

Alternate Format Production Administrative Processes

Rev. October 2015

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INTRODUCTION

The alternate format process is complex, and student-driven. Understanding the elements contained in this document will help to speed the production process, which is a benefit to the student, and a benefit to the department.

The AFPAC is responsible for the production of alternate format (hard copy and electronic resources). This manual is divided into two parts:

- Request and fulfillment
- Production of alternate format

The Alternate Format Access Coordinator AFAC processes all incoming requests, provides quality control of finished products, and is the primary person communicating with the student regarding their needs. The AFAC also transmits completed alternate format to the requesting student. The AFAC supervises the production staff and process as the alternate format is created.

AFPAC

The Alternate Format Production and Access Center is the lab space we use to create and edit alternate format for student use. The AFPAC staff includes an Alternate Format Access Coordinator (AFAC) and as many as ten student staff working as Student Assistants II – IV. The AFAC handles the administrative process – intake, assignment of projects, quality control, sending of completed files, and all record-keeping the work process and output. Student Assistants handle the vast majority of production processes, including scanning, conversion through use of Optical Character Recognition (OCR), creation of tactile images, and producing the required output.

This is a student-driven process

Students approved for alternate format of their print materials are responsible for requesting their alternate format throughout their college career with the University of Colorado (CU). Items that are converted and provided for students upon request are:

- Required and optional textbook material assigned by the instructor
- Additional readings that may be handed out in class or uploaded to Desire2Learn (D2L) for student use
- PowerPoint slide presentations used in class
- Reference or supplemental material required for the writing of a paper or completing a project
- Exams and quizzes

First-In, First-Out

The AFPAC provides materials generally on a first-in, first-out basis. Students who request materials first will have their materials worked on before those who request later. Variations to this timeline can occur under special circumstances as determined by the AFAC or department leadership.

Appendices To This Manual

Appendixes include the following:

- Sample Alternate Format Consultation Form

- Sample alternate format request form
- Administrative Process Flow Chart
- Production Process Flow Chart

ALTERNATE FORMAT ADMINISTRATIVE PROCESSES

Background

Students who are approved for an alternate format accommodation meet with the AFAC prior to receiving alternate format. An Alternate Format Student Consult is conducted. The student is asked a series of questions (see attachment) to determine their needs and what type of technology and alternate format will best suit them. Two types of alternate format are generally provided to students – electronic or hard copy:

- Text-based PDF documents
- Microsoft Word documents – plain text
- Microsoft Word documents enhanced with MathML code
- XHTML files enhanced with MathType
- Braille
- Tactile graphics

The path a request will take

1. Student makes a request for an alternate format
2. AFAC fills out a request form and asks for copies of receipts/proof of purchase
3. AFAC researches the book to gather all information – author, title, edition, copyright year, publisher
4. Files are ordered for the book, or the student is informed that files will not be available and they must provide their copy for scanning)
5. Request form information is entered into Alternate Format Tracker spreadsheet.
6. Request form is filed in appropriate folder for processing
7. Files are received or book is scanned to create files
8. Production of the files into the appropriate format is completed by AFPAC staff
9. AFAC completes quality check of files
10. AFAC sends files or completed hard copies of alternate format to the requesting student
11. Spreadsheet is updated
12. Request form is filed in student's AFPAC folder

How students request their alternate format

Students can request their alternate format of textbook material in multiple ways.

- During initial intake. When meeting with the AFAC after approval of the accommodation of alternate format, the student can provide a list of texts required for class reading. This list can be obtained from the student's MyCU records, from an in-person meeting with their instructor, from an email from their instructor, or from a search of the CU Bookstore website.
- Via email after registering for classes. Student can email a screen shot, or cut and paste information, from their MyCU account after registering for classes. Student can also just type a list of the books they need in an email.
- Via phone or in person visit to the AFPAC.

Students requesting alternate format of textbooks need to provide the following information:

- Title of book
- Author's last name
- ISBN number from the copyright page or bar code area on the back of the book

Students who have requested alternate format of textbooks cannot receive files until they have provided proof of purchase/ownership of the textbooks they are requesting. Copyright law prohibits the Disability Services office from providing alternate format unless the student has purchased a hard copy of the text. This can be a new or used book, purchased from any source they choose. The AFPAC does not need to wait until a student has purchased their books before beginning the process of acquiring/converting textbooks. This can be done at any time after the request has been made by the student. Files will be held in lieu of proof of purchase/ownership.

Production timelines for textbooks

The time required for production of alternate format materials varies. Students are informed that production can take up to 6 weeks, and in some cases longer, depending on type of output and quality of original document. In some cases, part of the production time is actually waiting time while we await the receipt of files from the publisher or the arrival of a hard copy of the book for scanning. AFPAC strives to provide all alternate format of textbooks within 2 weeks of the request, and within four days for individual pieces (handouts, D2L uploads, PowerPoint slides, etc.)

Alternate Format Request Form

Each request for a textbook results in a form that follows the book through its production cycle. (The form is located in the appendix of this manual). The form has space for:

- Name of student
- Date of request
- ISBN, Title, Author, Edition, Copyright Date, and publisher information
- Where files requested from
- What format file received
- Who worked on the production of the alternate format, and the dates/time of completion
- What method was used to deliver the format to the student
- Notes section

Forms are filled out as books are requested, and move through the production process. When the final product is produced and sent to the student, the form is filed in the student's folder in the top drawer of the filing cabinet.

Researching requested books

Using the information provided by the student regarding their book, the AFAC will research the book to gather the following information:

- Author
- Title
- Edition
- Copyright Date

- ISBN number
- Publisher

The best resource for this information is going to be Amazon.com, which currently has the best book database in the world. If not enough information is received from the student to locate specific details on the book, the CU Campus bookstore website can also be consulted. The bookstore website is www.cubookstore.com.

The complete information can then be added to the Alternate Format Request Form.

Acquiring electronic text of textbooks for conversion to required format

After a student has requested alternate format for a textbook for a course, the following steps occur.

1. Requested book is searched on Amazon.com for complete information – title, author, ISBN number, edition, year of publication, and publisher name.
2. Book information is entered on the Alternate Format Request Form (see appendix). Form includes student name, date of request, type of format requested/needed, and complete book information.
3. Book information is also entered onto the current semester’s Alt Format Tracker for the current semester.
4. If a book is older than 2006, it is assumed that there will not be alternate format available from the publisher. See below about acquiring a hard copy of the text
5. Book information is compared to ATLAB share to determine if files for the book are already available. \\UCBFiles3\ATLab\scanned\AAA All Books
 - a. If files for the book are already in the AFPAC repository, they are queued for delivery to the student upon provision of proof of ownership. See “Sending Files to a Student” section below for more information.
 - b. If files for the book are not already in the AFPAC repository, move to step 6.
6. Publisher or database is contacted to provide alternate format. See Appendix B for URL, Username, and Password information for the below-listed sites.
 - a. *AccessText Network* (aggregate request site) if it is one of the following:
 1. Cengage Learning
 2. Charles C. Thomas, Publisher
 3. Dunedin Academic Press
 4. Elsevier
 5. F.A. Davis Company
 6. John Wiley and Sons
 7. Jones & Bartlett Learning
 8. Kogan Page
 9. Labrynth Learning
 10. Lynne Rienner Publishers
 11. Macmillan Higher Ed (Higher education books only)
 12. McGraw-Hill Education
 13. Pearson Education (plus imprints)
 14. Ramsey Education Solutions, The Lampo Group, Inc.

15. RosettaBooks
16. Sage Publications, Inc.
17. Sinauer Associates
18. Springer Publishing
19. W.W. Norton

To request a book from ATN, locate it using the ISBN finder, then fill out the form to complete the request. Files will be delivered either through the ATN portal (the ds-atlab email account will receive notifications that the files are ready for download) or through a link sent in email. Once files have been downloaded/received, the request can be marked “completed” on the ATN portal. It can take anywhere from a few hours to a few weeks to receive files from the publisher through ATN.

- b. *Bookshare (DAISY or Braille format)* for the following. Bookshare generally includes only text-based books, rather than those with graphic content (such as STEM materials):
 1. Penguin (and all imprints)
 2. Random House (and all imprints)
 3. Many classics, older works, and common works (Shakespeare, the Greeks, the Romans, etc.)

To order a title from Bookshare, first locate it through their search engine. Do not use an ISBN number to search, but instead search by title of book and author. Once the book is located and you have clicked the download button, you must then assign the book to a student. Choose any student on the list; all of them are valid for download. Then click “download” at the bottom of the page. On the next page, you will need to click “download” again. On the next page, once “available” appears, you can then click to actually download the book.

Bookshare downloads require that you have an approved account, and one can be provided by the AFAC. There is no general-use account for Bookshare.

- c. *Taylor and Francis (including imprint Routledge)*
 1. Fill out form stored in \\ucbfiles3\ATLAB\scanned\Publisher Contact Information
 2. email the form according to the directions on the form – this is critical

- d. *Oxford University Press*
 1. Fill out form stored in \\ucbfiles3\ATLAB\scanned\Publisher Contact Information
 2. email the form according to the directions on the form – this is critical

- e. *Bibliovault* provides alternate format at a cost of \$8 per request. This cost is paid via the AFPAC budget. The AFAC approves all payments and submits to ODECE’s Finance Specialist. A list of the publishers Bibliovault supports can be found here:

<http://bibliovault.com/BV.pressses.epl>

Generally, Bibliovault provides texts from University and professional trade presses. To request alternate format from Bibliovault:

1. Locate the book by typing the ISBN in the search box.

2. Click on the search return to open the information page about that book.
3. Click on “Request Accessible File” link.
4. Fill out the form according to the directions, and submit.

The files will arrive by email within 14 days.

f. *Other publishers not so far listed*

1. A list of publishers and their request information can be found on the AFPAC server, at \\UCBFiles3\ATLAB\Scanned\Publisher Contact Information\publisher contacts.doc. This file is constantly updated as new information becomes available or contact information changes.
2. Publisher Lookup can be used to locate information on contacting a publisher. It is located at www.publisherlookup.org.
3. Google the publisher name, and look for anything about alternate format/disability requests and follow their instructions. This is usually under the “rights and permissions” part of their website. If they don’t mention it at all, use their “contact us” form or email to contact them directly. See Appendix C for an example email for the appropriate wording.

g. *Special instructions for course readers.*

Course readers are sometimes the required reading for classes. These are created by an instructor, department, or division, and include an assortment of poorly-scanned readings taken from books, news and magazine articles, and library databases of journals, all bound together with a spiral. They may also include a syllabus or other instructional material. They are not available as electronic copies from publishers. These must be scanned and repaired by hand. There are two ways to get copies of course readers:

1. Contact the instructor of the course and ask for a hard copy of the course reader for scanning. The spiral can be easily removed for scanning, and replaced just as easily when the scanning is completed.
2. As the student to bring in their copy of the course reader, which can be unbound for scanning, then rebound and returned to the student.

h. *Publishers who will never provide alternate format:*

1. Cambridge University Press
2. Waveland Press
3. Paradigm
4. Guilford
5. Hackett
6. Harvard University Press
7. Rutgers University Press
8. Penguin (and imprints)
9. Random House (and imprints)
10. Perseus

There are others, and this list is always changing.

7. When the publisher does not respond, or responds that the book is not available, the last resort is to ask the student for their copy of the text for scanning. This does place the burden back on the student for providing the hard copy of the text, but most books can be re-bound with a spiral bind when the scanning and conversion are complete.
 - a. Book is taken to the print shop to be de-bound (binding is cut off)
 - b. Book is scanned in AFPAC.
 - c. If book is a paperback, it is taken back to the print shop to be re-bound with a spiral.
 - d. If book is a hardback, it is taken back to the print shop to be three-hole punched, or spiral bound with a laminated card-stock cover.
 - e. Book is returned to student.

Alternate Format Tracking spreadsheet

After completing the research and requesting files from the publisher, all Alternate Format Request Forms are recorded on the electronic Alternate Format Request Tracker for the current semester. The tracker is located in the file share:

\\UCBFiles3\ATLAB\databases & alternate format IS

The Alternate Format Tracking spreadsheet includes sections for request dates, completed dates, level of difficulty, type of file sent to student, etc. The sections of the spreadsheet are self-explanatory.

Processing folders/locations for in-progress requests

Once the Alternate Format Request Form is filled in, files ordered, and the form entered in the spreadsheet, the form goes to one of four places.

In AFAC's desk file drawer:

- Red folder – waiting for publisher response
- Yellow folder – publisher will not be able to provide files, so AFAC is waiting for student's response
- Green folder – files are available and ready for pickup, but student has not provided proof of purchase yet

In the main file cabinet, second drawer:

- Bottom bin – for forms that files have been received or some type of production needs to be completed

After Alternate Format Form has been processed

After the Alternate Format Form has been processed, and files ordered, AFAC sends the student an email listing where the books are in the process and letting them know if there are books they need to bring in for scanning.

When files come in from publisher, or we scan files for a student

All book files received/scanned go into our AFPAC server space located at:

\\UCBFiles3\atlab\scanned\AAA All Books

Folder Naming Convention

Books are listed by their title, edition, author, and ISBN number, in the following format:

World According to Garp 5th - Irving - 9780345366764

When files for a book are downloaded, a folder must be created for the files to go into. This naming convention applies to all books. In the case of Bookshare downloads, where an ISBN is not available, then the folder created should read:

Dialogues of Plato – Plato – NO ISBN

Subfolders

Inside the book's folder can exist several subfolders. The folders indicate the type of file and sometimes the source of the file. The following folders may exist:

PUB files. These are files downloaded from a publisher. They may or may not have been altered, and are almost always PDF files.

PDF Scans. These are books that were scanned in AFPAC. The files may or may not have been altered, and will always be PDF files

WORD. These are word files that were created through conversion to alternate format for a particular student.

TIF. An older file type of scanned document, usually created in-house.

Word with Math, Word Lean, or Word ML. These files have been produced with MathType or Scientific Notebook and are accessible for blind students using a screen reader to do mathematical equations.

There may be other file types, but these are the most common.

Additionally, there may be zipped files within the book's base folder. These are the completed files ready to send to the student. The name of the file will always be the name of the book and edition, plus the files' type (PDF, Word, etc.). For example: World According to Garp PDF files.zip.

File Names

File names for books' chapters and sections are named by the author's last name and the chapter number or book's section number. For example:

Martin Chapter 03.pdf

Bowles Front Matter.docx

Sanderson Appendix D.pdf

On rare occasions, a book has no author, or is broken into parts, sections, etc., instead of chapters. In the case of a missing author name, the title of the book is used. "Section" and "part" can be used to identify the part of the book in that particular file. For example:

Quick And The Dead Chapter 01.pdf

Thompson Part 1.docx

Assigning text for production

Once files are received from the publisher or database, or the book received for scanning, the Alternate Format Request form is noted with the file type and date received, and instructions on what is to be done to convert those files for use. Example instructions might read:

- Break into chapters
- Rename chapters
- Crop
- Turn into Word files
- Scan and break into chapters
- See Syllabus for order of production
- Turn into Word with MathType

Once the Alternate Format Request Form is marked with the notes for conversion, it is placed in the bin for “do next” for student production staff. The bin is located in the second drawer of the main lab file cabinet.

Purpose of hard-copy Alternate Format Request Form

The purpose of the hard copy of the Alternate Format Request Form is to keep track of the process the book makes through our acquisition and conversion/production cycle. The form follows the book’s track from request to completion of production and final dispensation of the converted materials.

During the administration process, the Alternate Format Request Form resides in one of three statuses. They are kept in folders in the file drawer of the ACAP’s desk.

1. Waiting for publisher. Forms in this folder are waiting for the publisher or other source to provide the files. (Red folder)
2. Student Response Required. Forms in this folder are waiting for more information from a student, or waiting for the student to provide a hard copy of the book for us to scan. (Yellow folder)
3. Ready for Pickup. Forms in this folder are completed conversions or available files, but the student has yet to provide receipts/proof of purchase.

During the Production Process, the Alternate Format Request Form resides in one of two statuses. They are kept in two bins in the second drawer of the main AFPAC file cabinet.

