

# A scientist's guide to making nice-looking presentations

\*\*N.B. you're on your own with content



before getting started

**Got PowerPoint open already?**

**Close it**

*It'll just distract you*



Get in the right **frame of mind**.

**Close your eyes and repeat the following:**

***“Making presentations is fun and I will enjoy it”***

***“Making presentations is fun and I will enjoy it”***

***“Making presentations is fun and I will enjoy it”***

***“Making presentations is fun and I will enjoy it”***

***“Making presentations is fun and I will enjoy it”***

***“Making presentations is fun and I will enjoy it”***

2.

THE *VIBE*

Decide on the ~vibe~ of your presentation

**The vibe is *everything*. Some things to consider:**

- 1. What are you presenting?** *Squirrel ecology? Cancer treatment?*
- 2. Who is your audience?** *Peers? Hiring committee? Students? Public?*
- 3. Where are you presenting?** *Conference? Classroom? Lab meeting?*

vibezz

Default  
"Ya, I had to make this presentation..."

Black text on white,  
Calibri font

Big round title font  
Bold colorful background

Relaxed

This is serious but you can laugh

Simple and sleek

I'm going to tell you something important

Empty space  
Stripe breaks up slide

Cartoonish font  
...and a cartoon

FUN!

I expect laughter



**Achieve your vibe by manipulating:**

**FONT**

**COLOR**

**whitespace**

**SIZES** OF **THINGS**

\*Funnily enough, these are also the ways to emphasize points.

Ok you can open PowerPoint now



- Not
- too
- many
- bullet points
  - And no sub bullet points
    - according to some people

Bunched up paragraphs are hard for people to read and listen to you at the same time, so

keep text to a minimum

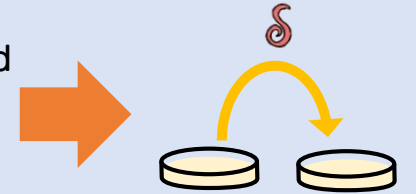
add more space between lines

let your slide breathe

# the basics

Don't use words when a diagram will do the job better

"We transferred worms to a new plate"

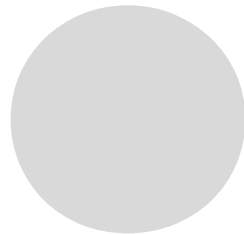


Make sure text is readable  
Keep backgrounds simple



3

**FONTS!**

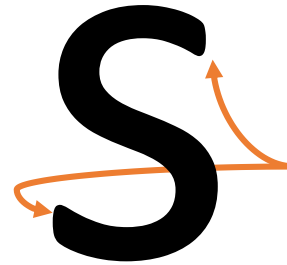
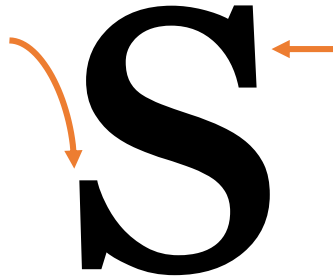


Friggin' *love* fonts

# “A font speaks 1000 words”

– a very old proverb, I’m sure

serif fonts have **serifs**  
(those overhanging  
lines on the ends  
of letters)



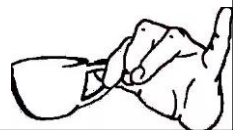
sans serif  
fonts don’t  
have serifs

Serif fonts are better on  
**paper.**

It’s ok to use serif fonts sparingly  
onscreen, e.g. headings.

## Serifs

Make things look formal and fancy



## Sans serifs

Are more chill and modern

## A mix

Is nice, though.

# choosing a font

**Think back to your *vibe*. What are you going for?**

Fun and quirky!

Computer code

Minimal & modern

Drinking tea in the 1800s

High school essay

Horror

I hate making presentations<sup>1</sup>

Simple & effective

<sup>1</sup>*Calibri isn't a bad font, just overused.*

# How do I choose the right font?

There's not one right answer to this question, but there are wrong ones.

- **Stay away from handwritten, *script*, or otherwise stylized fonts unless they're for a specific purpose: they're hard to read.**
- **And for the love of god, comic sans is never the font you want.**

# PAIRING FONTS

Keep things interesting by using different fonts!

But keep it to **two**.

Unless you have a really good reason.

