



Contents

Common Elements.....	2
Color.....	2
Shapes.....	3
Sizes.....	3
Fonts.....	3
Icons.....	3
Create a Graphical / Visual Abstract.....	4
Graphical / Visual Abstract Elements.....	4
Create an Infographic.....	5
Create a Poster.....	5
Poster Elements.....	5
PowerPoint Tips.....	5
Adjust Size of Slide.....	6
Lock Background.....	6
Navigate Items in Selection Pane.....	7
Type in Your Text.....	8
Insert a New Text Box.....	8
Insert Icons.....	8
Change Color of Icons.....	9
Change Size of Icons.....	9
Ungroup Icons.....	10

Insert Shapes.....	10
Merge Shapes	11
Keyboard Shortcuts for Objects.....	11
Insert Pictures	11
Convert Bulleted/Numbered Lists to SmartArt	12
Convert SmartArt to Shapes	13
Adjust Graphic Elements.....	13
Crop an Image.....	14
Save an Image as a Picture.....	15
Maximum Number of Undos	15
Resources for Art / Icons.....	16

Common Elements

Elements that really stand out when you see graphical/visual abstracts, infographics, or posters:

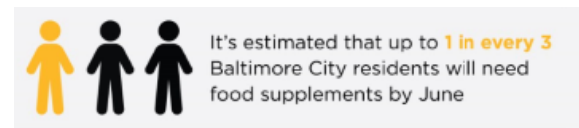
Color **Shapes** **Sizes** **Fonts** **Icons**

Color

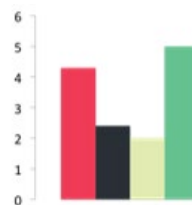
Color is used to make data stand out and to help tell a story. Alternating color blocks are used to separate sections of graphical/visual abstracts, infographics, or posters.



Color is often used to differentiate items when counting or to differentiate important data.



And of course, color is used in charts and graphs.



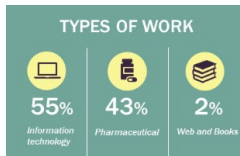
Shapes

Paragraphs or bulleted lists are often converted into shapes to make them stand out.



Sizes

The sizes of items—whether numbers, words, or graphic elements—are often used to show their importance or make comparison easier.



Fonts

Cool fonts in headings can provide a level of sophistication. In this example, the sleek font and different sizes make it look professional but interesting. With a lot of white space around it, it really stands out.

CLINICAL AND ECONOMIC VALUE
OF PRODUCT™ (generic)

Icons

Icons are used to represent an idea quickly.

They can be used to show what's in the text.

Where should I wear one?
It's important to cover your face when you are in places with a lot of people like:

- Grocery stores and other food/meal distribution sites
- Pharmacies
- Public transportation, or other shared rides
- Other crowded public areas where social distancing measures are hard to maintain, like parks and trails

Sometimes symbols or icons are used as bullets.

Details to Remember

- ✓ Provide a place for checkmarks!
- ✓ Add instructions for teams.

Sometimes icons are used to help count and to show the differences between items.

SPEAKING

Spoke at 2 Conferences and 1 Meeting

Gave 4 Webinars

Create a Graphical / Visual Abstract

When a template is provided by the journal, open it in PowerPoint and add content as needed.

If the journal does not provide an actual template, you can use the following template:

<https://assets.ctfassets.net/o78em1y1w4i4/60l4lziUOXboluLlkxVYAf/94cbd4abc0637574ef9b41129a3e5c8a/Visual-abstract-template-CMT-April-2021.pptx>

Or you can create one of your own in PowerPoint using the tips in this handout and the following best practices:

- <https://www.elsevier.com/researcher/author/tools-and-resources/graphical-abstract>
- https://www.surgeryredesign.com/s/VisualAbstract_Primer_v4_1.pdf