1. Work On Next. These are requests that should be picked up as previous requests are completed. Since we work on a First-In-First-Out process, work is chosen from the bottom of the bin first.
2. In Progress. These are requests that are currently being worked on. Multiple student staff may be working on the same request at the same time. The back of the form is used to track progress.

In addition to having the forms as a reference, it is also used to keep notes or information about the book and its production. The blank back side of the form often is covered with production notes, information, and times of production information, which will be used later to complete the front side of the Alternate Format Request Form.

When the production process is complete, the form returns to the possession of the AFAC for final completion of the process.

Quality Control

After files have been converted or edited as requested, the AFAC does a random check of several files to be sure that the requested edits were made. If a file fails QC, then it is returned to the student staff who completed the work, with instructions for revision.

Preparing Files To Be Sent to the Student

Generally, the converted/edited files are compressed as a group into one .zip file, and named by the title of the book and type of files. For example:

Valley of Death PDF files.zip

Tale of Two Cities Word files.zip

Some students prefer to access files through the server, which means they are not compressed, but are left separate.

To Compress files to send to a student

Locate the files in the book's folder. Select all of the files you want to compress (Control + A will select all inside the folder). Right-click any one of the files and choose Send to, Compressed File. Depending on the size of the files, compression can take as little as a few seconds or as much as several minutes.

Once the compressed file has been created, rename it, using the title of the book and the type of files (see example above).

Sending Files to a Student

Virtually all files are sent to the student via the Large File Transfer Service.

<http://filetransfer.colorado.edu>

The ds-atlab email can be used to log in and send files (See Appendix B for information on login and password information). Files should only be sent to a student's Colorado.edu email address, and not to an outside or personal account that belongs to the student.

For students with blindness, sending files through email is more effective and easier for them to access. Send the zipped Word files directly to their Colorado.edu email address.

Students can also pick up files in person by bringing a flash drive to the AFPAC.

Wrapping Up the Textbook Request Process

The AFAC initiates the process with the Alternate Format Request Form, and needs to complete the process when the files are sent to the student. When student staff complete the conversion/editing process, they complete the form with their initials, date started and ended, and how many hours or partial hours were spent creating the alternate format.

Information from the form is entered into the database (Alt Format Tracker), including a level of difficulty of the conversion (scale of 1 to 5), date and type of file sent to the student, and marking the work “complete.”

Once a request is complete, files sent to the student, and spreadsheet updated, the form is filed in the student’s folder in the top drawer of the large filing cabinet. Please note: a request is not complete until the file is delivered to the student. Occasionally, a student will never come forth with their receipt for purchase, and at the end of the semester, all such requests are marked as “deferred” and filed in the student’s folder. All such requests reside in the green folder in the AFAC’s desk.

Ongoing Processes

Throughout the life cycle of a request, there are ongoing tasks to complete, mostly for the purposes of keeping a particular request on track.

Waiting on publisher response. When a publisher doesn’t respond within a couple of weeks, a determination needs to be made about whether to re-request the files for the book, or look for them elsewhere.

Waiting for student response. When a book’s files aren’t available from the publisher, and the student has been asked to provide their copy for scanning, a maximum of two weeks should go by before requesting the book from the student again. A second request can come at two weeks, and at 4-5 weeks after the last request, it should be marked “deferred” and filed in the student’s folder. The spreadsheet should be updated at that time, as well.

Waiting for student’s receipts/proof of ownership. A reminder can be sent to the student at 2 weeks, and again at 4, before the request is marked deferred and filed in the student’s folder. The database should be updated at that time, as well.

Periodic sending of files. Sometimes, the scope of the book plus the complexity of the needed output can make production time extremely long, up to and including the full length of the semester. During a project such as this, as files are completed, they are sent to the student.

Updating students on progress of conversion. If acquisition and/or production of a textbook is going to take longer than the preferred two weeks, the student will need to be updated on the process.

What About All Those Handouts and Power Point Slides?

Students can request alternate format of handouts, power points, and D2L materials in multiple ways.

- Via email. Student can download and send their materials from D2L to the AFPAC email address, ds-atlab@colorado.edu
- Via flash drive or portable media. Student can download and save documents from D2L to a flash drive or other portable media and drop it off at the AFPAC

The process for producing and recording individual pieces of works (i.e., not textbooks) is less complex, and generally the process happens much more quickly. Individual pieces have a turnaround time of four days or less. When requests come in, they are prioritized by due date and assigned to student staff based

on prioritization of existing workload. A handwritten tracking sheet on blank paper is used to track these requests throughout the semester.

Files are processed and edited, and returned to the AFAC. The AFAC then checks for quality, and sends the repaired document back to the student who requested it.

A record of individual pieces is kept in the Alt Format Tracker spreadsheet, under the correct tab. The spreadsheet is not filled in until the end of the semester, when all of the semester's work has been completed.

ALTERNATE FORMAT PRODUCTION PROCESS

Introduction

Production staff are hired to assist in the completion of alternate format projects. Depending on type of output, some projects take weeks or even months, while others only take a few days. All student staff can produce all types of output:

- Text-based PDF files from scans
- Text-based PDF files from publishers, with edits
- Word files produced from scans or files from publishers
- Word files with MathML or equations
- Tactile graphics
- Braille

Cutting and scanning of books

Cutting

All books needing bindings removed for scanning are taken to the print shop, located on the third floor of the 11th gate of Folsom Field. The cutting is performed on the spot so the book can be returned immediately to the lab.

Scanning – Scanfront Scanner

The Scanfront scanner is located on the file cabinet in the AFPAC. Scanner can accommodate up to 1/4th inch of pages at a time. The scanner runs an OCR (Optical Character Recognition) on the pages as they scan, turning them into readable PDFs.

1. Place pages in the scanner face down, top-first.
2. From the display screen, choose Scan to File.
3. Choose Stratus-5.
4. Double-check settings (color or b/w, duplex or simplex)
5. Choose Next
6. Choose Start

Scanner will scan each page, and when finished, save the file in the “Scanfront” folder on the machine marked Stratus-5. Continue scanning until all of the book is scanned.

Once files are scanned:

1. Create Folder on the ATLAB server for the book. Naming convention should be book title edition – author – ISBN number.
2. Create sub-folder called PDF Scans
3. Move files from Scanfront to the newly created subfolder

Books that belong to a student need to be re-bound and returned. Cut books can be taken to the print shop at any time to be re-bound. The process takes two days, so it must be dropped off, then picked up later.

Post-Production of Scanned Files

Scanning results in a collection of files with numbers for names. The scans need to be put together into one file, then broken out by chapter. See the section on Adobe Acrobat Professional for instructions on how to complete this process.

Adobe PDF

Renaming PDF files

When files are received from publishers, they sometimes come as a collection of files, broken into chapters and front/back matter, but with names that don't match our naming convention. These files must be renamed before we can send them to the student.

1. Locate the book's folder on the ATLAB server. Open the subfolder labeled "PUB files."
2. Right click on the file name of the individual chapter, and choose rename.
3. Use our standard naming convention: author name chapter number.
4. Hit return.

Do this for each file, naming as appropriate.

Combining PDF files

When a book is scanned in the lab, the collection of scans may be in order from front to back, but not broken into chapters. In order to break into chapters, that collection of individual files needs to be put back together.

1. Open Adobe Acrobat Professional.
2. From the loading window, choose "Combine Files into PDF."
3. In the "Combine Files" window, you can either add files (browse to the file location and choose the files you want to add) or you can click and drag files from an open explorer window to the combine files window.
4. Click Combine files.
5. Save the new document, titling it the name of the book.

Breaking up PDF files

When files are received from publishers, or we've scanned the book and combined the files, we need to break the book into manageable pieces. This is done through extracting what you want for each individual file.

1. Open Adobe Acrobat Professional.
2. Open the file you need to break up.
3. Turn on the Page Thumbnails view in the left-hand pane. This will show you all of the pages in the book in thumbnail form.

Scroll through the thumbnails to get a feel for how the book is broken up and what the first page of a chapter looks like. The next step is to extract the pages so that they can be saved separately into chapters.

1. Select the first page of the section you want to extract.
2. Scroll to the last page of the section you want to extract.
3. Holding your shift key down, select that last page. This will highlight all of the pages between the first selection and the last selection.
4. Right-click on any of the selected pages and choose "Extract."
5. A dialogue box will confirm that this is what you want to do. Select the OK button.
6. A new Adobe Acrobat window will open and your extracted pages will be in that window.

7. Select file, save, and save the file in the same folder where the original large file is. Give it the appropriate file name.
8. Repeat this process until you have extracted all chapters, front matter, and back matter.

A note about what parts to extract separately.

Most of the time, you can extract the entire front matter as one document. However, if there is an extensive Introduction, you will need to extract it into its own file. Likewise with back matter, the index may need to be extracted into its own document.

Cropping PDF files

Some files from publishers arrive with crop marks in the corners, and extraneous file information in header or footer areas. Likewise, scanned documents may also have margin information that needs to be removed (like holes from punching, or an overscan that shows up as a black line. This information should be cropped from the file before it is considered complete.

1. After opening the file that you need to crop, reduce the page size until you can see one complete page inside the window. This can be done by holding down the control key and scrolling the mouse, or by using the zoom window in the menu.
2. Turn on the tools menu on the right-hand side, and choose the Pages tab.
3. Choose the crop tool from the Pages list.
4. Using the crop tool with click and drag of your mouse, highlight the area of the page that you want to keep. The extraneous items should show up outside the box you just draw.
5. Place your cursor in the center of the box you drew, and double-click.
6. A dialogue box will open. Check the “All” radio button under page range, then okay. This will crop all of the pages in the document.
7. Save the document.

Other Functions in Adobe Acrobat Professional

Checking for readability

A PDF document is only readable if it is text-based. To check for readability, try to click and drag to select text. If you only get a blue or grey box, and no selection of words, the PDF is not text-based and will need to be run through Optical Character Recognition and turned into a Microsoft Word file.

Omnipage

Omnipage is used to run Optical Character Recognition (OCR) on a file that is not text-based, or that is text-based, but needs to be converted to another file type (such as Microsoft Word or Braille). Omnipage will scan through a document and mark what it believes is text, and what it believes is a graphic. It also marks passages it thinks are tables. Text is marked with a reddish-brown outline, graphics with a green outline, and tables with blue outlines.

Omnipage will perform OCR on any image-based file (PDF, JPG, TIFF). The quality of the output depends greatly on the quality of the original scan.

Opening and Using Omnipage

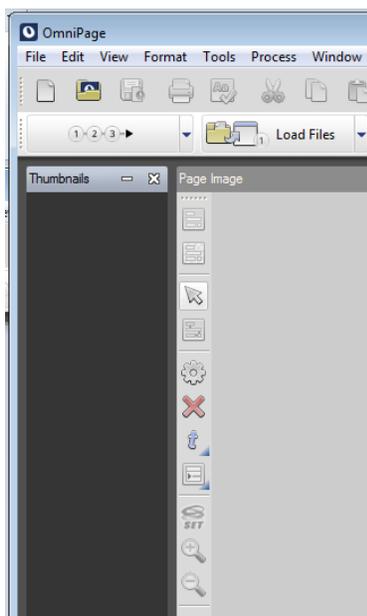
1. Omnipage can be opened from the all programs menu, or there is a link on the desktop.
2. When Omnipage opens, you will see a menu, a row of buttons, and then a second row of larger buttons. That second row of buttons is what you will be accessing.



3. Click on the 1-2-3 button. Omnipage will bring up a dialog box for you to choose where the file is located. Navigate to your file and click “open.”
4. Omnipage will then do its best to run OCR on the file. You may see a spell check dialog box appear; close it.
5. Once Omnipage has finished scanning the document, it will ask you to save it.
6. Save the file as a doc or docx. There should be (or you should create) a folder for the Word files, in the root of the book’s folder.

If a document is a poor scan, you can take extra steps to clean the file before you save it.

1. Open Omnipage, start the process (1-2-3 button), and let the scan complete.
2. When Omnipage asks you to save the file, click cancel.
3. Turn on the editing delete tool. This is a red “x” on the page image bar that shows between the Thumbnails and Page Image spaces on the window.



4. Using your mouse, click and drag around areas that you want to delete. The delete tool, once activated, deletes whatever is inside the selection.
5. You can use your mouse to drag handles of text boxes to enlarge or shrink them.
6. You can use the delete tool to get rid of graphics, as well, or you can right-click on a graphic and choose delete.
7. Once you have adjusted text panes and deleted graphic panes, you will need to re-scan the document with the changes. To do this:
 - a. Click in the “Thumbnails” pane and then press Control + A. This selects all of the pages for rescanning.
 - b. Click the third button, “Automatic.” When the dialog box asks if you are sure you want to run the scan again, click okay.
 - c. Once scan is complete, click the fourth button “Save to files” and save the file.

Closing Omnipage after you are done extracting files

When you close a file or close Omnipage, it will ask if you want to save the document. You should say “no,” as it wants to save the resulting OPD document, and we do not keep those. The extracted Word file is all we need.

Editing in Microsoft Word

All files extracted from Omnipage need another layer of editing before they are ready to be sent to a student. This requires careful comparison of the original image file (usually a PDF) to the extracted Word file. You will need to create heading levels where appropriate, add in page numbers and page breaks, and re-format tables. For some documents, you may need to re-insert graphics, and for some of those graphics, you will need to add alternate text to describe the image.

Steps to Begin Editing in Microsoft Word

It is helpful to strip out any remaining formatting before trying to work on the document. To do so, follow these steps:

1. Open the Microsoft Word document you extracted from the image file with Omnipage.
2. Choose file, save as, and save the file as a plain txt file. You make this choice in the “files of type” drop down menu. Keep the file’s same name.
3. Close the document (File -> Close). Do NOT close Microsoft Word.
4. Choose File, Open to reopen the .txt file.
5. Select Control + A, then apply the “normal” style from the home ribbon.

Now you are ready to actually edit the document. Using the original image file to compare to, you will need to check for spelling problems, missing words, and re-add page breaks. Page numbering needs to be added to the top of each page in the “headers and footers” under the Insert menu.

What to edit and how

To add a page break:

Place your cursor at the end of the sentence where you want to place a page break. Hold down Control and press the enter key.

To add page numbering:

1. Choose Insert, Page Number, Top of Page, and choose the first one on the list – left justified.
2. Type the word “Page.”
3. An automatic page number will appear. If you need the page number to be a different number, choose Page Number, Format Page Number, and then enter the page number you wish the document to start at in the dialogue box. Click OK.

Correcting a scanned document is more about looking for patterns than it is about reading the actual material. Some things to look for:

- Red underlines (potentially misspelled words)
- Blue underlines at the beginning of a line (can indicate that there is an extra paragraph mark that needs to be removed on the previous line)
- Blue underlines in the middle of sentences or paragraphs (can indicate an extra space or poor choice of word use that can indicate a missing word)
- Green underlines (same as above)
- Blank lines with no text (can indicate that there is an extra paragraph mark that needs to be removed on the previous line)

Tools that you can use to help your process:

- Turning on show/hide can tell you where hard returns and extra formatting may exist. The tool is a toggle on the Home ribbon and looks like the “paragraph” symbol (backwards P with an extra line).
- Find and replace. If the document shows that Omnipage consistently got a particular set of letters wrong, a find and replace will fix all of them in the document. Be cautious using this tool, however.
- Undo feature. If you change something and didn’t mean to or realize it made the document worse, undo is your friend. There is an undo button on the upper menu (looks like a backwards spinning arrow) or Control + Z will do it.

Page Numbers and Page Breaks:

In a textbook, we want to maintain page breaks and their corresponding numbers as they are in the original image file, whenever possible. If the text will not fit on the page, here are some tricks to try.

- Reduce the font size.
- Reduce the margin size. You can set the margins to half an inch, if you need to. The margin size adjuster is in the Page Layout ribbon.
- Do NOT allow words to break across pages. This interrupts the flow of reading. If words have been broken with a hyphen, remove the hyphen and put the word back together, and put the page break in after the complete word.