Peanut butter  
And jelly

Two peas  
In a pod

Bread  
And butter

Hand  
In hand

Instead of different fonts, you  
can also use different typefaces:

Lato Light

Lato

**Lato Black**

# font resources

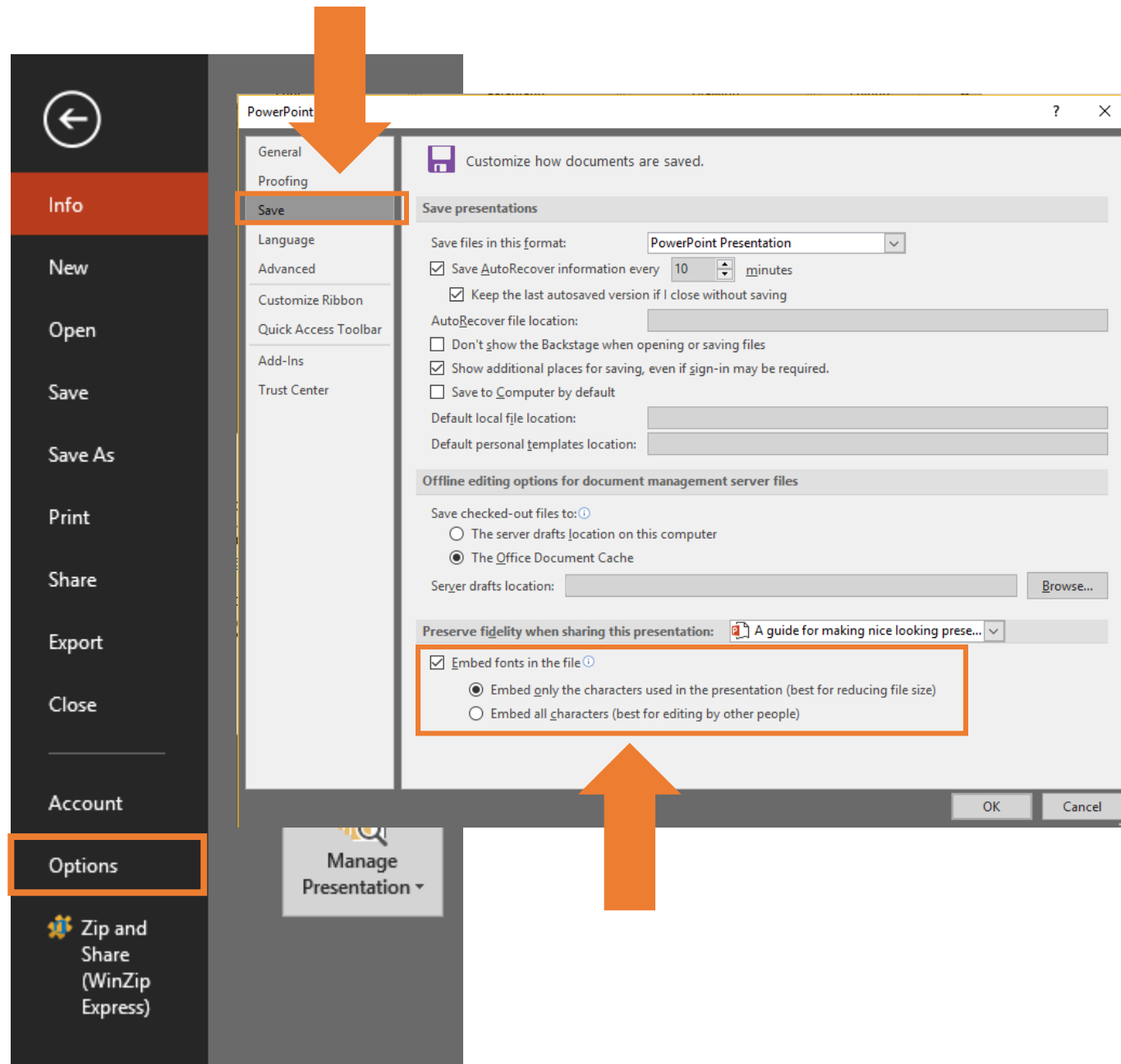
There are loads of free, downloadable custom fonts out there. Go find some inspiration!

- [Font Squirrel](#)

Worried your cool new font won't show up on another computer?

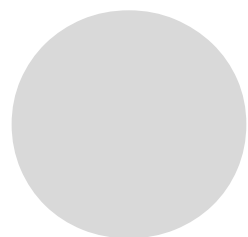
No problem! **Embed it.** (It'll increase the file size but it's so worth it)

Go to: File > Options > Save > Embed fonts



4.

COLOR!





# color is your friend

but color is tricky

Color is a **slippery slope**. It enhances a slide but things can get real ugly reeeaal quick, too.

Some **key** color points:

- **Like fonts, don't use too many.** Pick 2 main "theme" colors that match your **~vibe~**.
- **Keep background colors subdued. Not tryna assault anyone's eyes.**

# accent colors

Color is a super effective way to **emphasize** things.