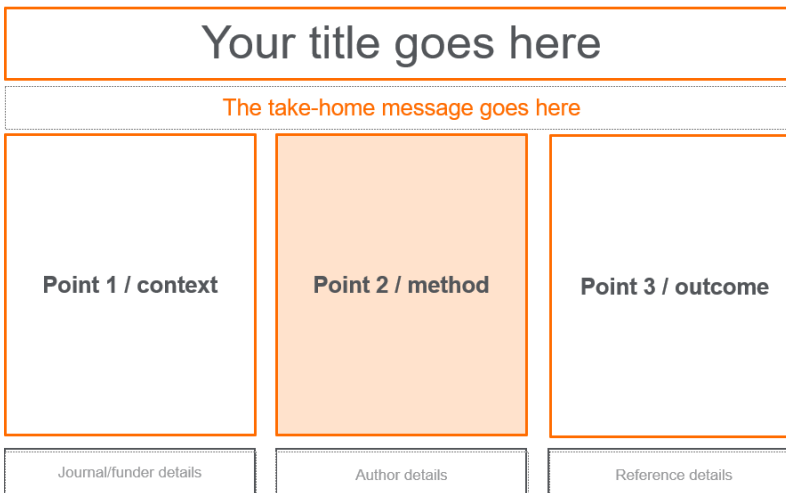
Graphical / Visual Abstract Elements

Graphical/visual abstracts rely on color, shapes, sizes, fonts, and icons to make information stand out. But their format is more constrained because of how they are used.

Graphical/visual abstracts generally require the following:

- Title
- Keywords or message
- Key points with icons
- Journal information
- Author information
- Link to journal article

Most templates have three panels as shown in this PowerPoint template:



From Elsevier website:

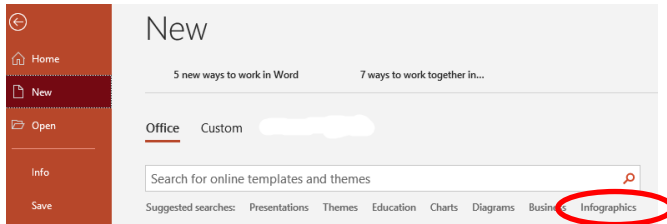
<https://assets.ctfassets.net/o78em1y1w4i4/60l4lziUOXboluLlkxVYAf/94cbd4abc0637574ef9b41129a3e5c8a/Visual-abstract-template-CMT-April-2021.pptx>

Create an Infographic

While there are many apps on the web to help you create infographics, it's sometime best to use a tool you know and that is readily available to you and your co-workers: PowerPoint.

To create an infographic from a template in PowerPoint, do the following:

1. Open PowerPoint.
2. Click **File**, then **New**.



3. Select **Infographics**.
4. Choose a template that either seems to fit your needs or that has an appealing color scheme or layout.
5. Add content and adjust elements using instructions in this handout to tell your story.

Create a Poster

While PowerPoint does not have any templates for research posters, many apps that have infographic templates have templates for them (eg, Canva). And there are websites that have free PowerPoint templates for posters:

- Poster Nerd has many templates, tutorials, and printing services: <https://www.poster nerd.com/sciposters-templates>
- PosterPresentations.com has many templates, a QR code generator, a font size checker, and printing services: <https://www.posterpresentations.com/free-poster-templates.html>
- Four Waves provides advice (mentioned in slides): <https://fourwaves.com/blog/how-to-make-a-scientific-poster/>

Poster Elements

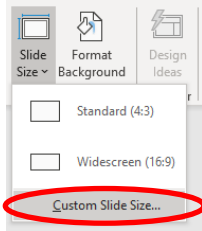
Like graphical/visual abstracts and infographics, posters rely on color, shapes, sizes, fonts, and icons to make information stand out. Like graphical/visual abstracts, they are often landscape, in 3 (or 4) columns, and they read from left to right with content that covers an introduction, data, conclusion. Like manuscripts, they tend to use more tables and bar or line graphs and cover all the data from the manuscript. Of the documents discussed in this handout, they are the largest; 48" x 36" is a standard size for a poster but check requirements if you will be displaying at a conference or congress.