Footnotes:

Footnotes need to be placed appropriately in textbook files. Use the References ribbon to do so. This is a pretty simple process but requires cutting and pasting of footnotes into the footnote section you add.

Styles and Headings

Almost all textbook material has styles and headings in the original image files. These do not translate in the OCR process, and need to be added back in. What were headings before are now just plain text. Heading styles are located in the Home ribbon, starting with “Normal” and expanding to multiple layers of headings. The appropriate template has already been installed on all of the lab computers, so that no matter what computer you are on, you will have the same style set to work with. Here are the most common styles you will use:

- Title. Used only once in a document for the title of the chapter.
- Heading 1. First heading below the title level.
- Heading 2. Second heading below the title level.
- Heading 3. Third heading below the title level.

You can use up to 6 levels of headings in a document. The preference is to go no deeper than three.

Bullets and Numbering

Use the bullets and numbering feature for lists in documents.

.doc or .docx?

Either file format is acceptable for student use.

Turning Word files into PDF files

Some student prefer PDF files, even though we've had to create accessible Word files in our process. To save as PDF:

- Save your repaired document as a Word file
- Choose file, Save as
- In the Save as Type, choose PDF
- Click the Options button
- Make sure the "Create Headings Using" is checked, and the "Bookmarks" radio button has been selected.
- Click Okay
- Click Save

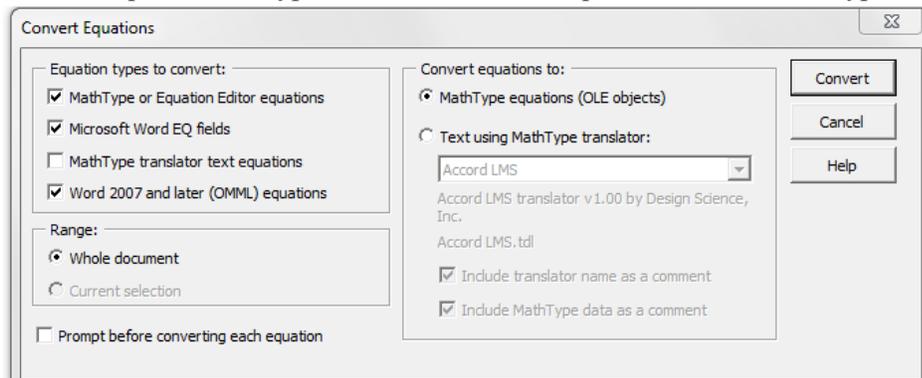
Math Textbook Procedures: MathType -LEAN

When converting a Math textbook to Microsoft Word there is a different process to make sure all the equations are readable. If you simply use the Equation Editor function in Word the read aloud programs (JAWS, Window-Eyes, etc.) will not be able to read the equations. For this reason the equations must be put into MathType in Word and then run the Lean Program over it. Thankfully, this is an easier and more sufficient option to converting equation. The difference between Lean and converting the Math Document to HTML is that you can keep the document in Word. Therefore you can keep the page and footnote formatting. Below are the detailed steps of how to make a Lean document and some examples to help you through it.

How to Put Equations into MathType

2 options:

1. Use the “Inline” button [ctrl+alt+Q] or “Display” button directly from the MathType tab and type in Equations
2. Use Equation Editor [alt+ =] and then convert equations to Math Type.
 - a. After all equations are typed click on “Convert Equations” in the MathType tab

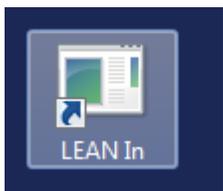


- b.
- c. Click “Convert”

Note: If you are unaware of what the symbol is or where to find it, ask the professor, or someone who is knowledgeable in Math. It’s always better to go to the source than to guess.

How to convert to LEAN

1. After all equations are in MathType you can run Lean over the document.
2. Select all the text. [ctrl+A]
3. Find the LEAN In Shortcut key on your desktop



If this is not on your desktop- Go to the Folder name LEAN app and you can begin installation from there.

4. Double click this button and it should process all the equations.

5. When you are finished make sure to SAVE AS and add “_Lean” to the name of the file. You MUST do this, for the Lean application work properly. Please move the files into a new Folder labeled as LEAN

Another Option

It is possible to put equations into the Word Document directly from the LEAN program. Using the LEAN Edit shortcut, you can insert equations that are already leaned into the Document. You can follow the tutorial in the LEAN folder regarding the codes used to insert symbols.



Example Textbooks

There are textbooks on the file server that are good examples of work that has been done using MathType and Lean. They are:

- Neural Networks - Rojas –
- Statistical Reasoning for the Behavioral Sciences

Scientific Notebook Manual

Introduction

Scientific Notebook is an easy-to-use word processor that integrates mathematics and text in the same environment. It's outcome file type is a .tex file otherwise known as a LaTeX source file. This means that file contains the source code for a LaTeX document. Thus, you can open it with any text editor (notepad, notepad++ should work) and you can view the source code.

Headings

When you first create a new document in Scientific Notebook you will want to setup some basic document organization. In order to do this you will use **Headings** which work in a very similar manner to Microsoft Word.

Scientific Notebook offers you five tiers of heading types and they can all be accessed via a font type dropdown panel located in the bottom left corner of the application screen (See Fig 1).

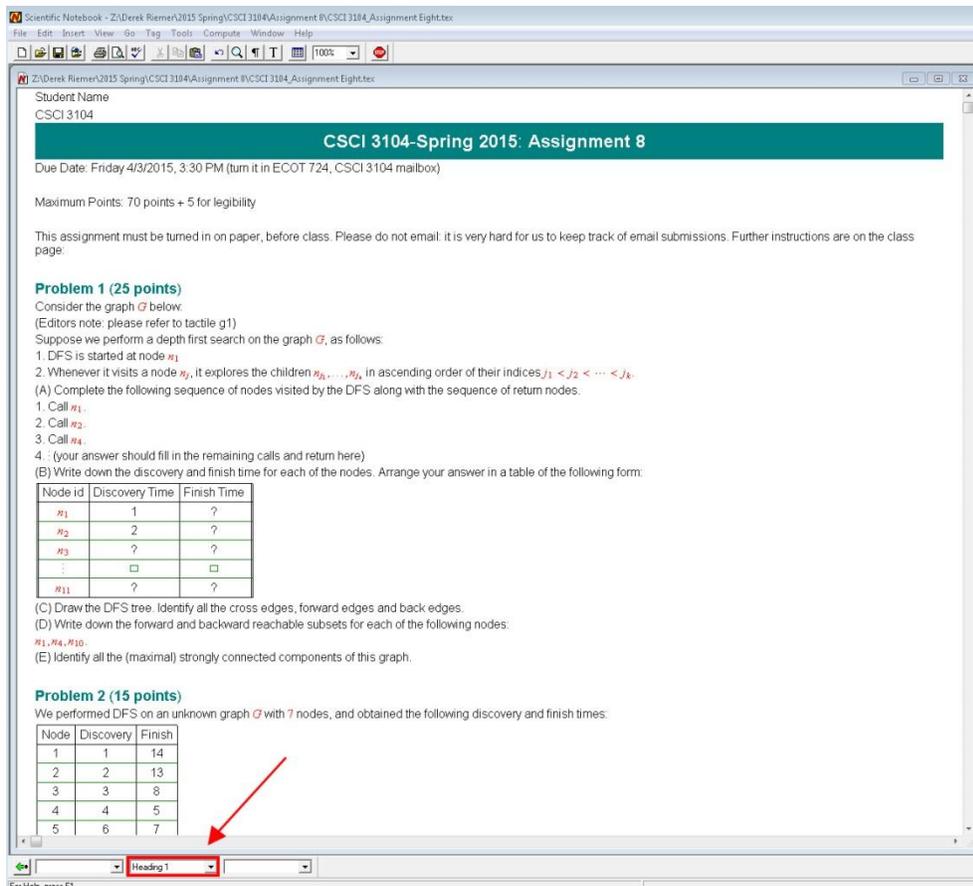


Figure 1: Heading Location

The first step to take when creating a new document is to write the student's name and course number in the top left corner in basic "Body Text" (default font).

Next, you will change the heading style to “**Heading 1**” to write the document **Title**. The teal banner located top center in Figure 1 with the written text “CSCI 3104-Spring 2015: Assignment 8” is in Heading 1 style. In order to exit out of that font style you will need to hit Enter and change the font style back to basic “Body Text”.

Another example of a heading style can be seen in Figure 1 as well. The text “Problem 1 (25 Points)” is in Heading Style 2. Headings 1 & 2 and standard “Body Text” should comprise the majority of your documents but feel free to explore using more Headings as needed.

Math

One of Scientific Notebook’s greatest strengths is its ability to distinguish math text from body text in the source code. This allows users to quickly understand when text styles are changing to and from math.

Section 2.2

Find the inverse of the matrices in Exercises 1-4.

1. $\begin{bmatrix} 8 & 6 \\ 5 & 4 \end{bmatrix}$

2. $\begin{bmatrix} 3 & 2 \\ 8 & 5 \end{bmatrix}$

3. $\begin{bmatrix} 7 & 3 \\ -6 & -3 \end{bmatrix}$

4. $\begin{bmatrix} 2 & -4 \\ 4 & -6 \end{bmatrix}$

5. Use the inverse found in Exercise 1 to solve the system

$$8x_1 + 6x_2 = 2$$

$$5x_1 + 4x_2 = -1$$

11. Let A be invertible $n \times n$ matrix, and let B be an $n \times p$ matrix. Show that the equation $AX = B$ has a unique solution $A^{-1}B$.

17. Suppose that A , B , and C are invertible $n \times n$ matrices. Show that ABC is also invertible by producing a matrix D such that $(ABC)D = I$ and $D(ABC) = I$.

24. Suppose that A is $n \times n$ matrix and the equation $Ax = b$ has a solution for each b in \mathbb{R}^n . Explain why A must be invertible. [Hint: Is A row equivalent to I_n ?

Figure 2: Body Text to Math Text integration

As you can see in Figure 2 the “Body Text” has bits of red text nested within it, this text is called “Math Text”. When text is in “Math Text” the source code will notify the user that the text style has changed. Using this “Math Text” is similar to using headings in that it is located in the same Font Style drop down panel. Additionally, you can quickly switch between Math and Body via the hotkey “CTRL-M”.

Math Details

Now we will get into some of the more detailed functionality of Math Text.

Toolbars

As you see in Question #5 (Figure 2) subscript is being used. In order to access the vast majority of your math tools you will need to get your tool bars setup appropriately.

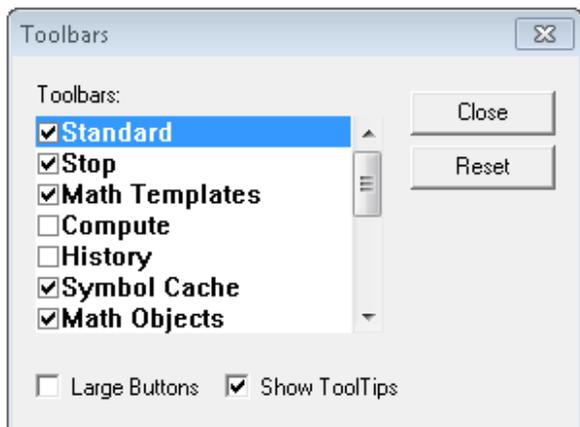


Figure 3: Toolbars Menu

Toolbars allow you to access the majority of math tools and they can be setup through accessing the “View” Menu and then click “Toolbars”. This will bring up the image shown in “Figure 3”.

Within this menu you will want to make sure the **Standard, Stop, Math Templates, Symbol Cache, Math Objects, Editing, Symbols Panels, and Tag** boxes are all checked. This should result in you seeing all of the tools shown in “Figure 4”.

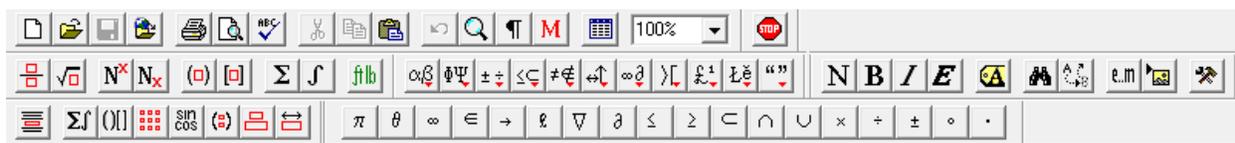
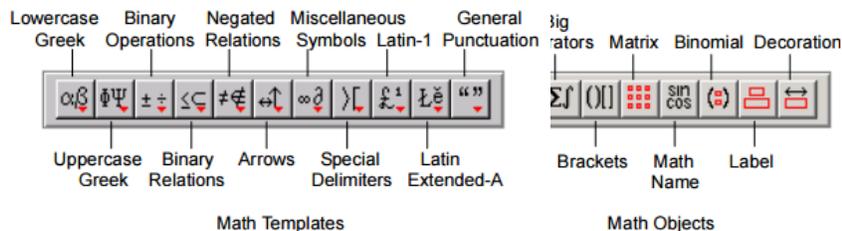


Figure 4: Toolbars

With these tools at your disposal you will access to **Super/Subscript, Greek Letters, Tables, and all other Math Symbols**. I recommend exploring what each drop down contains and getting familiar with where various symbols are located.



Saving

Saving your document with the correct file version is quite easy. Simply click “File” and “Save As” then a pop-up window will appear. From there you will select the “Save as type” to be **SW/SWP/SN Document (.tex)** (see Figure 5). This will save the document as a **.tex** file which is the correct final product.

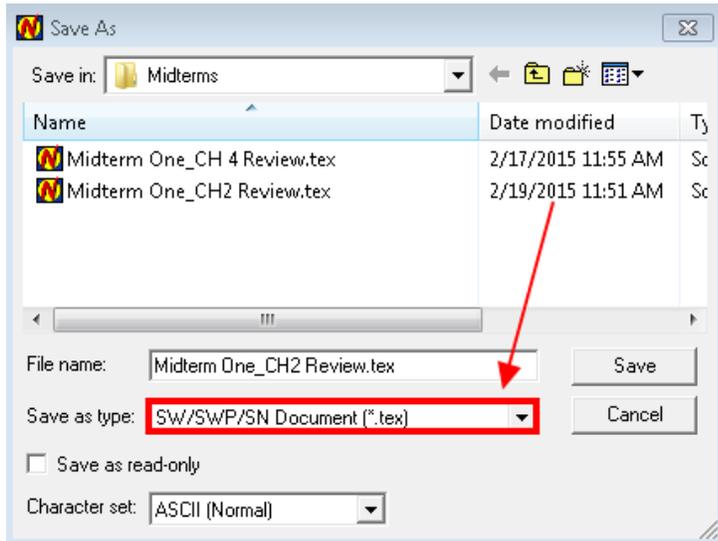


Figure 5: Save as window

Keyboard Shortcuts

Hotkeys expedite the process of Scientific Notebook dramatically because they help you seamlessly transition between “Math Text” and Body Text”. Listed below are a set of some of the most useful ones.

