> graphic icon

> objective(s):

Students will create a simple, one-color graphic icon from a photograph of an object.

> curricular focus:

This lesson emphasizes creating a minimalistic still life vector graphic of a real-life object.

> specifications:

save as: Graphic Icon_LastnameF
dimensions: 7" x 7"
resolution: 300 ppi
mode: CMYK
contents: Transparent

> instruction:

- review vector drawing tools
  - watch *How to Use the Pen Tool* at mhscomputergraphics.com
  - demonstration on Curvature Pen tool
  - demonstration on Shape tool
  - demonstration on how to duplicate and flip vectors to create symmetrical artwork
- review accurately locating objects
  - using Transform coordinates
    - select object then go to Edit: Free Transform (or press Ctrl + T)
    - go to the Options Bar at the top
      - select the appropriate Reference Point Location (usually center)
      - type in necessary X and/or Y coordinates
      - remember- you can type in the units to convert
  - using Grid
    - go to View: Show: Grid or press Ctrl + ' (apostrophe)
  - using Align
    - select objects then Select Move tool (or press V)
    - go to the Options bar at the top and select the three dots (• • •) then select align to Selection or Canvas
    - select appropriate alignment style
- introduction to graphic icons
  - extreme simplification (see *Illustration vs. Icon* on page 4)
  - positive versus negative space (see *Positive vs. Negative Space* on page 5)
    - use of exterior outline only (with empty interior) or
    - use of interior shape only (with empty outlines)
    - negative space used a faux "second color"
  - discuss various design styles (see *Graphic Icon Design Styles* on page 6)
- introduction to CMYK
  - used for printing
  - capable of only 1 million colors (RGB almost 17 million)
    - Out of Gamut- colors that CMYK cannot produce
      - yellow triangle with an interior exclamation point next to Current Color in Color Picker
      - select box underneath to move color within acceptable CMYK ranges
- introduction to Rich Black versus Flat Black
  - review *Color Treatment* on page 7
    - rich black coordinates: 75-68-67-90
    - flat black coordinates: 0-0-0-100

see Procedure on page 2

> graphic icon

> procedure:

STEP 1: Select subject
- choose something you enjoy (favorite activity, hobby, sport, class, career goal, etc.)

STEP 2: Download image

IMPORTANT: this *MUST* be a photograph
- you may not under any circumstances work from an existing graphic/artwork/clipart
- go to google.com and select Images from the top menu
  - type in your query
  - go to Filter (far right) then select Image Size and select Large

STEP 3: Review style examples
- check out *Graphic Icon Design Styles* on page 5
- check out Graphic Icon Examples folder

STEP 4: Create thumbnail sketches
- minimum three different design styles
  - simplify, simplify, SIMPLIFY! (see *Illustration vs. Icon* on page 4)
    - drastically reduce the amount of detail in the object- less is more!
      - reduce it down until, if you took anything else out, you would no longer recognize it
    - try reducing parts down geometrically (rectangles, ellipses, triangles, etc.)
  - explore both design styles (see *Positive vs. Negative Space* on page 5)
    - exterior outlines (black outlines with no fill)
    - interior shapes (filled shapes with empty outlines)
  - explore different angles
    - frontal, profile, perspective, rotated, etc.
  - remember pencil only (no pen, marker, etc.)
- approve with instructor

STEP 5: Create art file
- set file specifications (see above)
- rename Layer 0 as "Background" and fill the layer white

STEP 6: Begin artwork
- create a new layer and name it "Icon"
- place source image (if tracing)
  - place, then properly scale and center source image (photo download or picture of sketch)
  - if tracing a photo download make sure you adhere to your simplified sketch idea
    - *the photo is not a guide and should not be traced exactly!*
- create vectors based off approved sketch
  - all work must be created using vectors (paths and/or shapes)
    - save all vectors
      - go to Paths palette, click on pull down menu in top right corner, select Save Path
      - if a path is named *Work Path*, it is NOT saved
    - make sure you set the Pen and Shape tool modes to Paths (in the Control Panel at the top)
  - create, scale and properly locate all paths first before you add fill and stroke
    - vectors should be large in the frame without crowding document edges and centered
  - carefully read *Tips for Success* on page 3
  - have vectors approved BEFORE applying any strokes or fills
- apply strokes and fills
  - make sure you are using Rich black (75-68-67-90)
  - all brush work should be set to 100% hardness

STEP 7: Review artwork
- carefully read *Requirements* on page 3
- approve final artwork with instructor

see Requirements on page 3

> graphic icon

> tips for success:

1. **properly scale and center your source image *first*!**
   if your artwork has to be centered, and your paths have to line up with your artwork, then. . .
2. **use Shape tool whenever possible**
   it is much faster/easier/more accurate to create and edit a circle than it is to make your own!
3. **use as few anchor points as possible when using the Pen tool**
   every time you create an anchor point you create a new opportunity to be wrong
4. **duplicate and flip paths to create symmetry (if needed)**
   it's much easier to only create half of a symmetrical design right?
5. **make sure outlines are thick enough to be easily visible in smaller sizes**
   simply zoom out (hit Ctrl + - seven times) to see if strokes degrade
   make sure Brushes are set to 100% Hardness