PowerPoint Tips

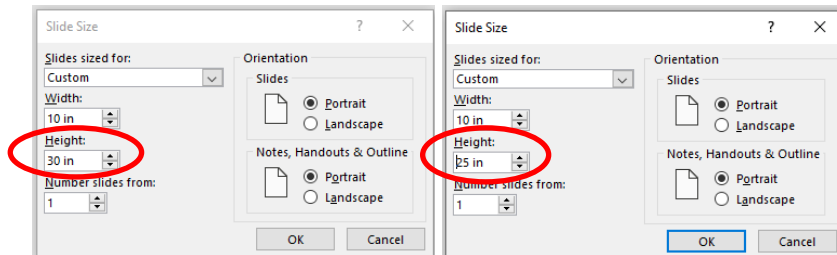
The following tips are helpful for working with graphical/visual abstracts, infographics, and posters in PowerPoint.

Adjust Size of Slide

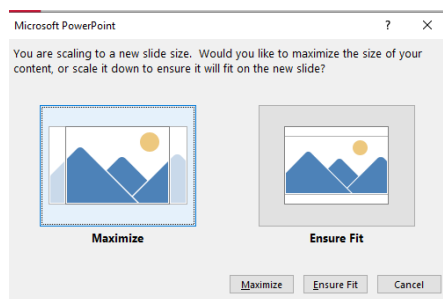
1. From the **Design** tab, click **Slide Size**.
2. Select **Custom Slide Size**.



3. Type in a smaller height, then click **OK**.



4. Click **Maximize** or **Ensure Fit**.



Note: Which to choose is sometimes hard to tell. Pick one that seems reasonable, then Undo if you don't get the desired consequences.

Another option, if Maximize or Ensure Fit does not produce good results, is to do the following:

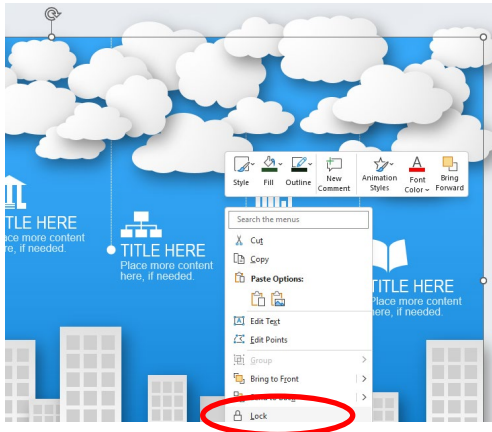
1. Select all contents on the slide (Ctrl + A).
2. Group them all (right-click and select **Group**).
3. Cut (Ctrl + X).
4. Change the size of the slide using either method.
5. Paste (Ctrl +V) back on slide and move around.

Lock Background

When working with colorful graphical/visual abstracts, infographics, and posters, there is often a color box acting as a background behind the other objects. As you move around some of the objects on top of the background, you may find yourself accidentally moving or deleting the background.

To prevent this, do the following:

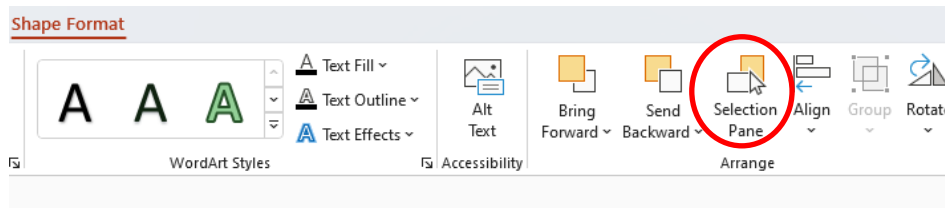
1. Click in the background.
2. Right-click.
3. Select **Lock**.



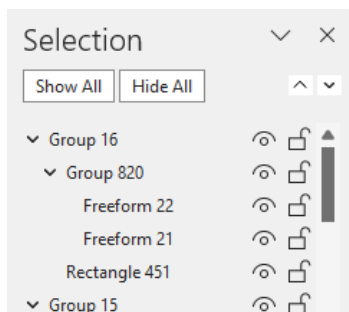
Navigate Items in Selection Pane

If your template has many objects, you might struggle to click on the right object to delete or adjust it. This is where the selection pane might come in handy.