Entering Mathematical Objects and Punctuation

To enter	Press
Fraction	CTRL+F or CTRL+/ or CTRL+1
Radical	CTRL+R or CTRL+2
Superscript	CTRL+H or CTRL+3 or CTRL+UP ARROW
Subscript	CTRL+L or CTRL+4 or CTRL+DOWN ARROW
Summation	CTRL+7
Integral	CTRL+I or CTRL+8
Parentheses	CTRL+9 or CTRL+0 or CTRL+(or CTRL+)
Square brackets	CTRL+[or CTRL+] or CTRL+6
Angle brackets	CTRL+<
Braces	CTRL+{ or CTRL+} or CTRL+5
Display	CTRL+D
Absolute value	CTRL+\
Norm	CTRL+ (CTRL+SHIFT+\)

Entering Greek Characters

To enter	Press CTRL+G then press	To enter	Press CTRL+G then press
alpha	α a	pi	π P
beta	β b		Π P
gamma	γ g		ϖ v
	Γ G	rho	ρ r
delta	δ d		ϱ R
	Δ D	sigma	σ s
epsilon	ϵ e		Σ S
	ϵ E		ς T
zeta	ζ z	tau	τ t
eta	η h	upsilon	υ u
theta	θ y		Υ U
	ϑ Z	phi	ϕ f
	Θ Y		Φ F
iota	ι i		φ j
kappa	κ k	chi	χ q
	\varkappa K	psi	ψ c
lambda	λ l		Ψ C
	Λ L	omega	ω w
mu	μ m		Ω W
nu	ν n	digamma	F I
xi	ξ x		
	Ξ X		

Official Reference Manual

While most of the essential basics have been covered in this guide there is an official Scientific Notebook manual that has been provided by the company. Should you have any specific questions that have not been answered in this document please refer to this link:

<ftp://ftp.mackichan.com/download/version55/getstarted-55.pdf>

Turning Word Files Into Braille

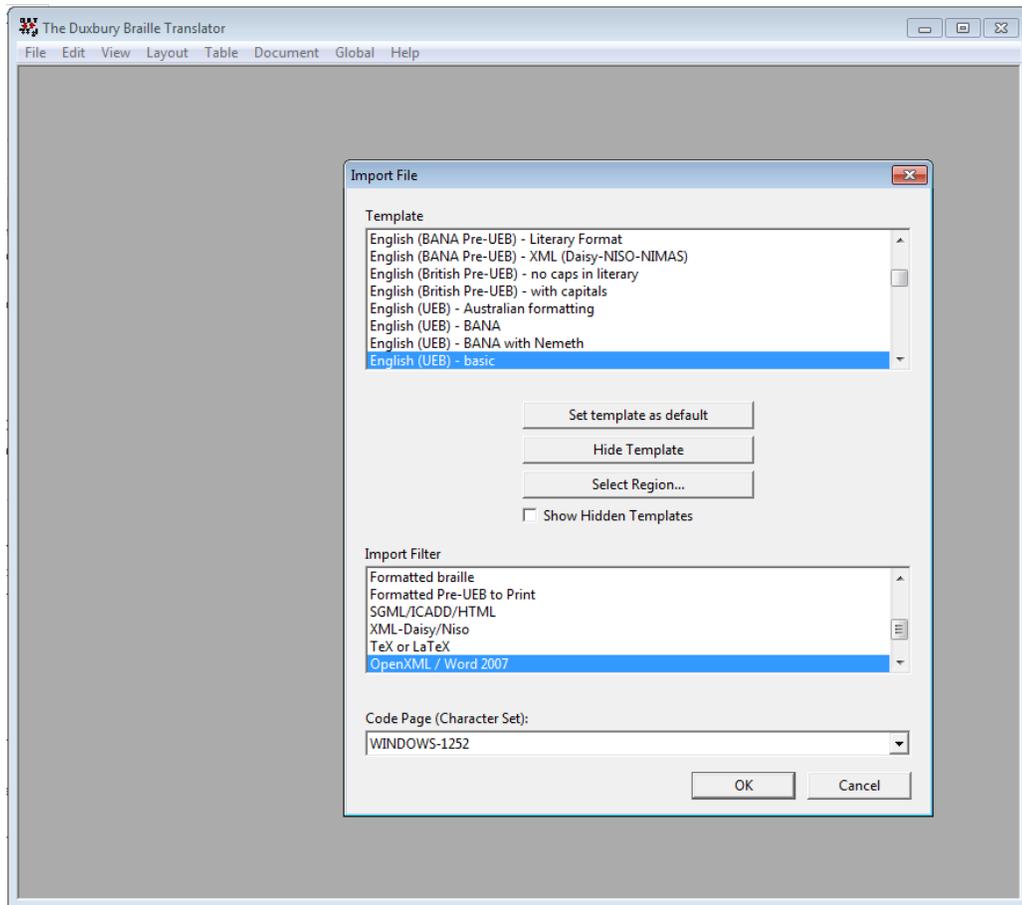
A well-formatted word file can be turned into Braille directly using Duxbury software. Two types of output can be created: physical Braille printouts, and BRF (Braille Ready Files). BRF files are electronic and can be read using special software or hardware on a student's computer.

How to operate Duxbury to convert a file to Braille

1. Locate Duxbury software on the desktop and open it. In some cases, instead of "Duxbury," you will find "DBT."
2. Choose File, Open to locate the file you wish to convert. Duxbury will open the following file types:
 - a. Word (docx)
 - b. Word (doc)
 - c. .txt with formatting

Any other file types will need to be converted to one of these formats before being opened in Duxbury.

After you have chosen your file, a dialog box will ask you to choose what template to open the document with. Choose the English (UEB) – Bana template. Then choose okay.



3. Once the file is loaded, choose file, translate. The file will be translated to Braille and appear in the Duxbury window.

To print the Braille you've just created:

1. Choose file, emboss.
2. Accept the default settings.
3. Click OK.

The Braille will print on the embosser in the Braille closet. Once the Braille has finished printing, use these steps to remove your printing job from the embosser:

1. Press the OL button to take the printer offline.
2. Press the FF button to roll the paper forward until you can separate it at the perforation.
3. Press 2, then E, and the paper will roll back to its start position and the embosser will be back online.

To save the Braille you've just created:

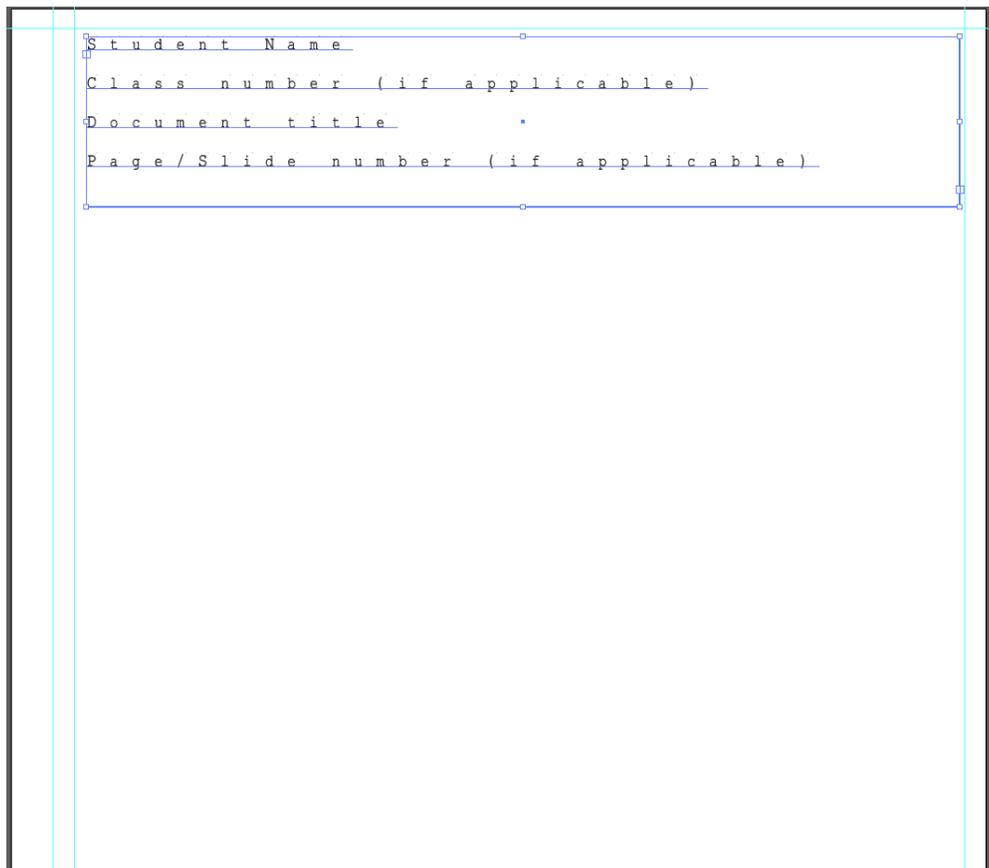
1. Choose File, Save As.
2. Browse to your save location (if necessary), and type in a file name.
3. In the Save as Type drop-down, choose "formatted Braille, USA encoding (BRF)."
4. Click Save.

Tactiles – Adobe Illustrator

This manual will explain how tactiles are made using Adobe Illustrator. It will go through all the helpful tools, and provide you with the knowledge to make your own tactile. While many of the tools in Illustrator are explained below, not all of the tools available will be shown in this document. Hopefully this manual will help you get started and you can discover more tools in Adobe Illustrator that will make the process easier.

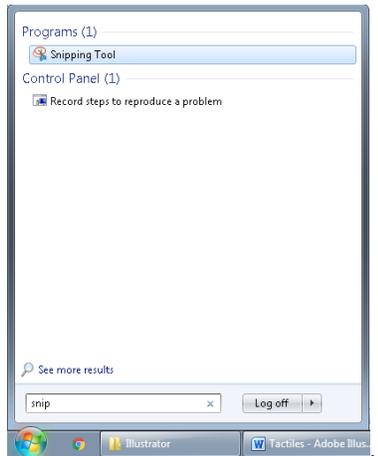
Process - Instructions

1. Start by opening the template file found in [Scanned → AAA Manuals → Illustrator → Template.ai]
 - a. You will notice that the document already has the right page size, margin guides, and a sample text to copy and paste from.
 - b. Please SAVE AS if you use this template
 - c. If you decide to start from scratch, please refer to [Basics](#) for more information on document sizing, guides and font style.
2. Make a heading for the tactile. The standard way to head a tactile is to start with the name of the student (or school, if for a different University), class number (if you do tactile for different classes for the same student), then the document/ figure name, and finally a page or slide number for reference.

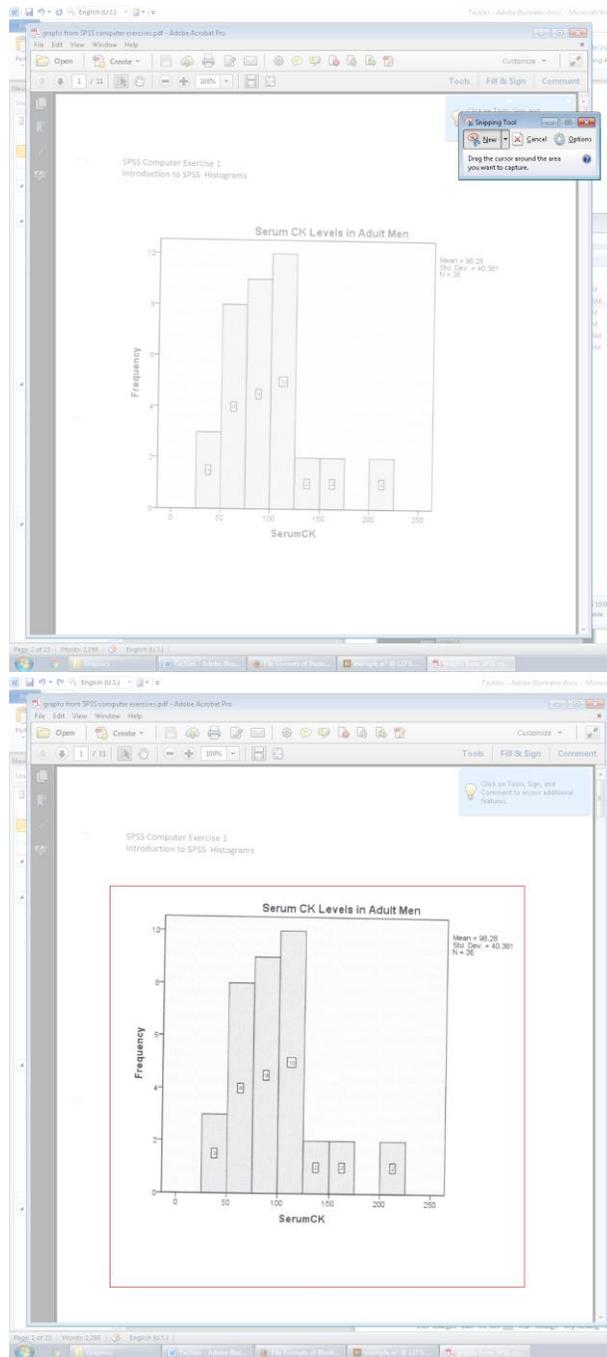


3. Next you will want to place your image in the artboard. There are three main ways to do that:

- a. Use the [Place](#) Tool. Go to [File → Place], select the image file that you want (It could be a jpeg, png, tiff, etc.). Select “Place” and the image should appear on the artboard.
- b. Use the “snipping tool” or a screenshot. This way is ideal for grabbing images from PDF’s or any place where the image is embedded into the document. To access “snipping tool”, search for it in the Start Menu



After you open the snipping tool, you can select by making a box around the image that you want. Then just paste (ctrl + v) it into your art board.



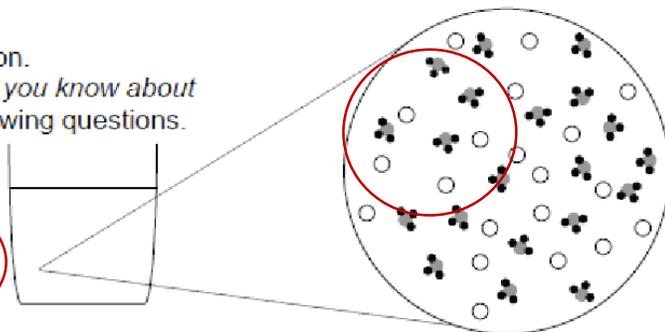
- c. Copy (ctrl + c) and paste (ctrl + v). Typically images found in word documents or in PowerPoint slides are ideal for copying and pasting into your artboard.
4. For organizational purposes you can create different layers and keep track of the texts or images being placed in your document. For example all the text can go in one layer and the images in another. For more information please see [Artboard/Layer Tool](#).
5. Finally it's time to create the image. First evaluate the image. How much text is there? How many different [textures](#) will be necessary? Do I need to include labels? Would a "key" be a good thing

to incorporate? Would this image be easier to read if broken down into multiple artboards (e.g. The Campus Map)? How much of the graphic is actually necessary? Please check out [Helpful Hints](#) for ideas on answers to those questions.

a. Example 1:

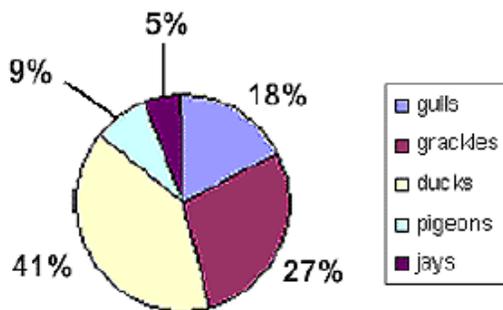
This beaker contains a **0.01 M HBr** solution.
 Use this molecular-level picture and what you know about strong and weak acids to answer the following questions.
 (No need to look up any values, etc.)

○ = Br⁻
 ●●● = H₃O⁺
NOTE: Water molecules not shown.