**Choose an accent color that **contrasts** your theme colors without being too **jarring**.**

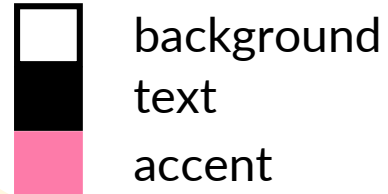
# choosing a palette

## Classic

*It's okay to use black on white!*

pros: nice, minimal aesthetic

cons: bright on the eyes



## Bad Watermelon

*My eyes! They burn!*



## Rebellious

*Ha, not really.*

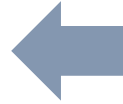


## Better Watermelon

Washed out watermelon



**BLUES**  
Frosty!



Using **cool tones** vs. **warm** ones will evoke unconscious reactions in your audience

**Reds**  
Firey! Or furious?



**Greens**  
Foresty!



Using color palettes that relate to the subject of your talk will bring the whole thing together and make your presentation easier to follow. Like wrapping the audience in a nice blankey.

TALKING ABOUT FOREST ECOLOGY? GO FOR **GREEN!**

**Golds**  
Fancy!



**Monotone palettes are cool too!**

# Consider colorblindness

Not everyone perceives color in the same way! Be mindful of color choices that could render your presentation illegible to some.

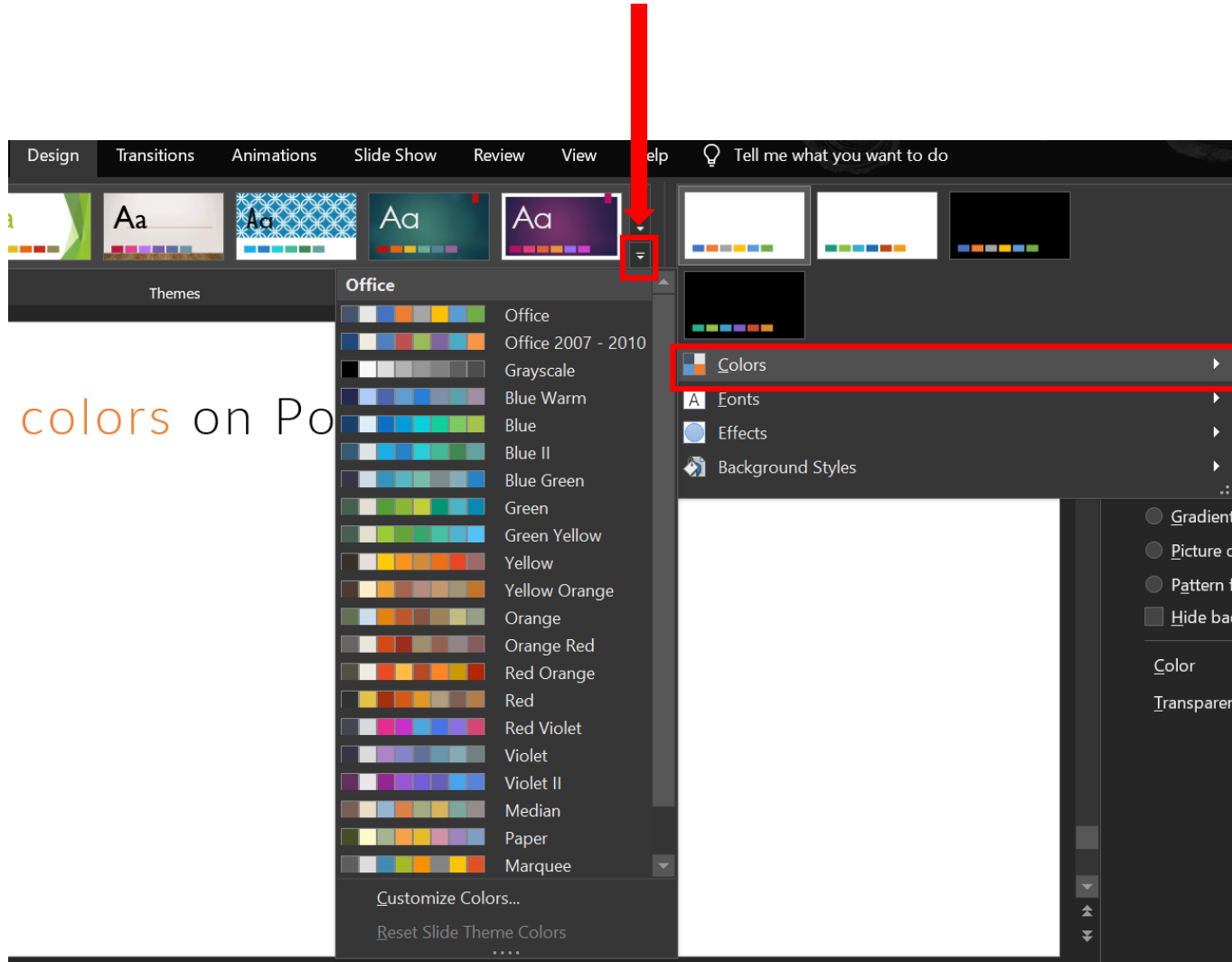
**The most common form of colorblindness is difficulty distinguishing reds and greens** (but unless you're going for an "ugly Christmas sweater" vibe, there aren't great reasons to pair these two).

