Basic layout of the software

- This is based on the latest version “classic” settings
- Layout customizable and varies from version to version
- Click “>>” or “<<” to expand and collapse toolbars

Tips to getting started:

- Hold down cursors to view more options (e.g. hold down the square to get circles, triangles, etc)
- Basic functions work similar to power point (resize, group, select line and fill colors, copy/paste)
- Group objects that you want to move together – double-click within the group to edit inside of it – double click outside of the group to exit it and edit other objects

Keyboard shortcuts [a select few of MANY]:

- “v” to change to ‘normal’ selection tool
- [ and ] keys increase and decrease the point of your cursor
- Hold shift + click/resize to lock aspect ratio
- Hold shift + drag to lock into horizontal/perpendicular line
- “x” to toggle between editing the path and editing the fill of your selection
- “t” to use text tool
- Ctrl + ; to hide/show guides
- ”p” to select pen
• “+” to add a node
• “I” to select eye dropper tool
• “a” to select direct selection tool
• “g” to switch to gradient editing
• “b” to use the brush tool
• “shift_b” to use blob brush tool
• “r” to rotate
• “o” to flip

If things get hairy:
• Hit “v” to return to main select cursor
• Hit “Escape” to exit any groupings you might be in
• Double click on a blank area of the artboard

Today’s workshop target illustration:

Download links for today’s session:
https://inprintscience.wustl.edu/resources/

After today’s workshop:
  1. Visit InPrint’s website to explore our services at https://inprintscience.wustl.edu/
Concepts in visual communication and graphic design

Adapted from: https://blog.adobespark.com/2016/07/27/8-basic-design-principles-to-help-you-create-better-graphics/

Before you start
1. **Concept simplification**: Distill your message to its simplest form
   - Try making a one-sentence summary of what you want someone to take away from your graphic
2. **Tech specs**: Look up your application-specific sizing and color profile...
   these can be hard to change after you start

Graphic design concepts
1. **Alignment**
   - Sharp, ordered appearance of objects and text help to focus attention; minimize variation to keep from being “cluttered”

2. **Hierarchy**
   a. Use color/font/spatial organization to create structure:

   **KEY POINT(S)**
   Important secondary information
   *Tertiary content (e.g. for reference by a presenter)*
   b. Think about how your reader’s eyes will move across the page
   (i.e. Left-to-right, Top-to-bottom, Z-shape)

3. **Contrast**
   Contrast objects or ideas by changing texture, color, font style, or shapes [choose one of these and try to keep the rest the same to create contrast rather than “busy-ness”]

4. **Repetition**
   Use predictable objects and formatting in multiple parts of your design
   For example:
   - Each time a cell is used, show the same object
   - Every heading has the same color/font/box shape around it
5. **Balance**
   a. Use of page/artboard space
   
   ![Page/artboard space diagram]

   b. Line thickness and font sizes in proportion to objects

6. **Color**
   a. Use to:
      
      i. Create depth/3-D effect & contrast
      
      ii. Provide additional layer of information, such as:
          - Function: UP/DOWN (GREEN/BLUE)
          - Judgment: BAD/GOOD (DARK/LIGHT)

   b. Try to make your colors colorblind-friendly. Some resources for this are:
      - [http://bconnelly.net/2013/10/creating-colorblind-friendly-figures/](http://bconnelly.net/2013/10/creating-colorblind-friendly-figures/)
      - [http://colororacle.org/](http://colororacle.org/)

7. **Negative space**
   a. Distribute your objects to imply shapes or facilitate reading order without having to add additional objects

   ![Circular diagram]

   b. Give objects and text in your design ‘breathing room’

**Resources:**

Check out Edward Tufte’s work on visualizing information at [https://www.edwardtufte.com/tufte/](https://www.edwardtufte.com/tufte/)