In this image, it's important to keep the key that they have provided and to make sure that the molecules are big enough to feel when tactiled. That means that maybe instead of putting all of the molecules in your tactile, you will only put 3 or 4 of each, but blown up so that the user can feel it easily. For this particular image the molecules are placed at a 1:1 ratio. You aren't expected to know information like that, so just be careful when making decisions of what can be cut out or not. ****Note:** We are not "content experts", so please contact the professor and/or students if an image is complex. There may be better ways to get the information to the student than from a tactile.

b. Example 2:

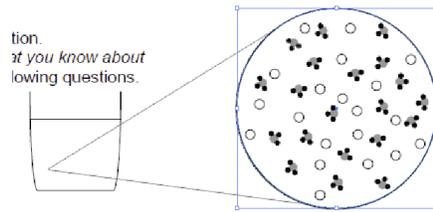


A Pie Chart

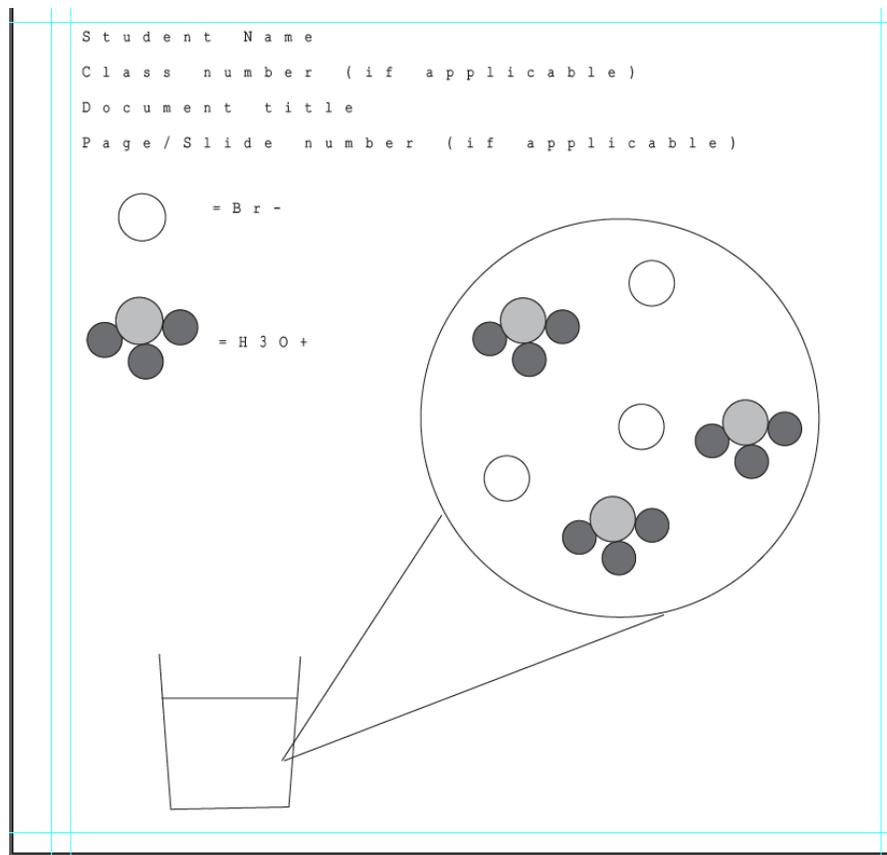
In this pie chart there are 5 different colors used to differentiate between the percentages. In tactiles there is really only 4 recognizable ways to differentiate using textures. Instead of using textures, maybe you could number the information in the key. So in this image 'gulls' could be 1, grackles could be 2, ducks could be 3, etc. Then you could put the numbers inside it's fraction of the circle.

- Start by tracing your image, using the tools that make the most sense. For example, the [shape tool](#) would be useful for an image of a graph, chart, shapes, etc. For more complex images, it may be easier to just use the [pen tool](#) or [line tool](#).

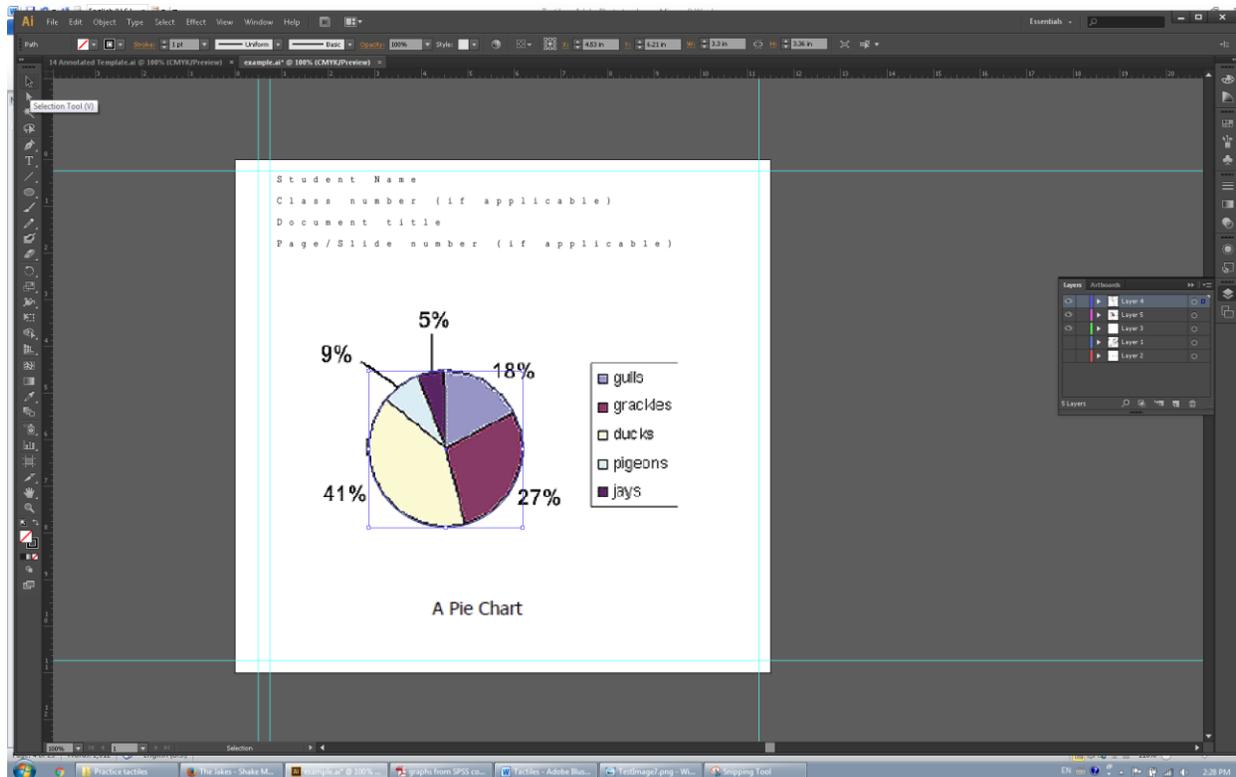
a. Example 1:



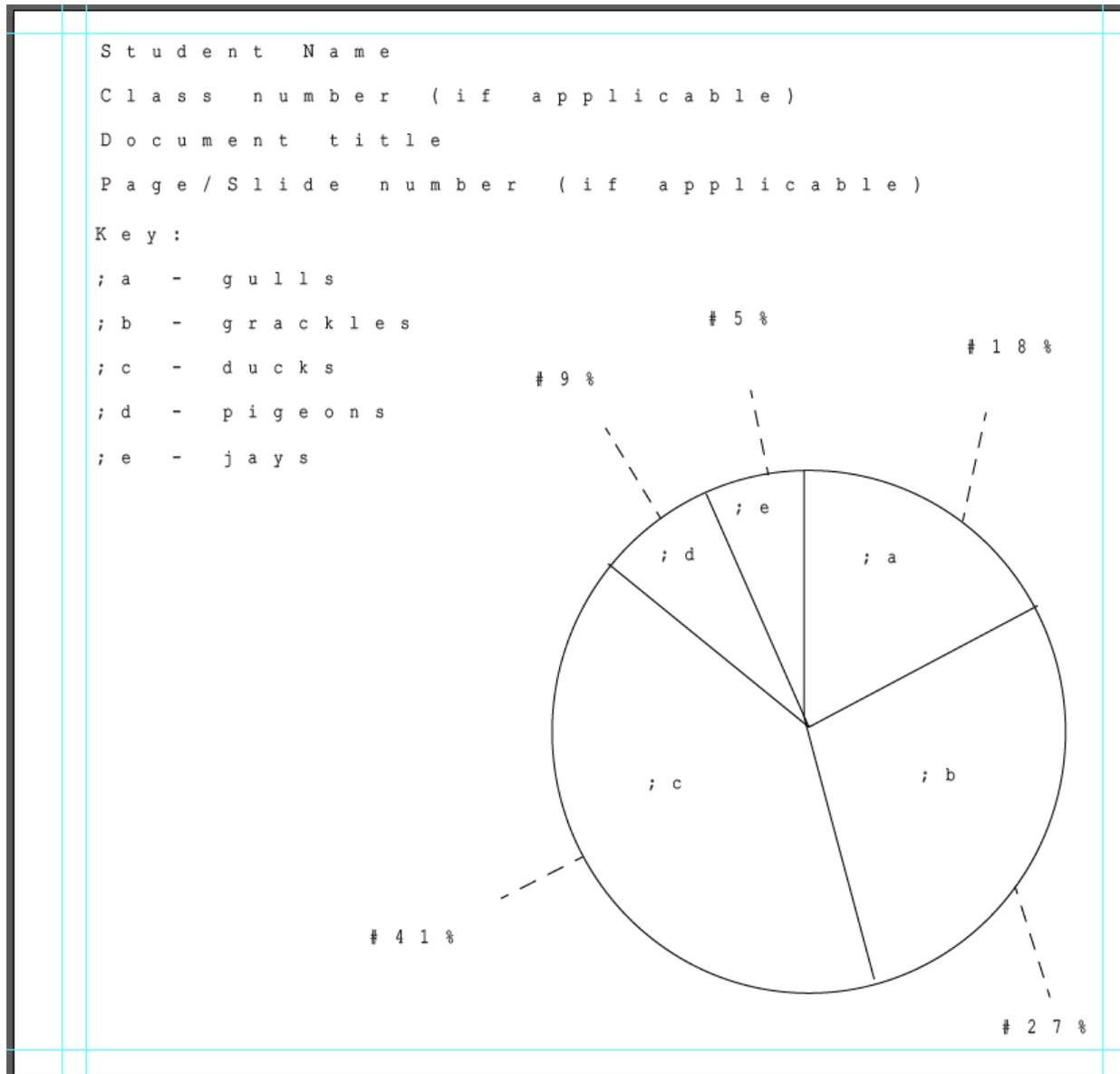
Begin by tracing the main parts of the image. Next [fill in](#) any textures that are needed. Finally [blow up](#) the graphic to a reasonable size. Move the graphic around to fit properly (make sure it won't change the meaning of the graphic).



Example 2



Begin by tracing this image; keep the fractions in the circle at the same proportions. Make the key, and place it wherever it seems appropriate (usually at the top after the heading would be a good place to put it). For this tactile I will use letters instead of numbers to label the items in the key. This way you can see how to differentiate between numbers and letters in braille. Finally, make the graphic as big as possible.



- b. There is an [easier option](#) that may be worth checking out for your tactile.
7. Finally, [print](#) out your tactile and check it. Thing to check for:
- a. Is anything overlapping?
 - b. Is the brailled print in an appropriate spot, i.e. not too close to the lines or other text?
 - c. Is everything within the margins?
 - d. Can you feel the differences if you used different textures?
 - e. Is there any detail that needs to be enlarged or represented differently?

Feel free to ask other people in the lab for their opinion! Fix anything that needs to be adjusted and print again.

In everything looks/feels good, then congratulations, you've made your first tactile! Please look through the rest of this manual for useful tips and tools that will help you succeed in creating future tactiles.

Basics

Paper size is 11 x 11.5

The margin size on the left will change depending on whether you use paper with or without binding holes.

With holes = 3/4 inch margin

- If you want to bind multiple sheets together (for example if they all belong to one chapter, or powerpoint presentation)

Without holes = 1/2 inch margin

- If it's a single sheet.

Make sure you use the font style Braille29 ASCII from sizes 15-16. (?? Spacing between characters)

- Easier to just copy and paste from previous tactiles and insert your own text. A copy of the text can also be found in the template.

Helpful Hints

When using the pen or line tool, hold shift to draw orthogonal lines (completely/perfectly vertical, horizontal, or diagonal)

When enlarging a graphic, make sure to highlight only the graphic itself; don't include braille text, because it can mess with the font and won't print the braille.

When labeling a figure, numbers are preceded by a number sign (#1, #2, etc.) and letters are preceded by a semi-colon (;a, ;b, etc.)

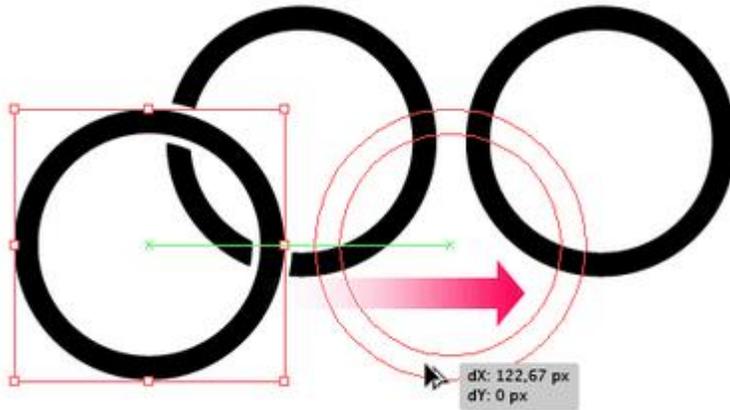
Why? Because numbers 1-10 and letters a-j appear exactly the same in braille. So you don't want to simply put '1a', because that can read like '11' or 'aa'.

You can make a key to represent objects if that makes your tactile simpler.

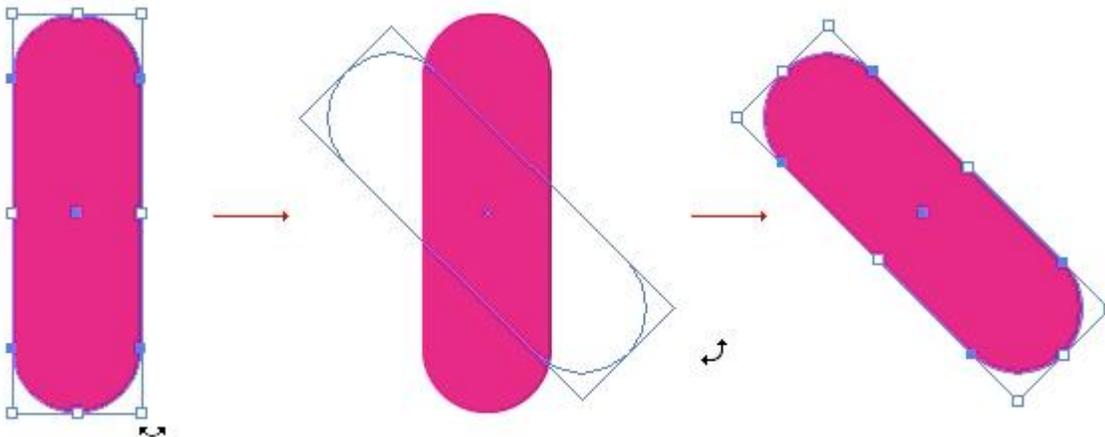
Don't be afraid to use more than one page. If the image is really complex, it can be broken into simpler parts spanning multiple pages.

If any of your toolbars disappear for some reason, you can get them by going to Window. Click on "Control" or "Tools." Alternatively, the "tab" button will make all your tools appear/disappear.

An easy way to copy an object is to select the object, hit Alt, and drag the item to a new spot. (a white arrow should appear next to the black one)



To rotate an object, select the object, hover the mouse over the outside of the bounding box until a two-sided arrow appears, click and drag in the direction you want it to turn.



Holding shift during this process will turn the object at 45 or 90 degree increments.

Textures

Tactiles can't display color but they can differentiate TEXTURES!!

Fill textures

Use 60-70% black instead of 100% black for filling in bigger spaces (So that it doesn't rip through the page)

30-40% black for a light texture (Can't go below that because it won't show up)

Dotted and/or striped textures can also be used to differentiate items in a graphic

Examples in Annotated Template Illustrator file

Stroke width

100% black

40% black

Dotted/dashed lines

- Keep in mind that while the texture may look different on the display screen, the actual printed texture may feel exactly like another one. It's all a matter of trial and error, so stick to the basic level of black, and if needed check out the different textures.
- Look at Campus Map tactiles for the different textures used to display grass, road, sidewalk, and building

Toolbars

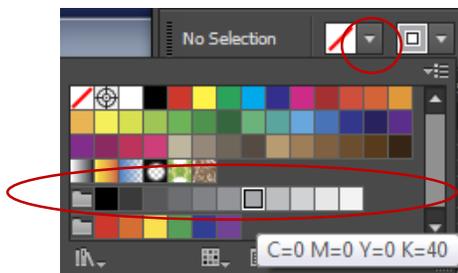
Control Window (normally at the top of Illustrator)

Color



The first box is the fill-in color. The second box is the outline color.