**Monotone palettes are good for this.**

There are tools you can use to **simulate** your color choices under different forms of colorblindness, in addition to pre-made **colorblind-friendly palettes**:

- [Coloring for colorblindness](#)
- [Color brewer](#)

# colors on PowerPoint

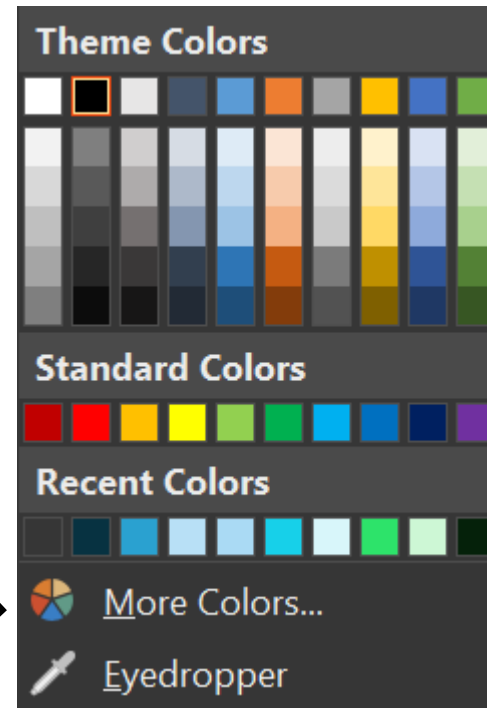


colors on Po

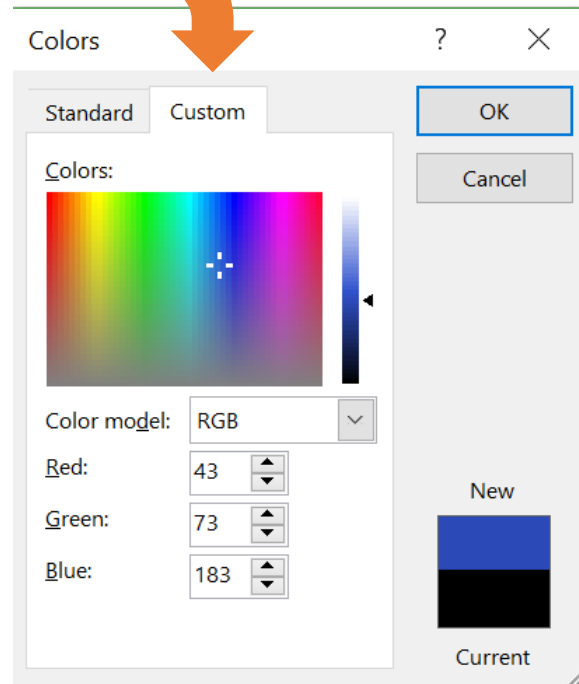
If you don't like the default palette, there are other options!

Design tab > the little down arrow under the scrolly bar on 'Variants' > Colors

# colors on PowerPoint



**Choose custom colors!**



**Need to match a color *exactly*?  
Click anything with the eyedropper tool, and voilà!**

# color resources

**Create your own palette, extract a color palette from a photo you like, or palette inspirations: [Adobe Color](#)**

**[Material design palettes](#)**





**DESIGN!**

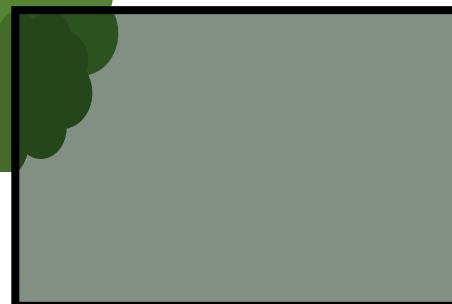
**& technical tips**

# backgrounds

# 101

**Don't make it too busy.**  
It's called a "background"  
for a reason.

Creating **texture** in the  
background makes it  
interesting without  
overpowering slide content.



