Adobe Photoshop

- Vector/Raster review
  - Raster
    - grid of pixels (dots) to produce image
    - scale up poorly – fuzzy or blocky
    - good reproduction of photographic imagery
  - Vector
    - mathematical equation to produce lines
    - scale infinitely with no quality loss
    - poor reproduction of photographic imagery
  - Photoshop normally works with raster images but now supports vector layers
    - most important for type

- Type
  - related palettes
    - character
      - controls character attributes and appearance
      - Window > Character
    - paragraph
      - controls paragraph attributes and appearance
      - Window > Paragraph
  - text layers
    - paragraph or line
      - line continues until a line break or paragraph return is added
      - paragraph fills a block, breaking lines between words to stay at appropriate length
        - text alignments
          - left, right, and center align are available from the options bar
          - justify alignments are available from the paragraph palette only
          - left align
            - left edge is flush, right edge is ragged
            - lines break to be as long as possible without running past right edge of paragraph
          - center align
            - left and right edges are ragged
            - symmetrical along a vertical axis
            - lines break to be as long as possible without running past either edge of paragraph
          - right align
            - right edge is flush, left edge is ragged
            - lines break to be as long as possible without running past left edge of paragraph
          - left justify
            - both edges are flush
            - word spacing adjusts
            - last line is aligned left
          - center justify
            - both edges are flush
            - word spacing adjusts
            - last line is aligned center
          - right justify
            - both edges are flush
            - word spacing adjusts
            - last line is aligned right
          - force justify
            - both edges are flush
            - word and letter spacing adjusts
            - last line is justified as well
        - hyphenate
          - when enabled, words will break at proper hyphenation points for a more consistent
- **editing**
  - basic editing is just like a word processor – cut, paste, etc
  - double click a type layer in the layers palette to begin editing it
  - or with the type tool, click in the text
  - enter key (next to numeric keypad) on keyboard will end editing a layer and commit changes
  - esc key on keyboard ends editing a layer without committing changes

- **changing font**
  - select desired text with the type tool
  - or select the entire layer by clicking once in the layers palette
  - faux bold and italic vs. real bold and italic
    - faux bold thickens characters by stretching them, doesn't always look natural
    - real bold is a variation on the regular weight typeface designed to look correct but heavier
    - faux italic just angles characters over and can look awkward
    - real italic is a variation on the regular typeface designed to slant and look natural
    - always use real bold/italic if possible
    - some fonts don't have weight or italic/oblique variations and you have to use faux bold/italic
    - or choose another font (choosing another font is recommended)
  - in the options bar
    - font family is leftmost dropdown
    - variations are in second dropdown (weights, italics, small caps, etc)
    - no faux bold/italic controls in options bar
  - in the character palette
    - font family is top left dropdown
    - variations are in top right dropdown
    - faux bold/etc buttons are in second row from bottom

- **changing size**
  - select desired text with the type tool
  - or select the entire layer by clicking once in the layers palette
  - in the options bar
    - third dropdown from left
    - choose a standard increment or type in your own
  - in the character palette
    - left-most dropdown in second row
    - choose a standard increment or type in your own

- **changing color**
  - select desired text with the type tool
  - or select the entire layer by clicking once in the layers palette
  - switch to the type tool (if using another tool)
    - right column, eighth row of tools palette
    - or “t” on keyboard
  - in the options bar
    - click on the color box towards the center of the options bar
    - select desired color from the color picker and click ok
  - in the character palette
    - click on the color box (right column, fifth row)
    - select desired color from the color picker and click ok

- **changing leading (space between lines)**
  - select desired text with the type tool
  - or select the entire layer by clicking once in the layers palette
  - change the leading control in the character palette
    - right column, second row
    - default setting is “(auto)” which is 120% of the type size
    - leading at less than 100% of type size causes overlap
    - choose a standard increment or type in your own