Click the down arrow to find more color options.



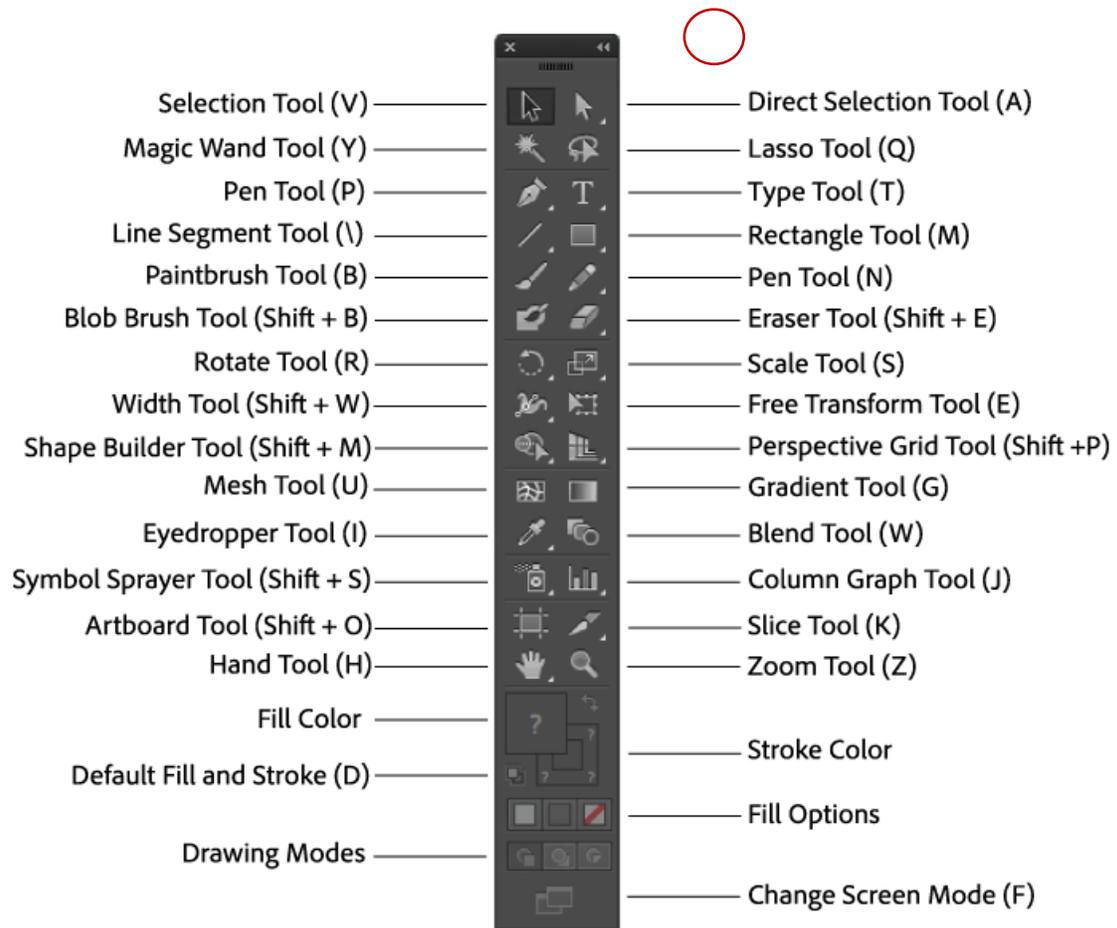
When I talk about the percentages of blacks, I'm referring to the circled area above. If you hover over the boxes you can see the color description, i.e. k=40 means 40 % black.

Stroke



The stroke is the line width. 1pt is standard. You can use 2pt for a thicker line. Anything bigger will rip the page. Lower than 1pt can be used for lines that are less emphasized. (This has a similar effect to changing the percentage of black or changing the opacity.)

Tool Window (normally on the left side of Illustrator)



The arrow at the top will change the display of tools to one column.

Tools that are frequently used to make tactiles are described below.

Arrows



The selection tool can be used to resize and/or drag an object from one place to another.

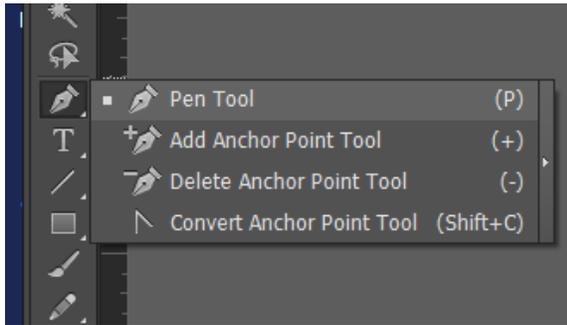
The direct selection tool can be used to move “anchor points” which changes how the object will look.

Example



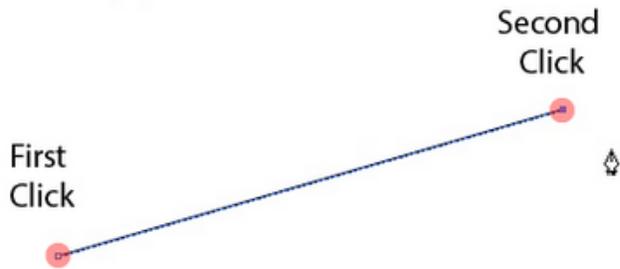
The Selection tool was used to move the copied square to the right, the direct selection tool was used to move the lower right side of the square on the right up and over.

Pen Tool

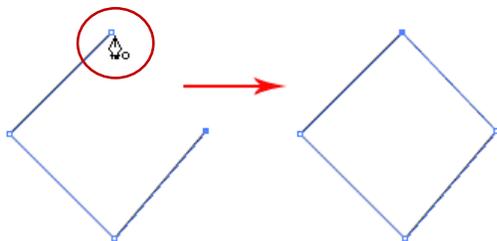


The pen tool is used to make anchor points and is useful for outlining complex images.

When the pen tool is selected, clicking once will drop an anchor point. Every time you click, you will add an anchor point and connect the points with a line.



To close a series of lines, a small circle will appear near the tool.

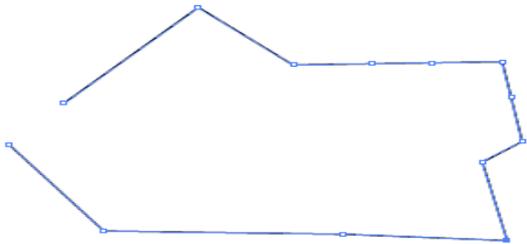


A closed path is useful if want to fill in the shape.

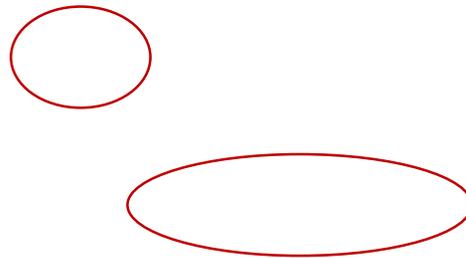
Anchor Points

If you draw a shape, but then need to change a part of the shape, use the “Add anchor points” tool. With this selected, when you click on a line, new points will be added.

Pen tool



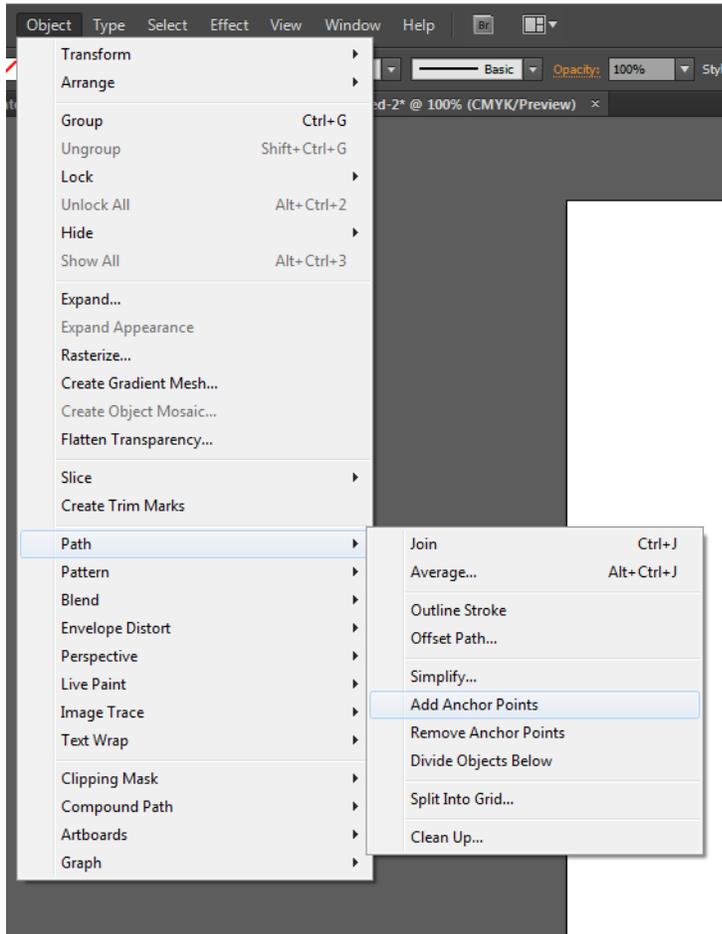
Add anchor points



Delete anchor points

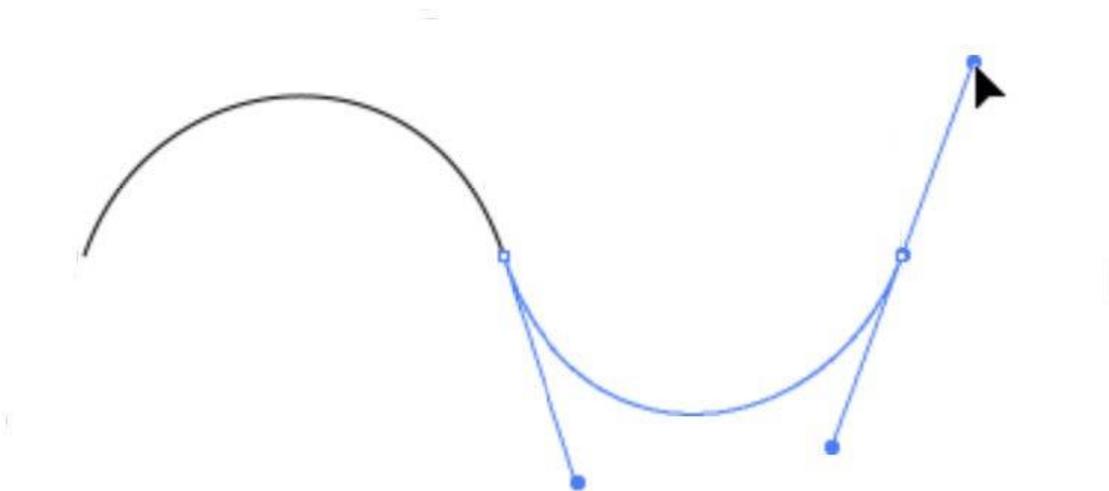


If you want to evenly add anchor points, go to Object → Path → Add Anchor Points

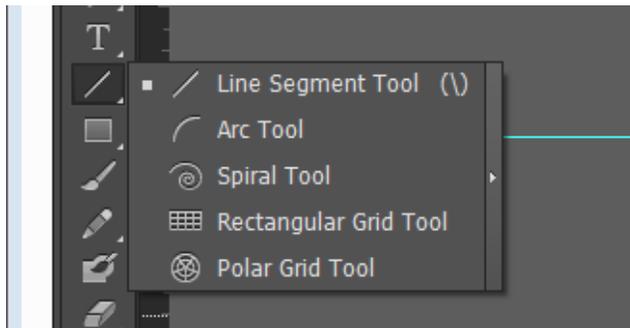


Curved lines

Using the pen tool, you can create a curved line by dragging the mouse before you release the second anchor point.

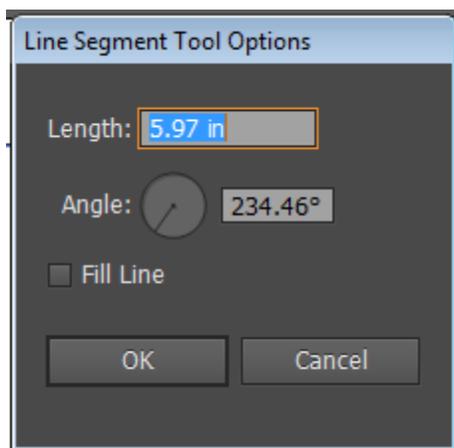


Line tool



Similar to the pen tool, the Line segment tool is useful for straight lines.

When the line tool is selected, clicking ones will give you a pop up option:



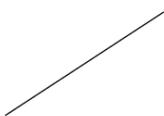
This will allow you to set the length and angle.

If you want to draw your own line, click and drag where you want the line to go.

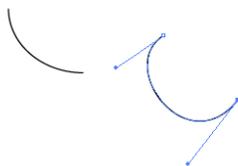
The arc tool is used for curved lines. With the Arc tool you can adjust the arc size with the Direct Selection Tool.

Example

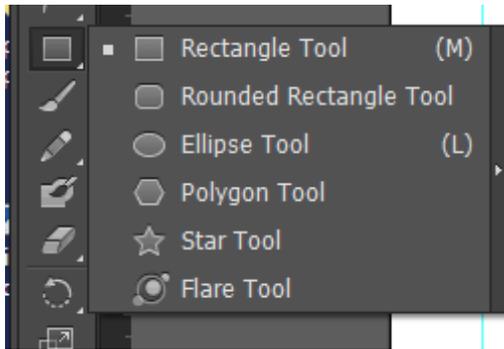
Line tool



Arc tool (anchor point to change arc)



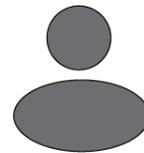
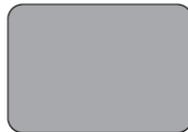
Shape tools



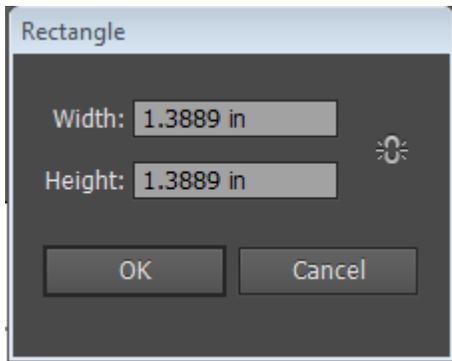
Rectangle (hold shift for perfect square)

Rounded rectangle

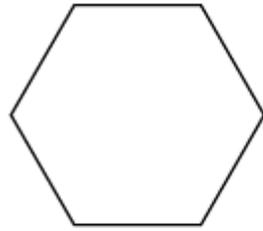
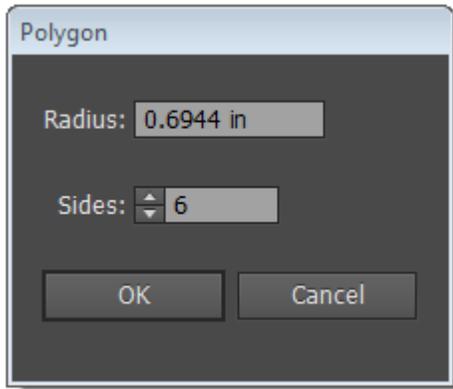
Ellipse tool (Hold shift for perfect circle)



Any time you want to type in specific dimensions for the shape, click once on the artboard to get the following menu.



The Polygon Tool gives you the option to set however sides you want.