> requirements:

- file
  - file specifications are adhered to (see above)
  - all layers are named
  - all hidden/unused layers are deleted (remember to delete your source image layer)
- vectors
  - all artwork must be vector created only
  - all paths are saved (they do not need to be named)
    go to Paths palette, click on pull-down menu in top right corner, select Save Path
    if the path is named *Work Path* it is not saved
  - paths line up with final raster (painted) artwork
- outlines
  - all contours have sharp, crisp edges
    Brushes were set to 100% Hardness
  - lines use strokes thick enough to be easily visible in smaller sizes
    (hit Ctrl + 0 to fit to window, then hit Ctrl + - seven times to check)
- color
  - only color allowed is Rich Black (75-68-67-90)
  - background set to white
- composition
  - artwork is properly scaled
    large in the frame without crowding document edges
  - artwork is perfectly centered in frame
    (x= 3.5 in | y=3.5 in or x= 1050 px | y= 1050 px)

> five quick questions:

1. **is your graphic large in the frame?**
   it should be large but not crowd the document edges
2. **is your graphic centered?**
   using Transform coordinates
3. **are your vectors aligned with artwork?**
   every path should align with every line perfectly
4. **did you use rich black?**
   75-68-67-90
5. **did you take care of all your layers?**
   all layers are named, all unused layers are deleted

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> illustration vs. icon

Icons are extremely simple. Tracing an actual image provides far too many details (and the more details you have, the thinner the lines have to be). Instead, sketch from photographic resources, greatly simplifying along the way.

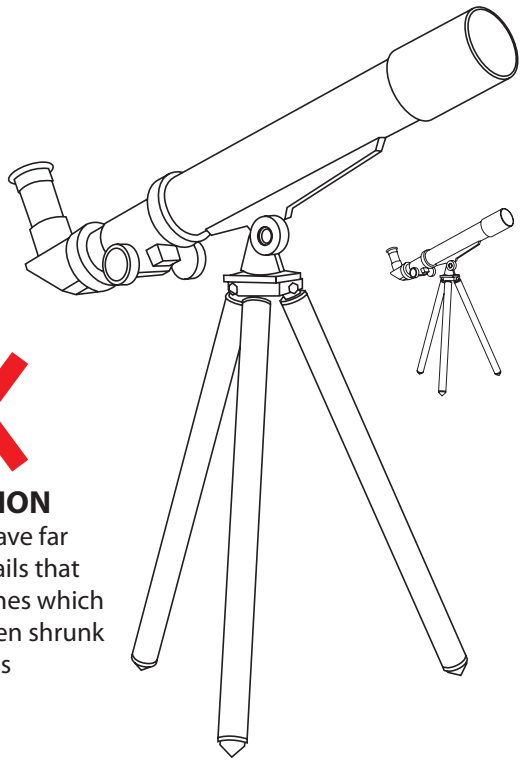
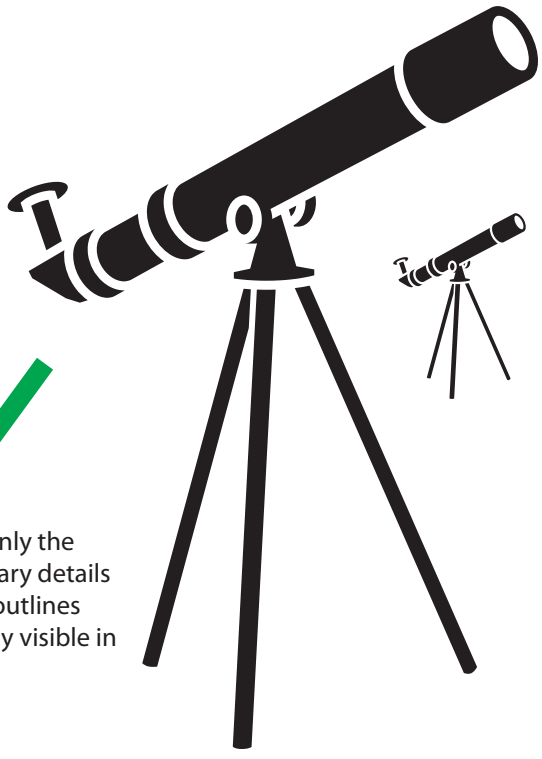


ILLUSTRATION
Illustrations have far too many details that require thin lines which disappear when shrunk to smaller sizes



ICON
Icons have only the most necessary details and thicker outlines that are easily visible in smaller sizes