**1** gradient layer

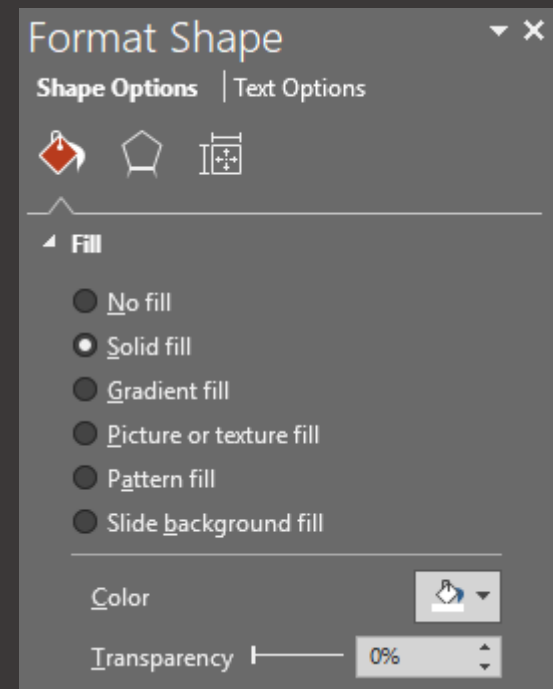
**2** texture layer  
(these are thought bubbles in  
the default shape options)

**3** semi-transparent layer  
tones down the background

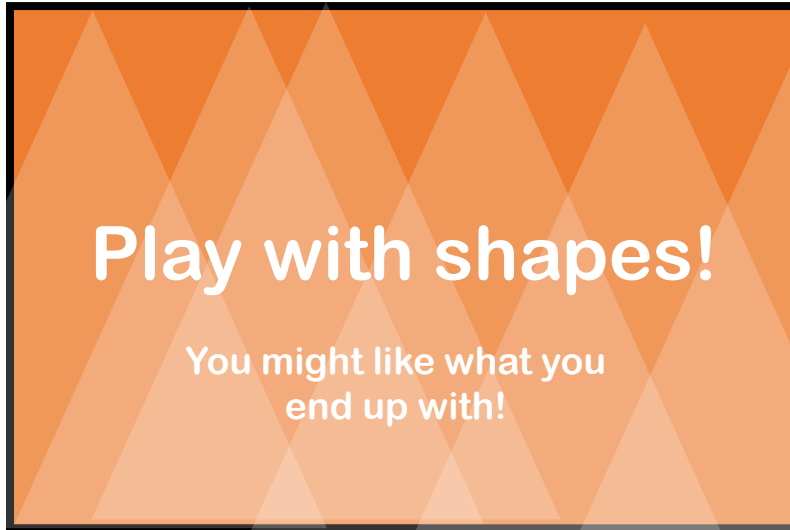
**4** content layer

**Greens**  
Foresty!

Change an object's transparency  
by right-clicking, then Format  
shape > selecting Solid fill, and  
moving the slider.



# backgrounds 101



White triangle at 80% transparency, **copypasted** a bunch of times.

Radial gradient background layer + light blue circles with 75% transparent fill & opaque outlines + 45% transparent black top layer

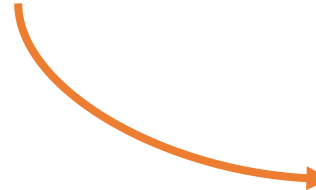


75% transparent lightning bolts, copypasted a bunch of times, with:

64% transparent **white** layer on top,



vs. a **black** top layer.



# backgrounds 101

USE **DIFFERENT**  
BACKGROUNDS ON  
DIFFERENT SLIDES.

Each background can be a variation on the main theme.

Use **solid** backgrounds if there are other visual elements on the slide, like graphs.



North American species

They got species for sure

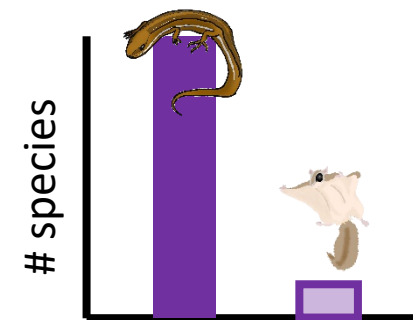
**Flying squirrels**, for  
example.



3 kinds, to be  
exact.



**More** salamander than flying squirrel species



If you want to use a simple white background,

do it.

*They're great.*

# whitespace

Whitespace breaks up your slide and adds visual interest. You can use it strategically to emphasize things, too (**see previous slide**).

Also consider how much space you have from **slide to slide**. Cluttered slides can be followed by slides with a lot of whitespace to provide **relief** during a presentation.

Space  
between  
lines



Space between objects

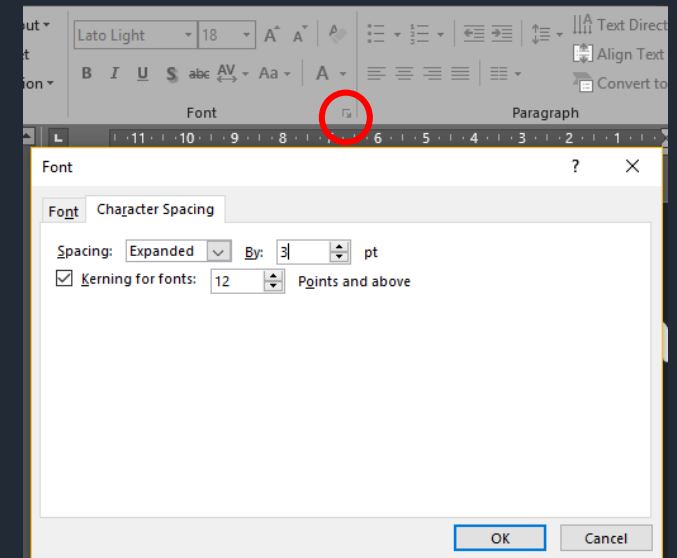
Space between  
letters

Increase space between letters in  
Font > Character spacing > Expanded.