Eraser Tool



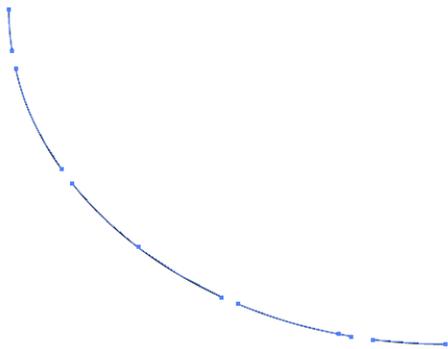
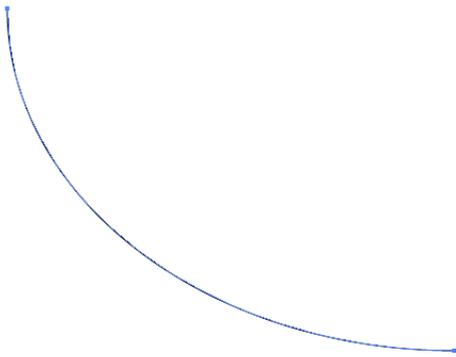
The easiest way to erase something is to select the object and hit delete or backspace.

The eraser tool might be useful if you want to delete certain segments of an object.

Example:

Before (one continuous line)

After (5 divided lines)



Eyedropper Tool



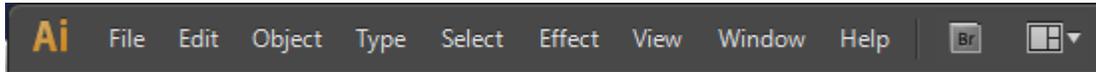
If you want to match the same format (i.e.: color, texture, line width) of an object OR text, use the eyedropper tool. First highlight the object/text you want to change. Then click on the eyedropper tool and select the object/text you want to match.

Artboard Tool



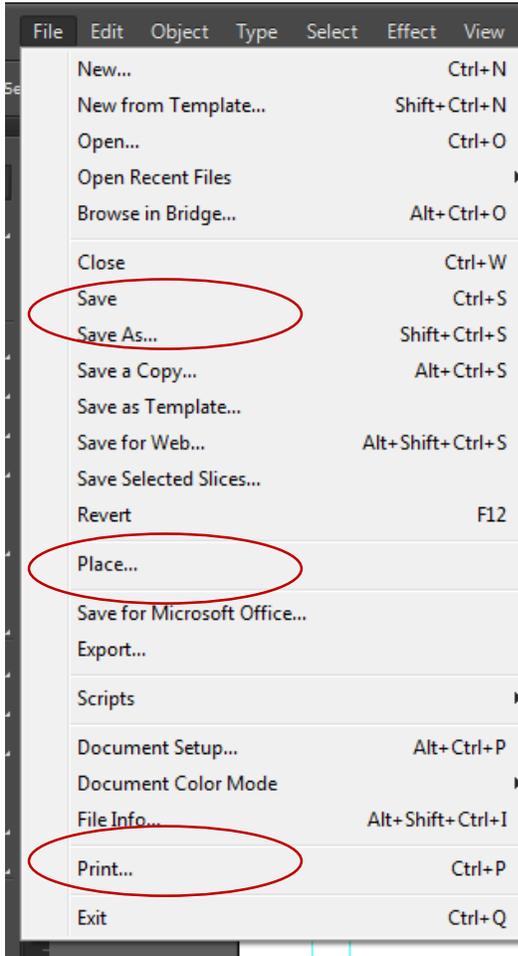
This tool is useful for moving around artboards. If you want to have multiple artboards in your document, you will eventually need to move the artboards around. You can also resize artboards from this tool.

Organizational Tabs



For most tools in the organizational tab, the shortcut keys will be more efficient. You can find the shortcut keys on the right hand side of the drop down.

File

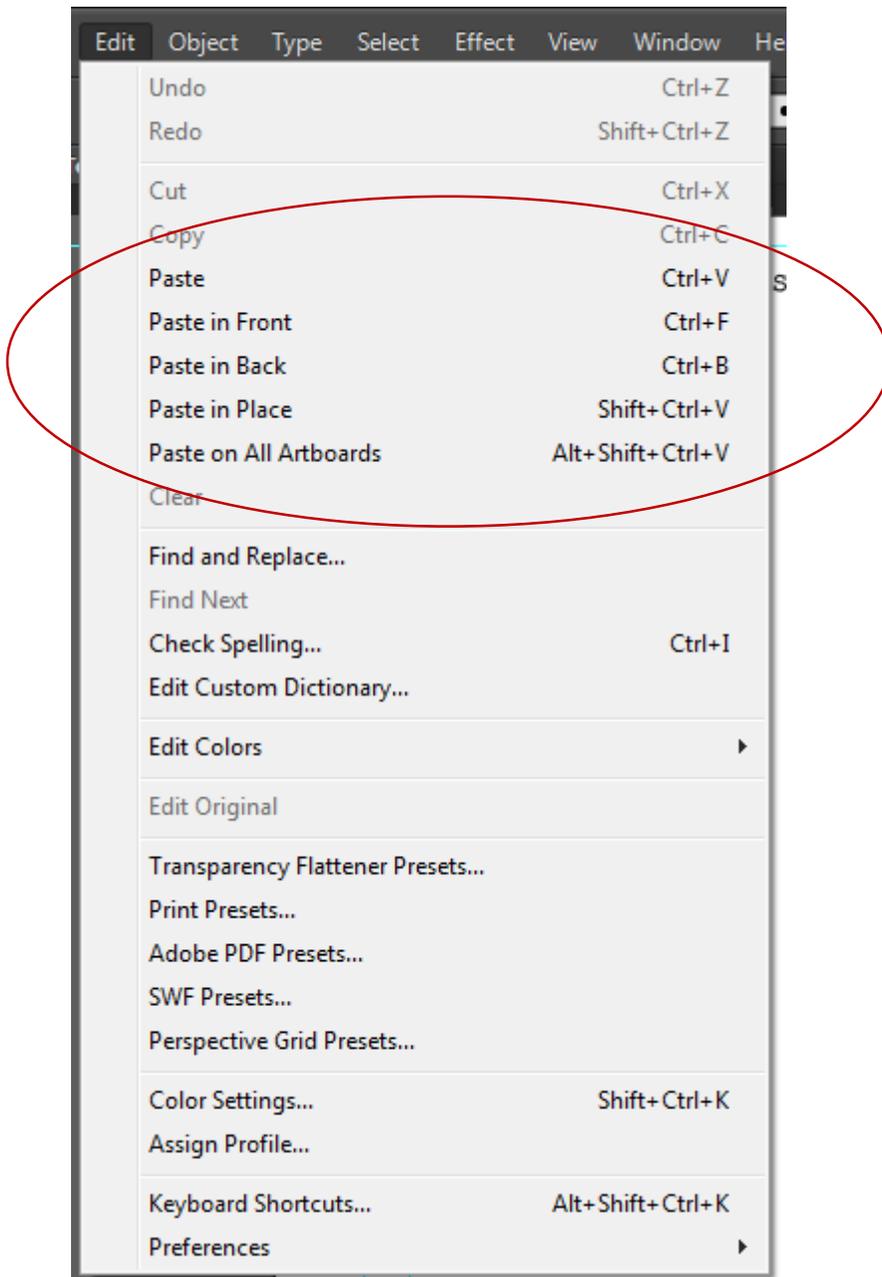


Make sure you consistently “Save” after you “Save as”. Sometimes your computer can crash and you don’t want to lose all the work you have done. The print feature is also available in this tab. See “Printing” for more details.

Place

If you want to bring an object/image into the Illustrator file without using the snipping tool or copy/paste, you can use ‘Place’. The ‘Place’ tool is ideal for an image that is already its own file (i.e. a jpg). If you are taking a graphic from a book chapter or part of a PDF, copy/paste will be easier.

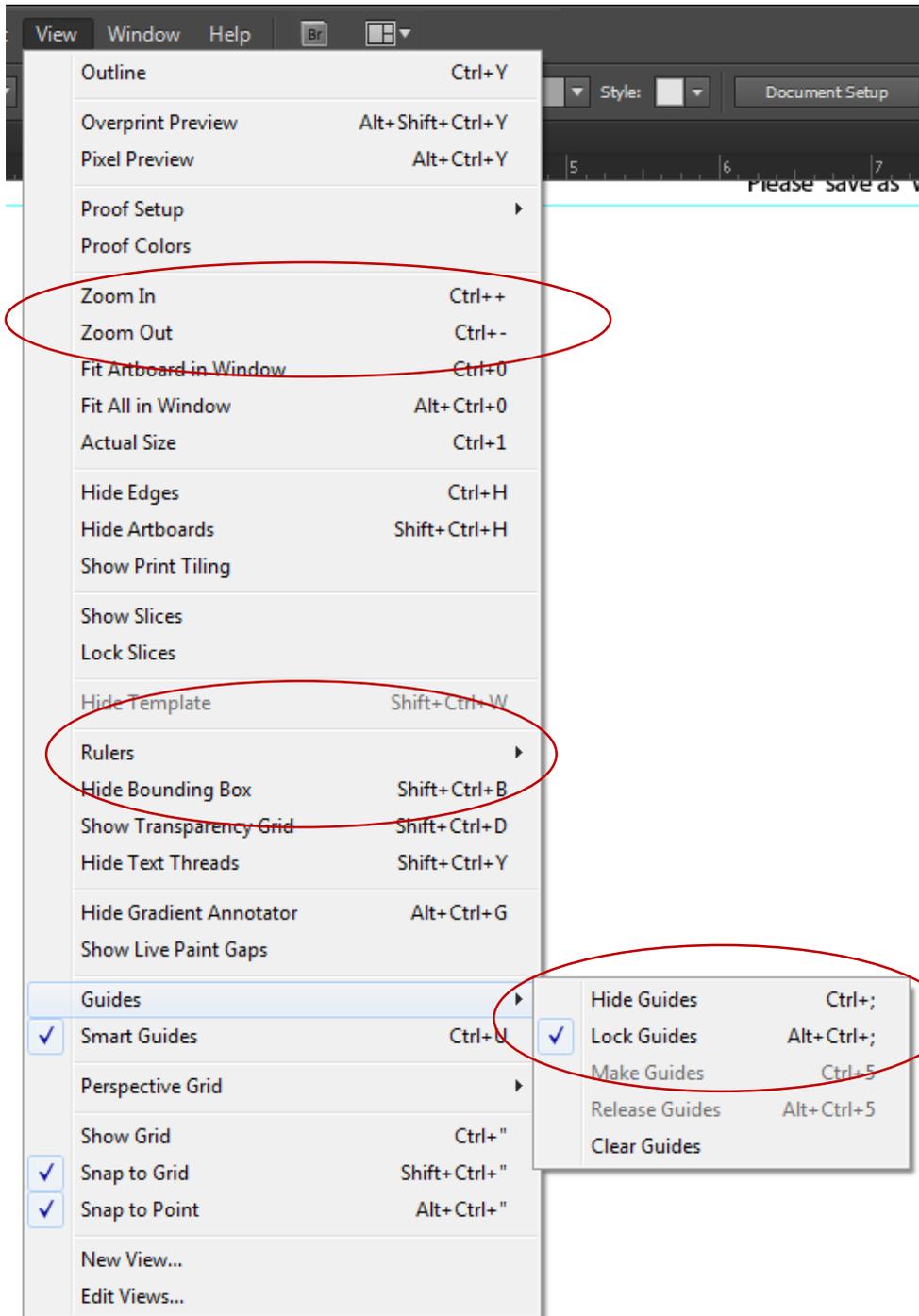
Edit



Most of the tools in the Edit tab are basic and will probably be the most used. Make sure you remember the hot keys for undo (Ctrl +Z), redo (Shift + Ctrl + Z), cut (Ctrl +X), copy (Ctrl + C), and paste (Ctrl + V).

You can also Check Spelling (Ctrl + I).

View



Zoom tool

The zoom in and zoom out features are great for navigating through artboards and to view images in detail. This will help trace a more accurate outline.

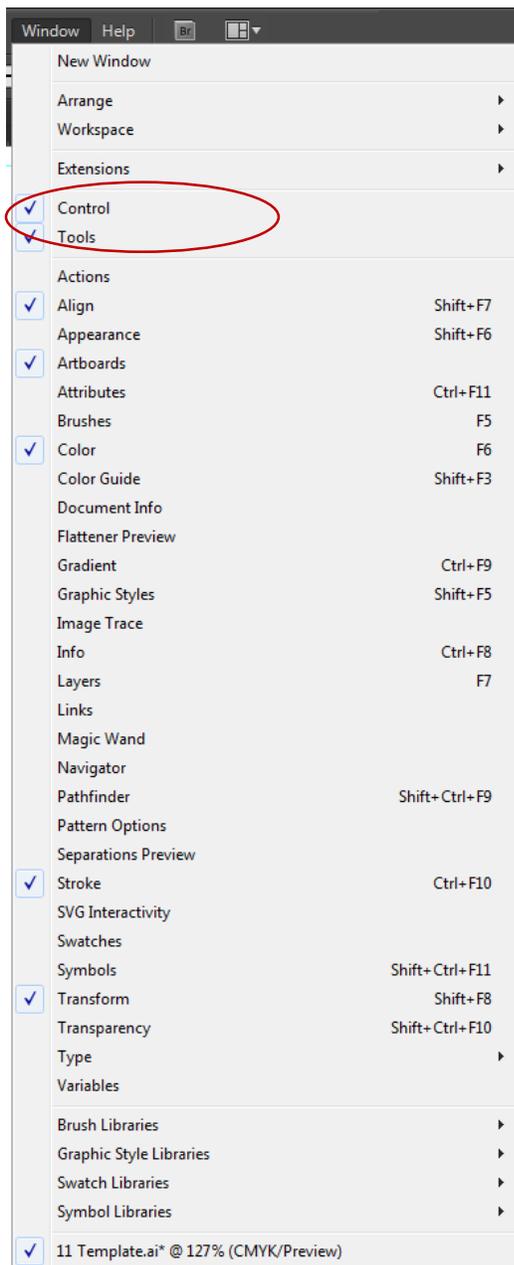
Rulers tool

If you want to see/hide the rulers at the top and left side of the page, use the shortcut (Ctrl +r) or you can find the tool under the view tab.

Guide tool

Under the view tab, you can access the guide tools. You can hide and show guides. If you “lock” a guide it will prevent the guides from moving or being deleted. The guides are used to make the margins in your document. Remember that the margins are important for making sure all your work actually shows up on you final printed tactile. The guide itself will not print along with the other objects on your artboard.

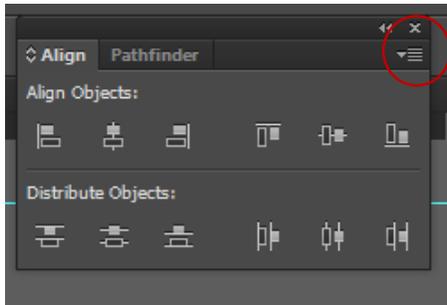
Window



The 'control window' and the 'tool window' are found here and can be removed or turned on from here.

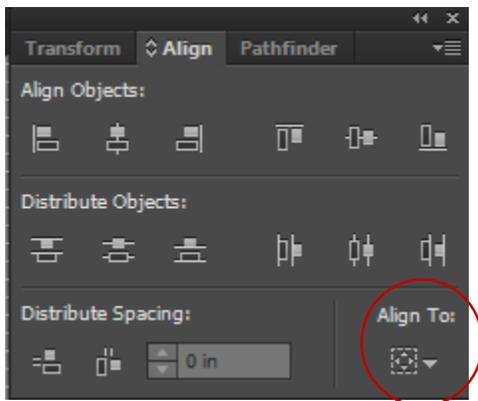
Other useful tools to have available for tactiling would be the align tool, color tool, stroke tool, and artboard/layer tool.

Align tool



The align tool allows you to align or distribute objects equally and/or evenly.

Clicking on the dropdown menu gives you more options

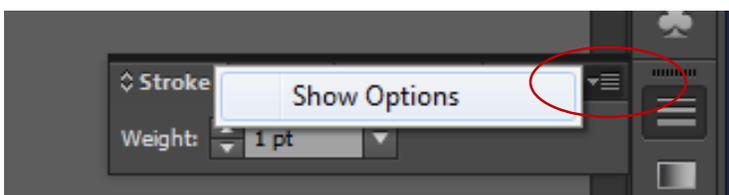


Here you can also distribute space between objects evenly. You can also set the tool to align objects to the selection or artboard.