1. Click **Shape Format** tab.
2. In **Arrange** group, click **Selection Pane**.



The selection pane will appear on the right of your screen, showing you all the objects on the slide:

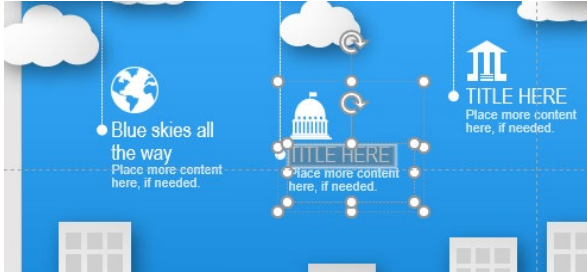


You can now click on an object in the selection pane, and it will be selected on the slide, allowing you to edit it as needed. You can also lock objects there (by clicking the lock next to the object), rearrange them on the layer, hide them (by clicking the icon that looks like an eye next to the object), and see how they are grouped together.

If you are working with graphical/visual abstracts, infographics, and posters with lots of objects, and you think you will be working and re-working it, you might find it worth your time to name the objects in the selection pane. Just click on an object, and once it's selected, double-click on the text and change the name.

Type in Your Text

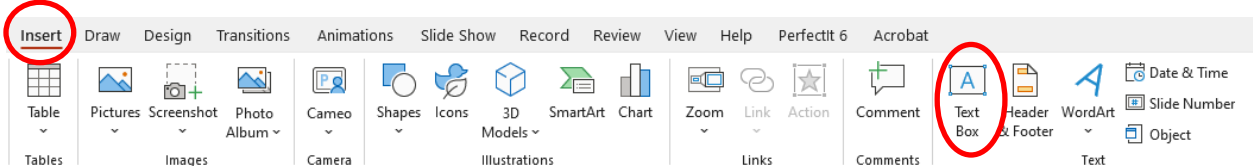
1. If a template has existing text boxes, click a text box to select the text, then type your text.



2. Continue to adjust text boxes and content as needed.

Insert a New Text Box

1. Click **Insert** tab.

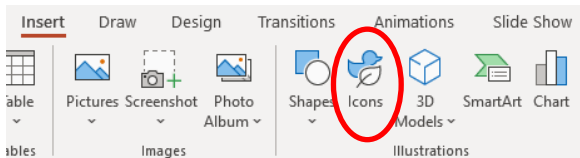


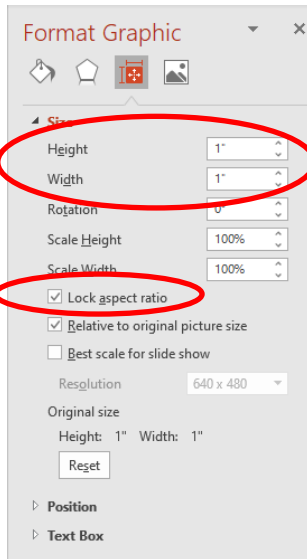
2. In **Text** group, click **Text Box** button.
3. Click the mouse on the slide where you want to put the text box, hold the mouse to expand to the size needed, then let go of the mouse to finish creating the text box.

Insert Icons

In addition to using the icons in templates, you can insert icons from PowerPoint and change them as needed to provide visual appeal or match the color scheme of your infographic:

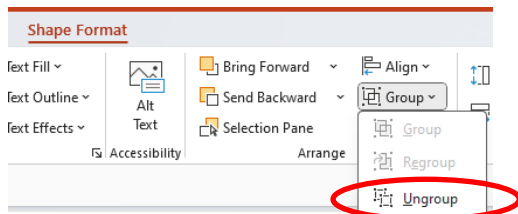
1. From **Insert** tab, in **Illustrations** group, click **Icons**.





Ungroup Icons

1. From **Shape Format** tab, in **Arrange** group, click arrow next to **Group**.

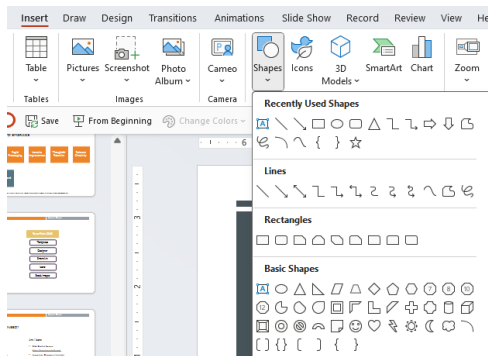


2. Click **Ungroup**.

Insert Shapes

You can insert shapes, like boxes or circles, to contain content.