Your font choice also affects whitespace, e.g.:

**Lato Black has little space, but**

Lato Light has lots.



# Size

Make headings really big sometimes.

**Why?** Dunno, it's fun.



PowerPoint has **default size** settings.

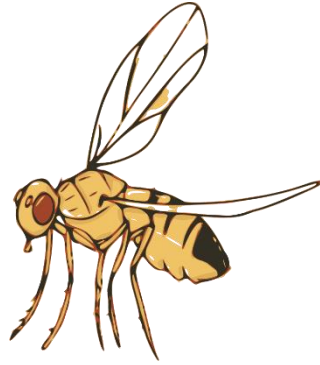
But you don't have to listen to them!

Changing font sizes, or **making objects obscenely large** can make a slide look “designed” with very little effort.

# Size differences are easy to perceive

**So use them when you can,  
rather than only writing it out.**

Flies sampled in the south were smaller than individuals from northern populations.

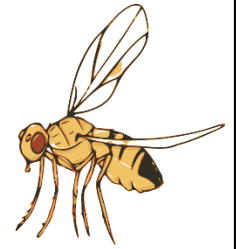


**vs.**

Flies sampled in the south were smaller than individuals from northern populations.



South



North



# IMAGES

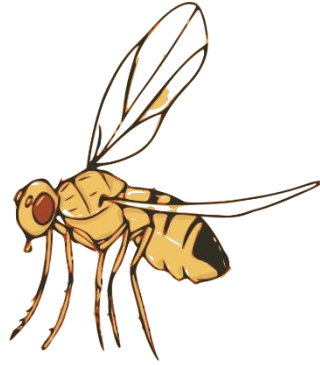
Yes. These are required.

Don't just plop them on the slide. *Use* them too.

# plopping



Flies sampled in the south were smaller than individuals from northern populations.



This is *okay*,

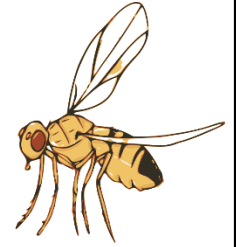
# using



Flies sampled in the south were smaller than individuals from northern populations.



South



North

but this is *better*.

**Images serve different purposes in a presentation.**

**PICTURES**

**If you want to show the audience a photo of your idyllic island field site, go for it.**

**VS.**


**But if you want to demonstrate how predators in a pond affect other species, use a diagram.**

**DIAGRAMS**

**Audiences **engage** with images in **different ways**: diagrams need to be deciphered, while photos can evoke feelings and memories. Both types have a place in a presentation!**

# Tables aren't images.

This is a friendly reminder that tables have *absolutely no place* in a presentation, *ever*.



coefficient	95% CI		Marginal	Conditional $R^2$
	lower	upper		
-0.52	-0.85	0.19	0.25	0.25
-1.00	-1.62	-0.38	0.27	0.56
-0.27	-0.46	-0.08	0.04	0.27
--	--	--	0.00	0.24
-0.19	-0.38	-0.07	0.00	0.79
-0.30	-0.50	-0.10	0.00	0.81
-0.12	-0.21	-0.03	0.02	0.80
--	--	--	0.02	0.79

Think about the last presentation you attended. For an audience member, taking in a presentation requires a concerted effort to **pay attention to the right things**.

The audience is (hopefully) listening to you speak and visually digesting slides at the same time, eyes continually darting between the two. If you're pacing back and forth, their focus will shift to you instead of the slide. If there's too much happening at once on your slide, they'll stop listening.

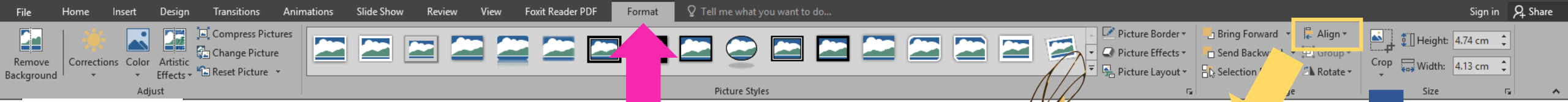
Your job as the presenter is to **guide the audience towards what they should be focusing on**.

Using images in place of text forces the audience to listen to what you're saying, while simultaneously taking in a visual representation.