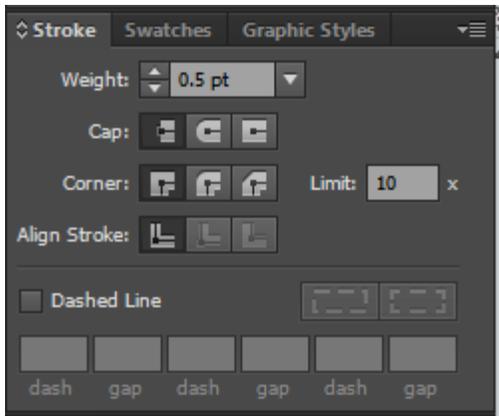
Stroke – dashed lines

Instead of using the different “brush definitions” found in the Control Window, to get a dashed line use the Stroke window.

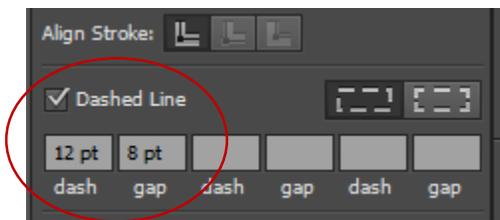
When you first open the Stroke tool you will get a box that look like the picture below. Click on the down arrow menu and then click “Show Options



You should get something that looks like this:

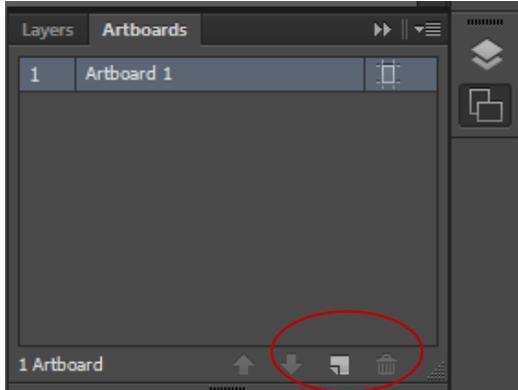


Next you will check the box that says “Dashed Line” and enter in numbers for “dash” and “gap”:

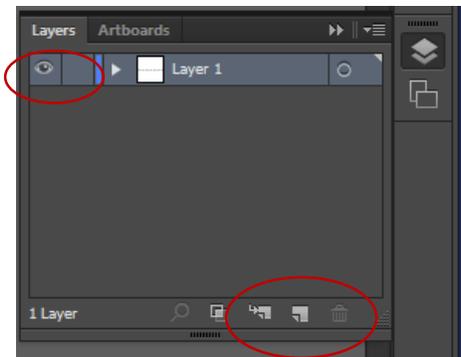


Artboard/ Layer Tool

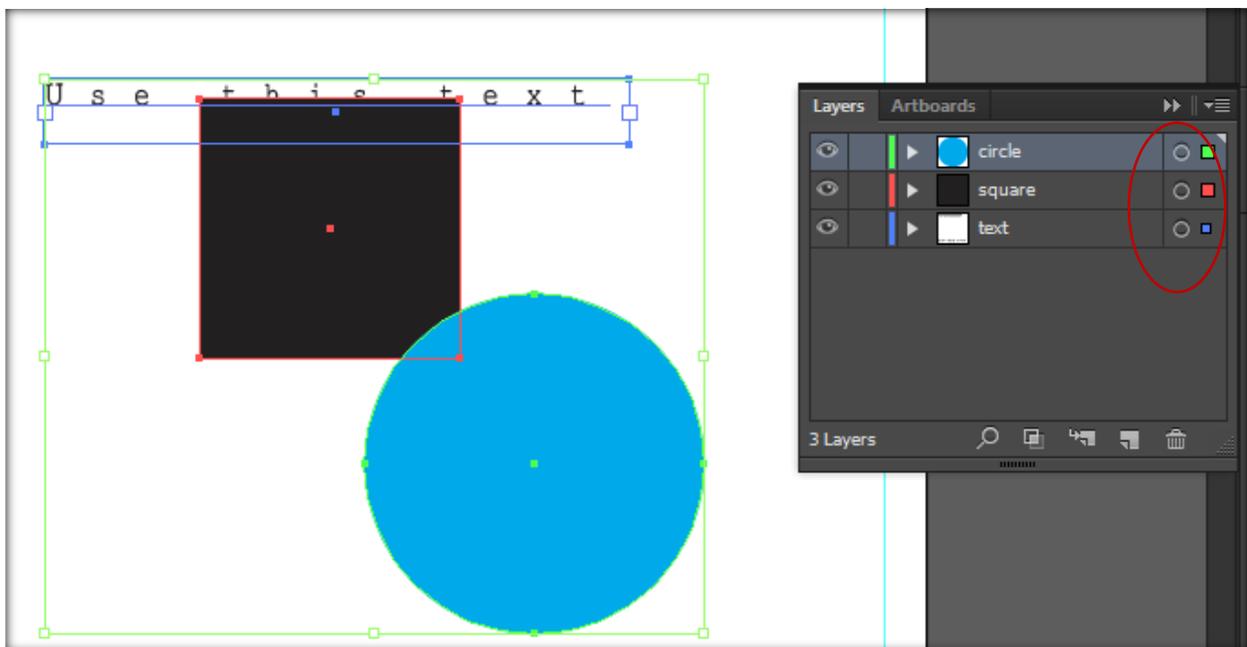
Think of artboards like pages. From this window you can add, delete, and rename artboards.



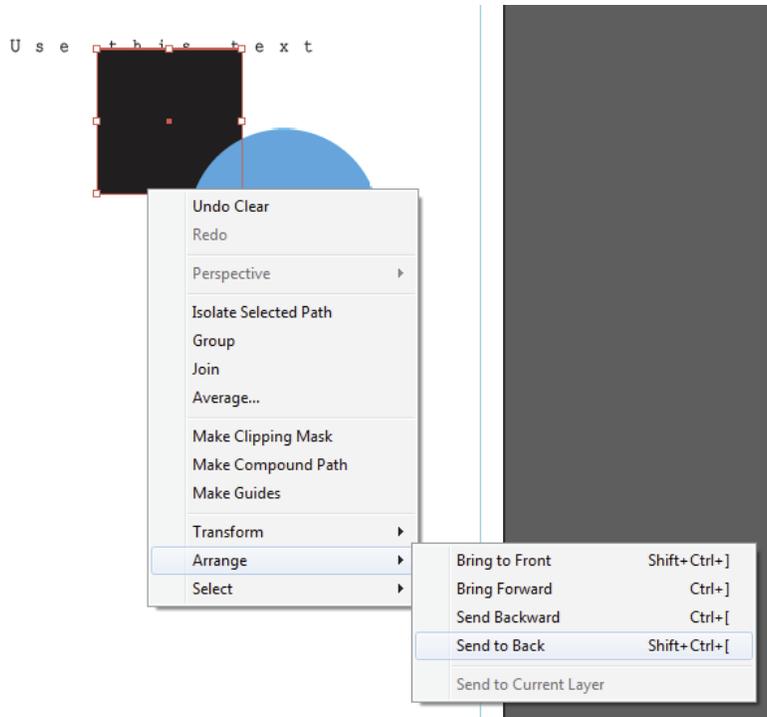
The Layer tool is used for organizational purposes. Like the artboard, you can rename, add and delete layers. The eye is used to hide and unhide an image. This is useful if you don't want to delete anything. For example, you could put all the original images in one layer, and then hide it before you print. You could also use layers to organize each page. Note that if you delete layer, all the objects within that layer will be deleted.



Each layer is color coded. You will also notice that the layers are stacked and would need to be moved around if you wanted the order to switch. If you want to select all the objects in one layer click the circle on the right hand side.

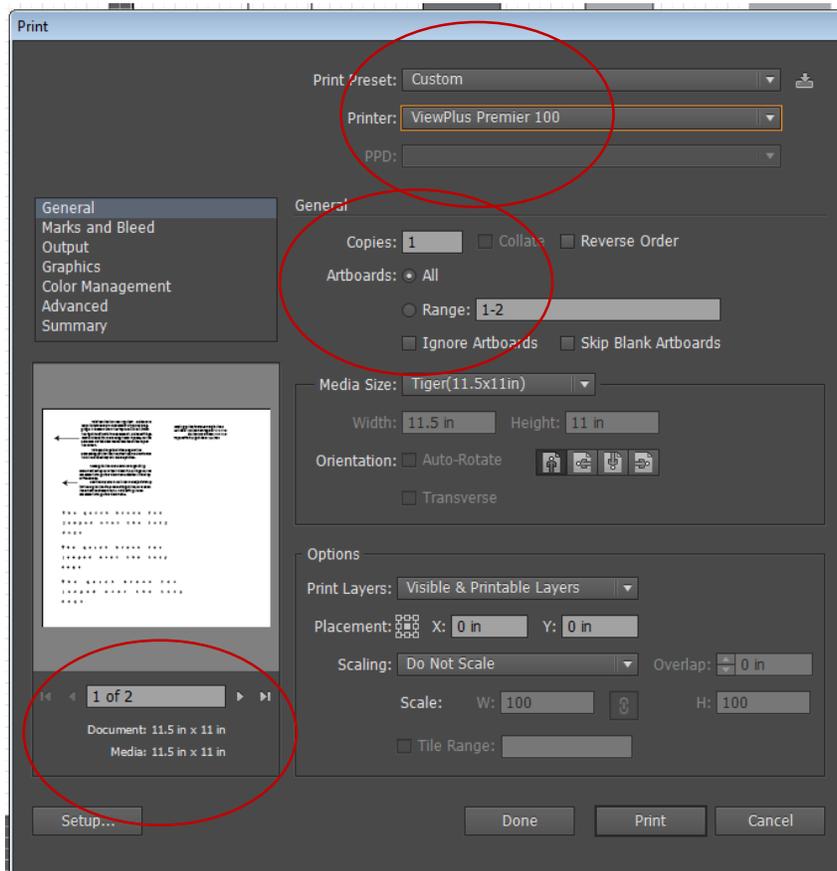


Within a layer you can also arrange the objects. To do so right click on the object the go to arrange and you will be able to move around the objects. This will allow certain things to appear in the front or back.

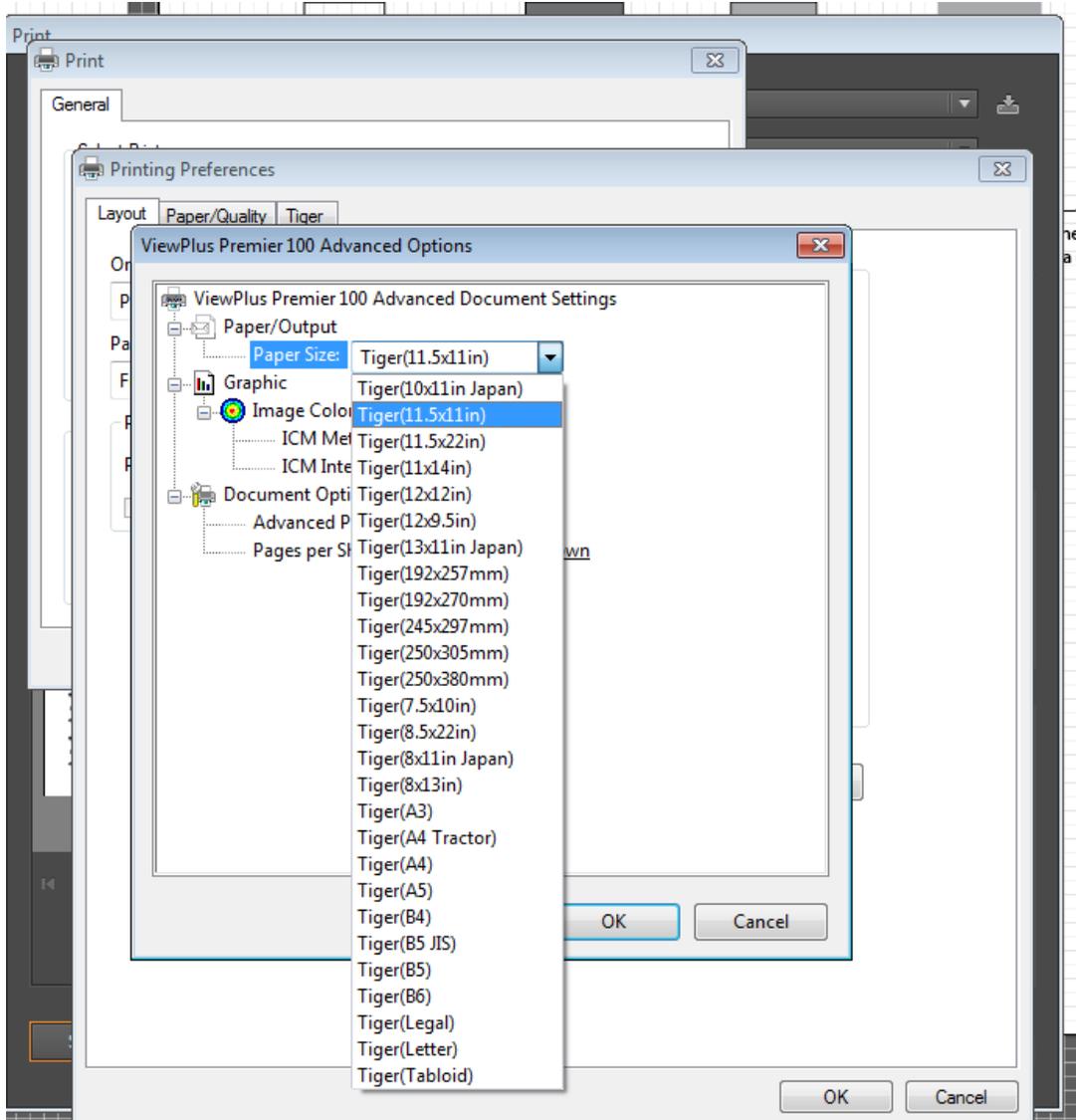


Printing

Printer name: ViewPlus Premier 100



Check to make sure the page size is correct. If not click Setup → Preferences → Advanced. Then you should get something that looks like this:



Make sure you pick Tiger(11.5x11in)

Etiquette

Make sure you use the down arrow to bring the paper all the back to the original position. (Sometimes you have to push it twice to achieve that.)

Announce that you will be printing to avoid confusion.

Always check to see if the printer is set back. (avoids wasting paper, and less work for you in the long run)

Close the closet door before you start.

Appendix A – Alternate Format Request Form

Alternate Format Request

Student Name: _____ Date of Request: _____

Preferred File Type: _____

ISBN/Title	Author	Edition	Year	Publisher

Requested from: _____ Date: _____

Received format: _____ Date: _____

Worked on by: _____ Date Started: _____ Date Ended: _____ Time spent: _____

Delivered to student via: _____ Format Given: _____ Date: _____

Notes:

If picked up by student:

Signature: _____ Date: _____

Appendix B – Login and Password Information

Access Text Network

Login: ds-atlab@colorado.edu

Password: disAbility14

Bookshare

Ask for a provisioned account for Bookshare before using. There is no general purpose login for Bookshare.

DS-ATLAB@Colorado.edu email account

Login: ds-atlab@colorado.edu

Password: disAbility14!

Large File Transfer Service

Use same credentials (above) as for email account login.

Appendix C

Sample wording for email to send to publishers requesting alternate format. FERPA guidelines and Federal law prohibit us from disclosing the name of the student or the nature of their disability, and we also must be careful about disclosing personal information inadvertently when a publisher asks us for proof of purchase. All requests should include your name, title, mailing address on campus, and campus phone number.

The wording for an email or contact form is:

Subject: In need of alternate format for a student with a print disability

Body:

We are in need of the following text in alternate format for a student with a print disability. The student has purchased a copy of the text and has a documented disability that requires the provision of alternate format. The book is:

Spectacular Geography
Miller
9780825378915

Any file format will do, as we can convert to what the student needs. Thanks in advance for your assistance.