiate between saving items to the symbol library and linking graphics.



# AREA VS. POINT TYPE

## Area Type

- Area type fills the text in a closed path.
- Use this when you want text to appear inside a shape or object.



## Point Type

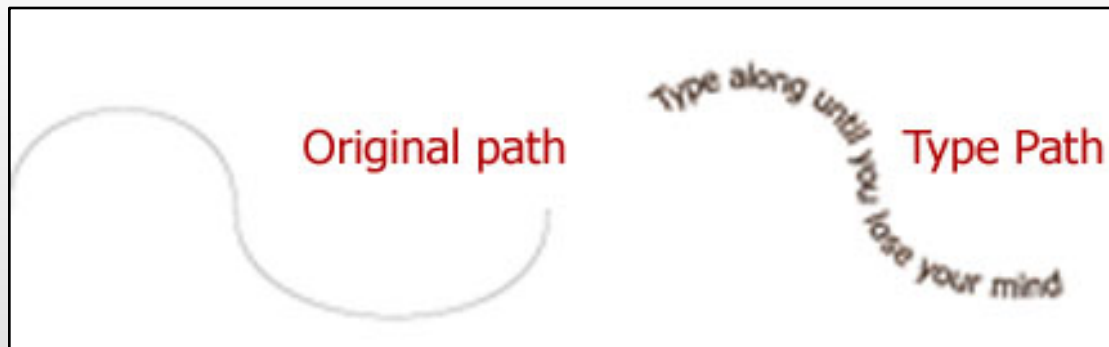
- Point type begins right where you click and does not automatically wrap to the next line.
- [Area vs. Point Type video](#)





# TYPE ON A PATH

- The text flows along an open or closed path.
  - Horizontally, the characters are parallel to the baseline.
  - Vertically, the characters are perpendicular to the baseline.





# QUESTIONS TO CONSIDER

- How would text along a path change if the baseline shift was a negative number?
- Predict the spacing change when the leading between baselines is increased? How would decreasing the leading change the type?
- Summarize how typing on a path can be used in both open and closed paths.