Don't get rid of text entirely– the **audience will benefit from well-chosen key words or concepts** on the slide.

IMAGES

# TIPS & TRICKS



PowerPoint has a pretty good set of picture editing tools.



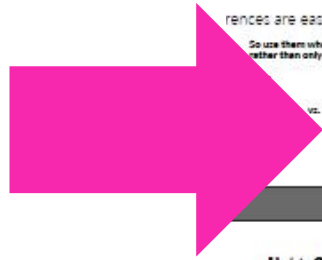
Align things!

Crop it!

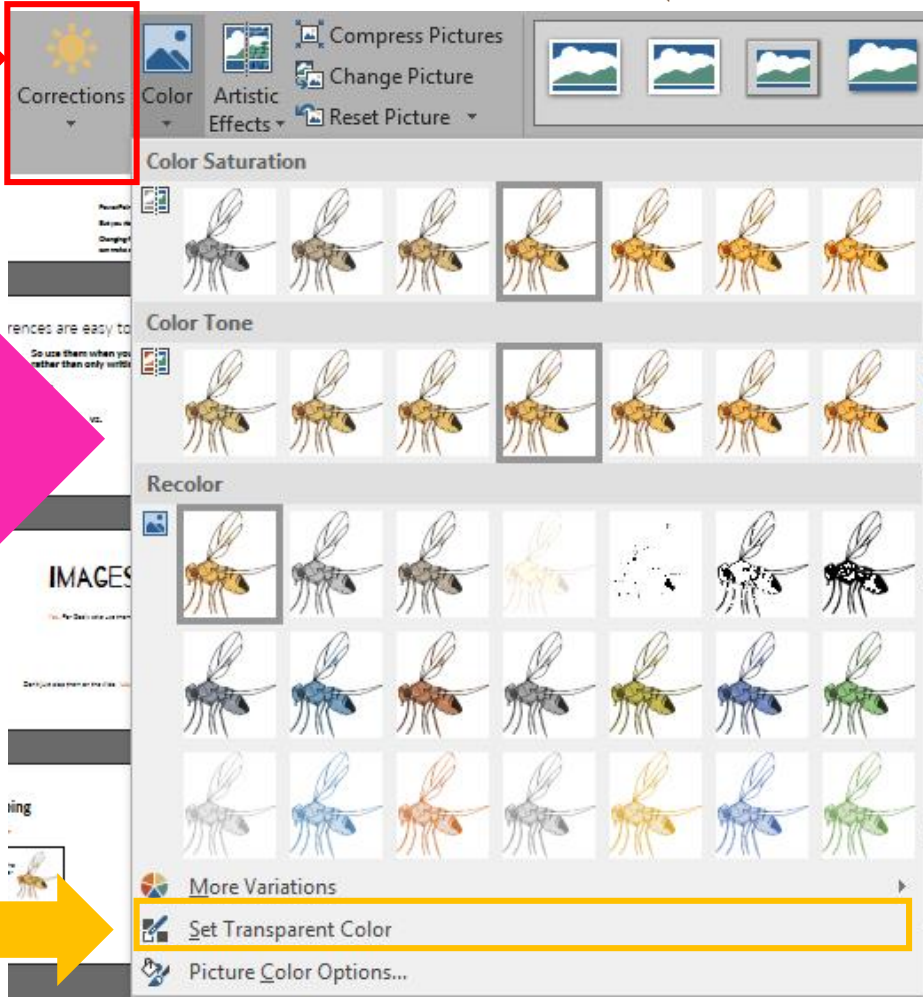
Change the **brightness** & **contrast!**



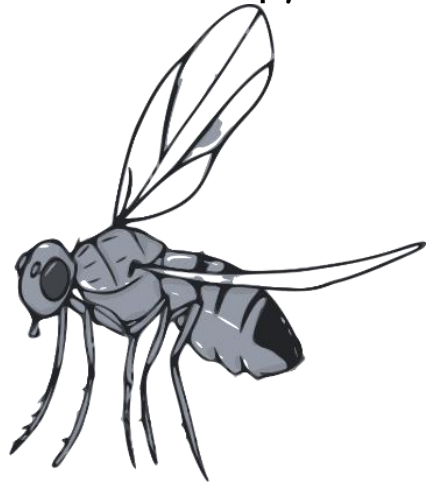
Want black & white?  
Some other monotone coloring?  
Change the **saturation** and **tone** of your image!