- **changing tracking (space between letters)**
● select desired text with the type tool
● or select the entire layer by clicking once in the layers palette
● change the tracking control in the character palette
  ○ right column, third row
  ○ default setting is “0”
  ○ positive number adds space, negative runs letters closer together
  ○ choose a standard increment or type in your own
  ○ vertical type
    • click and hold on the type tool in the tool palette, then select the Vertical Type Tool variant
    • click to create a new type layer
    • or click on the leftmost button in the options bar to toggle horizontal/vertical type
● rasterizing
  • converting vector-based type into pixels
  • required to use certain filter effects and painting tools
  • no longer a type layer afterwards, more like a drawing of type
  • Layer > Rasterize > Type

● Vector Shapes
  ○ how they work
    • in Photoshop, vector shapes are a solid-color layer with a vector mask drawn over it
    • vector mask shapes are defined by anchor points and control handles
      • the shape runs from anchor point to anchor point
      • two control handles extend from each anchor point and determine how the shape curves between anchor points
      • control handles can be set on the anchor point itself and have no directional effect then
      • smooth point
        ○ a point with two control handles extended in opposite directions
        ○ generates smooth curves
      • corner point
        ○ a point with control handles retracted or in close proximity to each other
        ○ generates sharp corners
  ○ vector mask can be edited
    • pen tool (tool palette, left column, third from bottom or “p” on keyboard)
      ○ pen
        • creates anchor points for a new shape
        • click to add a anchor point
        • click and drag when adding an anchor point to extend control handles while adding
        • when held over an existing active shape between existing points, will automatically switch to add anchor point tool
        • when held over an existing anchor point on an existing active shape, will automatically switch to delete anchor point tool
      ○ freeform pen
        • used to draw a vector shape
        • click and drag to create a new vector shape
        • Photoshop automatically determines anchor points and control handles based on the outline drawn
      ○ add anchor point
        • click on existing active shape between existing anchor points to add an anchor point
        • control handles will be added to maintain the shape
        • new anchor point can then be moved to modify the shape
      ○ delete anchor point
        • click on an existing anchor point on an active shape to delete that anchor point
        • the shape will then flow between the two anchor points on either side of the previous anchor point
        • shape will change depending on how the control handles for the two points are arranged
      ○ convert point
        • used to alter handles for an anchor point
- change a corner point to a smooth point or vice versa

- path selection tool
  - left column of tool palette, fourth row from bottom
  - or “a” on keyboard
  - used to make an existing shape outline active or to move it

- direct selection tool
  - left column of tool palette, fourth row from bottom
  - or “a” on keyboard
  - behind path selection tool
  - used to select one or more anchor points on an existing shape to alter the position of the selected anchor points

  - rectangle
    - right column of tool palette, third from bottom
    - or “u” on keyboard
    - creates a vector shape mask with a rectangular shape
    - hold shift while drawing rectangle to get a square

  - rounded rectangle
    - right column of tool palette, third from bottom
    - or “u” on keyboard
    - creates a vector shape mask with a rectangular shape with rounded corners
    - hold shift while drawing rectangle to get a square with rounded corners

  - ellipse
    - right column of tool palette, third from bottom
    - or “u” on keyboard
    - creates a vector shape mask with a elliptical shape
    - hold shift while drawing ellipse to get a circle

  - polygon
    - right column of tool palette, third from bottom
    - or “u” on keyboard
    - creates a vector shape mask with a polygonal shape
    - change the number of sides in the option bar
    - hold shift while drawing polygon to constrain rotation of drawn shape

  - line
    - right column of tool palette, third from bottom
    - or “u” on keyboard
    - draws a straight line
    - change the line weight in the options bar
    - hold shift while drawing line to constrain angle to 45° increments

  - custom shape
    - right column of tool palette, third from bottom
    - or “u” on keyboard
    - allows you to select from a number of shapes in the option bar
    - hold shift while drawing custom shape to scale proportionately