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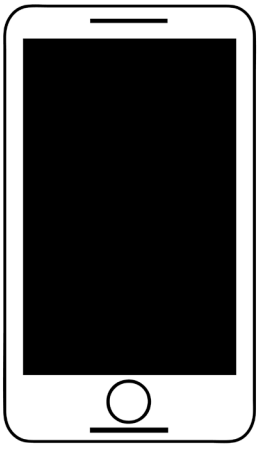
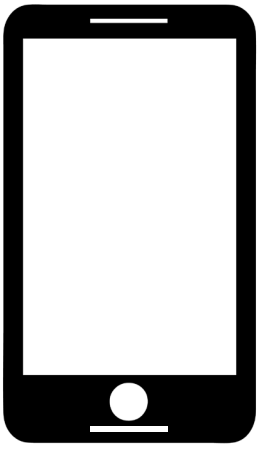
> positive vs. negative space

Icons can can be exterior (outlines are black and solid areas are negative space) or interior (outlines are negative space and solid areas are black). They can even utilize both. Check out the examples below.





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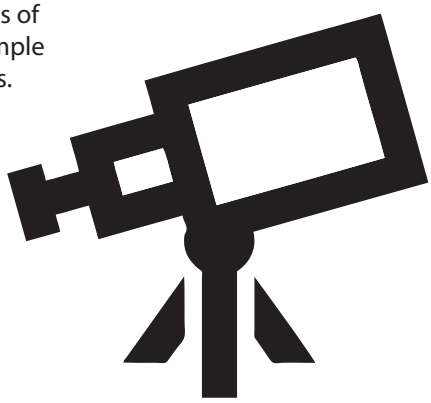
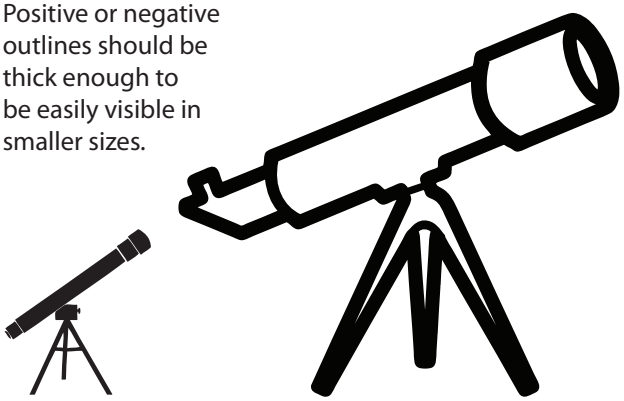
> graphic icon design styles

Check out the wide array of approaches to creating a graphic icon for the same subject.

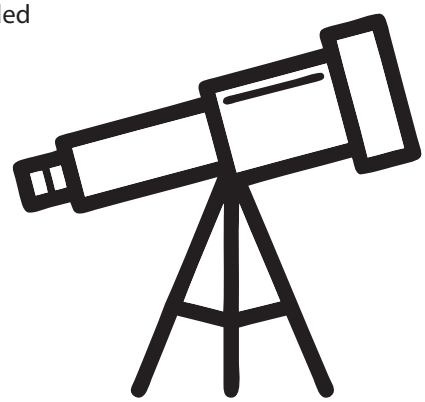
GEOMETRIC
Try reducing parts of your object to simple geometric shapes.



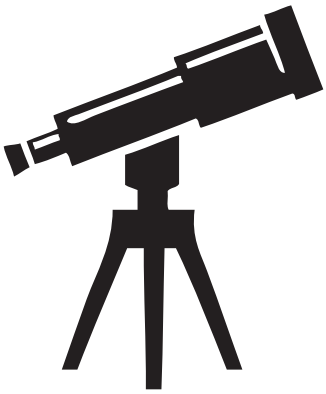
THICK OUTLINES
Positive or negative outlines should be thick enough to be easily visible in smaller sizes.



ROUNDED CORNERS
Corners are rounded rather than sharp.



HIGHLIGHTS
Highlights can add a sense of three-dimensionality to what is otherwise a very flat design.



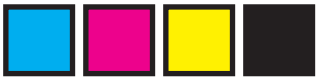
PARTIAL OUTLINES
The outlines do not traverse all the way through the object, but merely hint at their existence.

ROTATED ANGLE
Try finding images of your object with a more interesting angle.

> color treatment

CMYK

- CMYK stands for Cyan, Magenta, Yellow and Black



- used for printed designs; all printers use these for inks to create all available colors
- colors are referred to as a sequence of numbers representing each ink in order, separated by a hyphen

white (0-0-0-0)

red (0-99-100-0)

blue (100-60-0-0)

green (100-0-100-0)

light red (0-49-50-0)

light blue (65-20-0-0)

light green (40-0-40-0)

rich black versus flat black

- the K in CMYK stands for "Key" which is NOT black but just very dark gray
- to produce a "pure black" (aka rich black) you blend all four inks in the following amounts:
  C: 75
  M: 68
  Y: 67
  K: 90

rich black 75-68-67-90 flat black 0-0-0-100