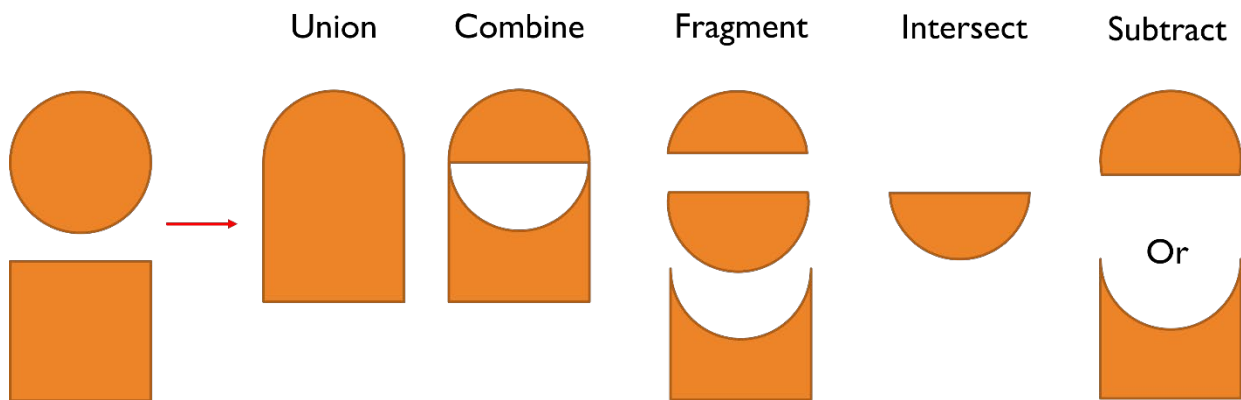
1. From **Insert** tab, in **Illustrations** group, click **Shapes**.



2. Choose a shape, then adjust the size or color as needed.

Merge Shapes

1. Create two shapes.
2. Select them both.
3. In the **Shape Format** tab, click the arrow next to **Merge Format** to choose a type:
 - When you choose **Union**, the two shapes become one.
 - When you choose **Combine**, the two shapes join everywhere but where it overlaps.
 - When you choose **Fragment**, you are provided with the overlap as one shape and the top and the bottom as two separate shapes.
 - When you choose **Intersect**, you are left with just the shape where they overlap.
 - When you choose **Subtract**, you are left with the shape on top of the other shapes, with the overlap taken out.



Keyboard Shortcuts for Objects

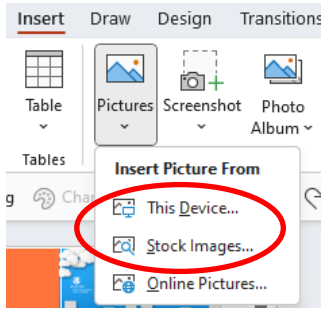
These shortcuts are helpful when breaking apart icons, templates, SmartArt, and shapes and putting them back together to meet your needs.

Operation	Shortcut
While moving an object, it will copy it	hold Ctrl
While moving an object, it will keep it in line (vertically or horizontally)	hold Shift
Select all objects	Ctrl + A
Group objects	Ctrl + G
Ungroup objects	Ctrl + Shift + G

Insert Pictures

You can insert images, like logos or other graphics specific to your company or project, or you can explore some of the options in PowerPoint.

1. From **Insert** tab, in **Illustrations** group, click **Pictures**.



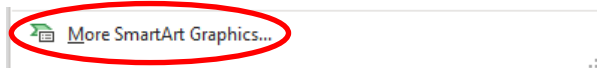
2. If you have your own graphics, click **This Device** and browse until you find your graphic.
3. If you want to explore PowerPoint's stock images, click **Stock Images**.