You can make backgrounds **transparent!**

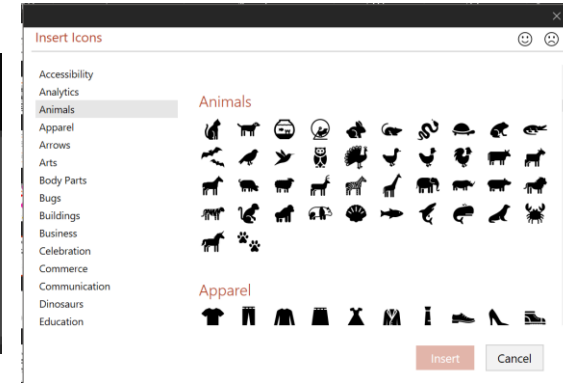
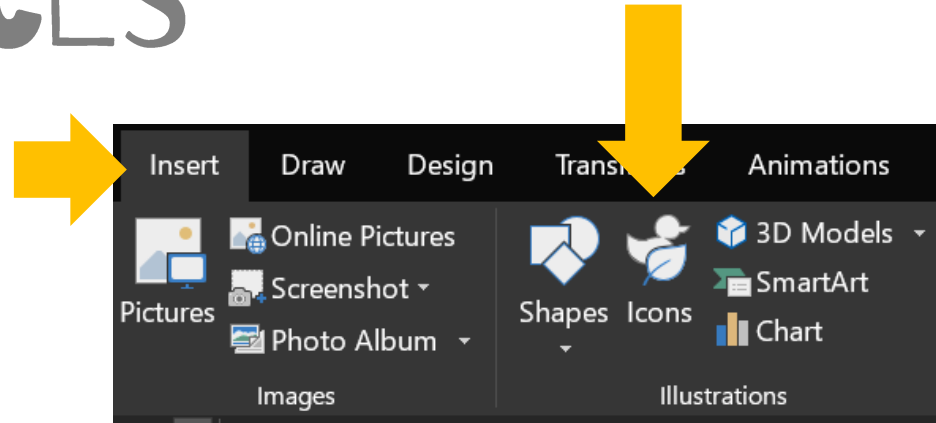


Crop it to a shape!



# IMAGE RESOURCES

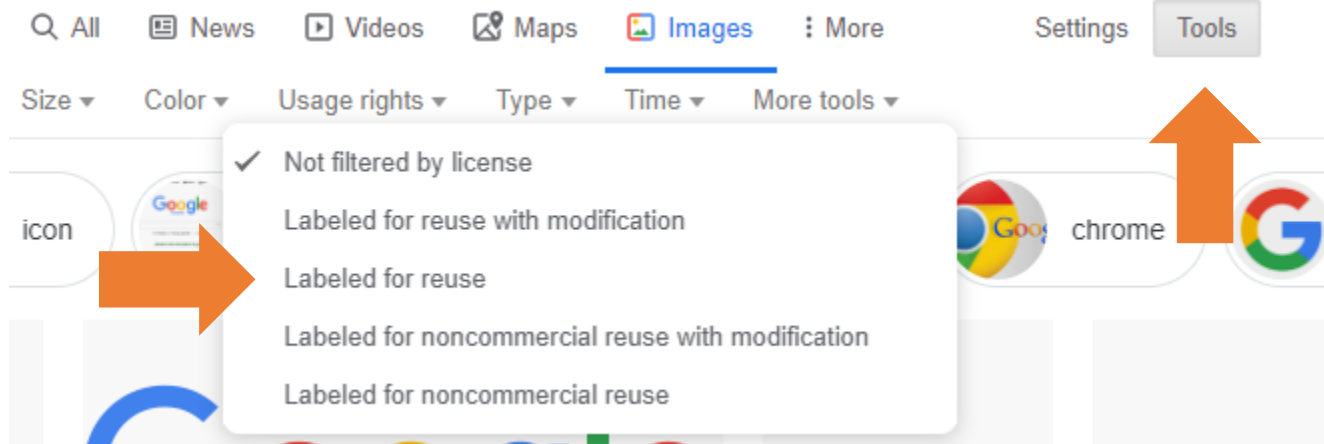
PowerPoint has **built-in icons** you can use:



## ATTRIBUTIONS

Credit the creator if you know who they are.

You can filter for non-copyrighted photos on Google:



## Other image sources:

- [Pixabay](#)
- [Freepik](#)
- [Flaticon](#)
- [Phylopic](#) (for species silhouettes)

**P.S.** There's an R package for this, to add images to plots!  
"[rphylopic](#)"

6.

**fin**

...as in “end,”

not fish



This guide is intended to:

1

open your eyes to the wonderful world of making presentations\*, and

2

demonstrate PowerPoint's considerable capacity to make pretty things<sup>§</sup>.

\*Because remember, it's fun!!!

§ No one paid me to say this but maybe they should...??

This guide is **not**:

definitive,

nor should you **limit** yourself to anything said here<sup>1</sup>.

<sup>1</sup>In fact, I highly encourage you to break all these rules.

The point is to have fun and experiment

scientists love experiments

*best of all, these kinds never go wrong!*

SO,

bye!

go forth and make **exciting** presentations!

*no excuses now*