Convert Bulleted/Numbered Lists to SmartArt

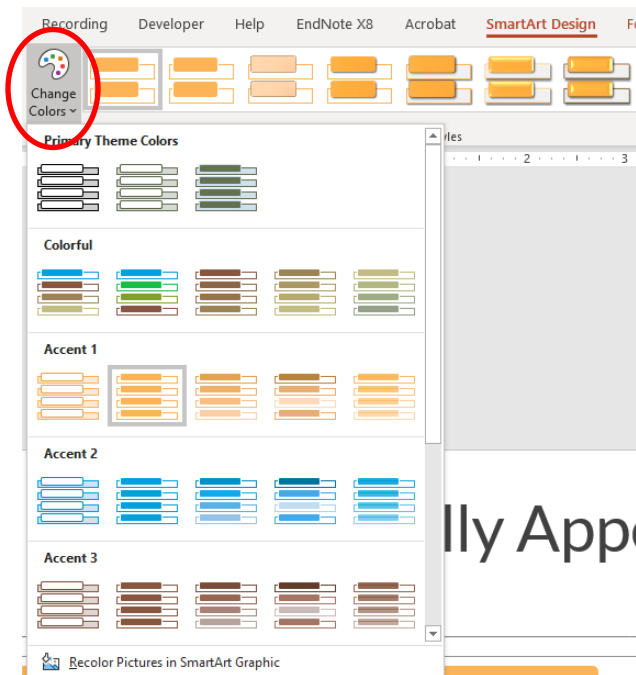
1. Select the bulleted list.
2. On **Home** tab, click **Convert to SmartArt**.



3. Choose a type of SmartArt that fits your text. If you don't see anything that appeals, click **More SmartArt Graphics**.



4. Click **Change Colors** if you don't like the default color.

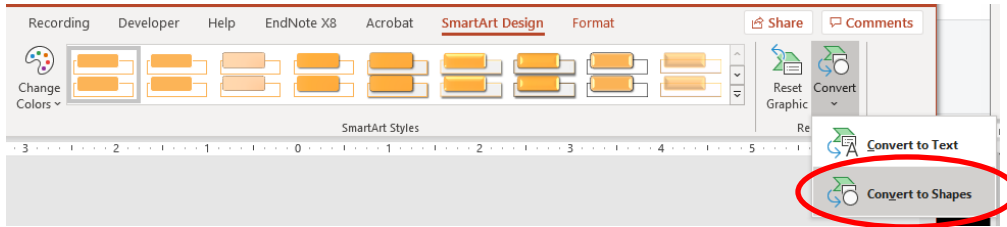


Convert SmartArt to Shapes

While SmartArt is convenient, it can slow down your progress if its default boxes are too small for your text, or it might take up more space than is really needed. While it can be a great tool, do NOT make your text fit the SmartArt. Convert the SmartArt to shapes, so you can better control how it displays your data.

To convert a SmartArt to shapes:

1. Select the SmartArt by clicking on the outermost box.
2. From **SmartArt Design** tab, click **Convert to Shapes**.



3. Adjust the whole shape or the individual items within it as needed.

Note: If you have just changed a bulleted list or other text to SmartArt, ungrouping twice will also achieve this with the added benefit that the objects are now ungrouped.

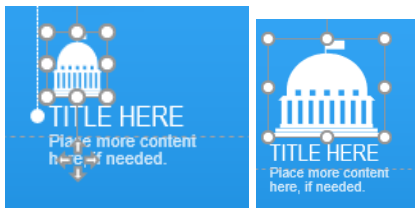
This allows you greater control of text size, shape size, and how the shapes move within the larger shapes.

Adjust Graphic Elements

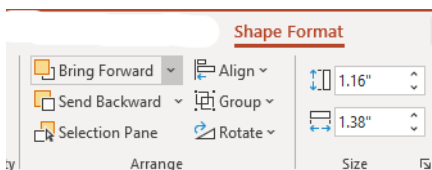
1. Click a graphic element to change its color.



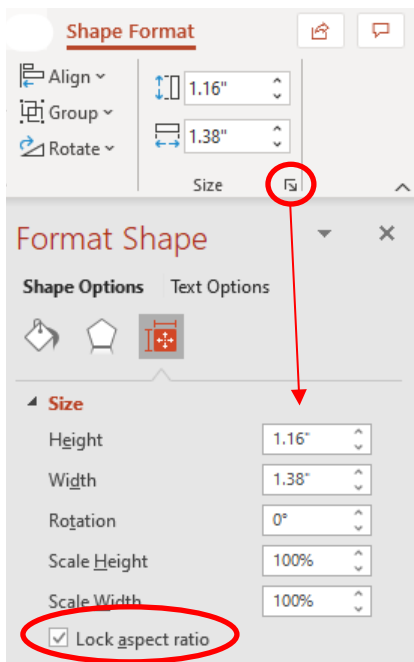
2. Click on the circles at the corners of the bounding box to change the size.



3. If you want to take more control of the size, go to the **Shape Format** tab, within the **Size** group to choose the dimensions of your object.

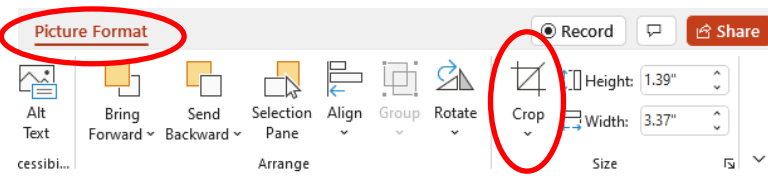


To keep the item from looking distorted as you change its size, click the dialog box launcher to open the **Format Shape** menu, which allows you to lock the aspect ratio as you make the item larger or smaller.



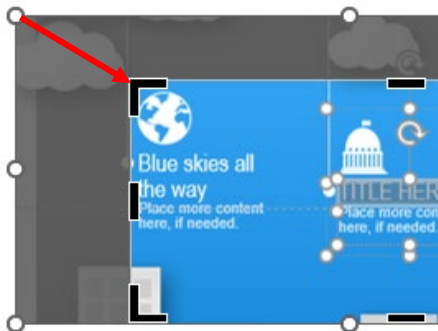
Crop an Image

1. Click the image.
2. Go to **Picture Format** tab.
3. In the **Size** group, click **Crop**.



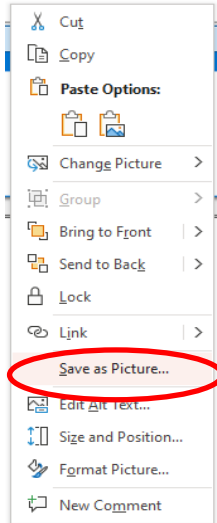
4. When you see black bounding bars, pull them inward to cut off whatever part of the image you don't want:

- If you pull in a corner, the box will shrink in two directions.
- If you pull in using one of the lines in between the corners, the box will shrink in one direction.

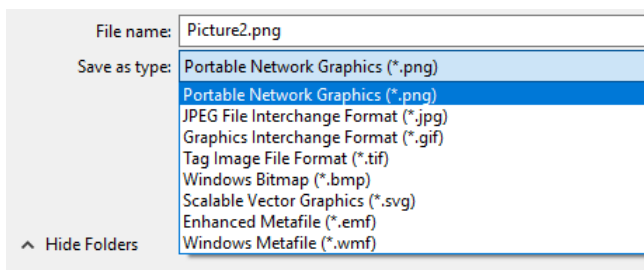


Save an Image as a Picture

1. Right-click on the image.
2. Click **Save as Picture**.



3. Give it a name in the box next to **File name**.
4. Choose what type of file in the box next to **Save as type**.

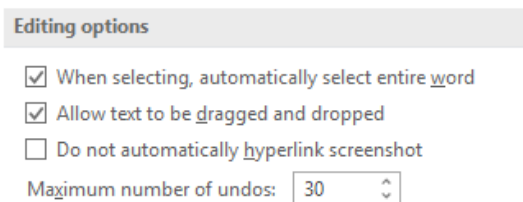


Note: Unless asked for a particular file type, I tend to use .png for web and .jpg for Word docs and PowerPoints.

Maximum Number of Undos

When playing around in PowerPoint, you might notice that there are not as many undos as you get in Word or other programs. To adjust the maximum number of undos in PowerPoint:

1. Go to **File > Options > Advanced**.



2. Increase the number next to Maximum number of undos.

Resources for Art / Icons

- NIH BioArt Source <https://bioart.niaid.nih.gov/>
- Innovative Genomics Institute <https://innovativegenomics.org/glossary/>
- SciDraw <https://scidraw.io/>
- Health icons <https://healthicons.org/>
- The Noun Project <https://thenounproject.com/>