A SCIENTIST'S GUIDE TO MAKING POSTERS

so you have to make a poster?

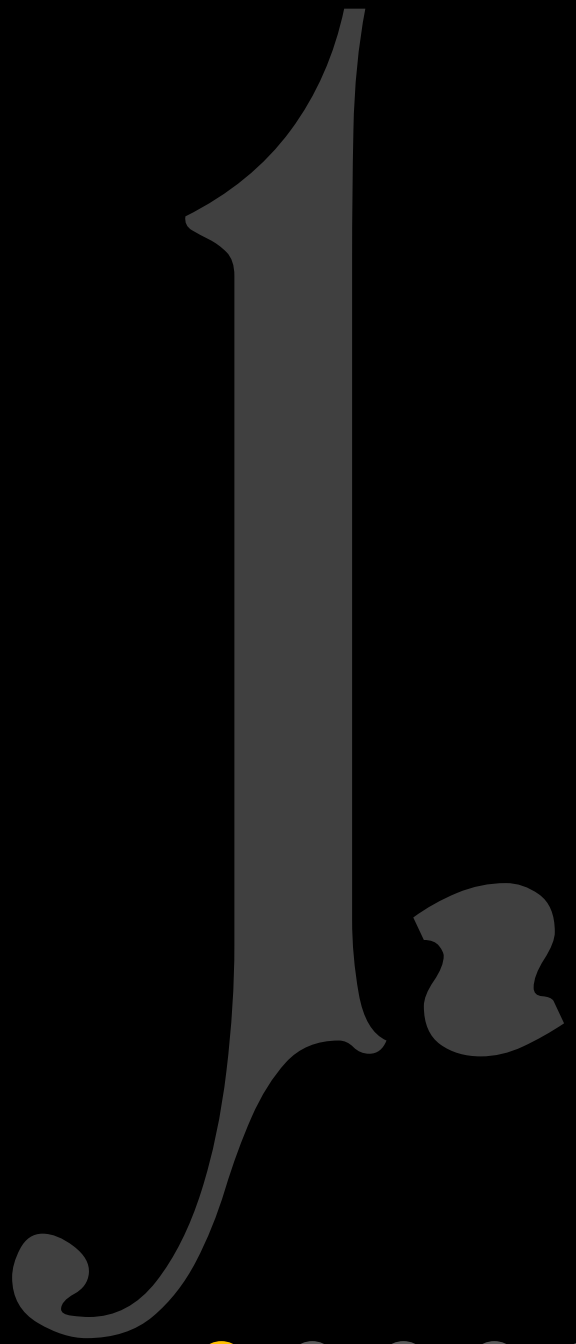
don’t know where to start?

HAVE NO FEAR!

Making poster is as easy as 1, 2, 3...

4, 5.

Let’s begin!



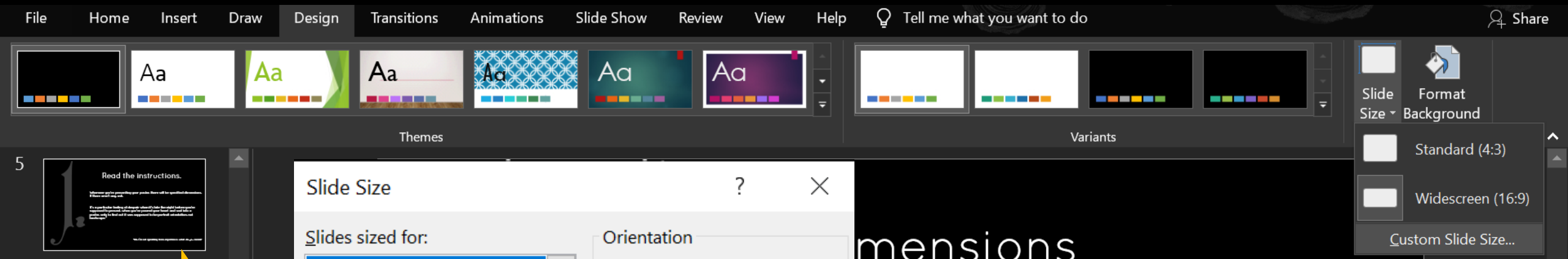
Read the instructions.

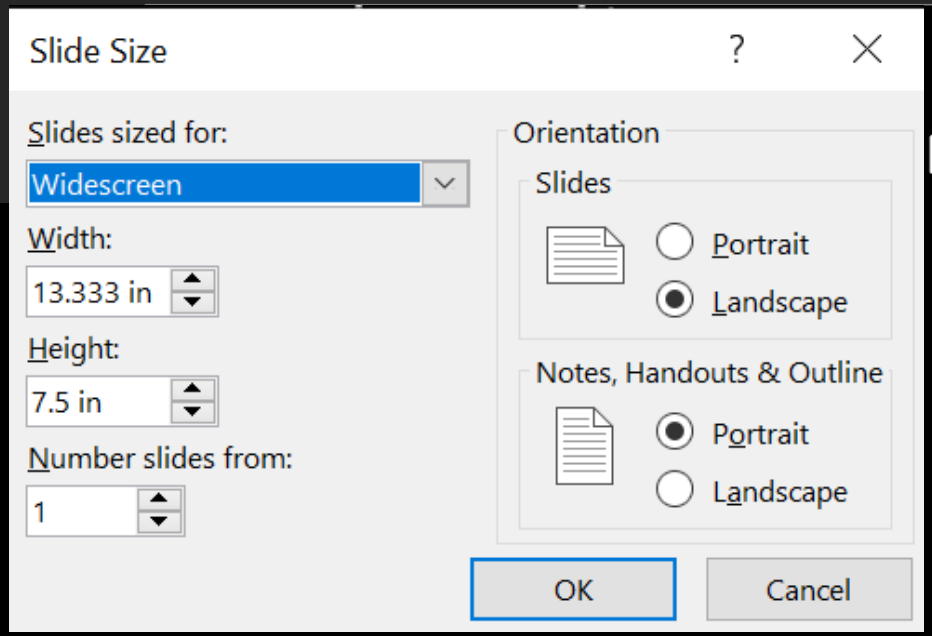
Wherever you're presenting your poster, there will be specified dimensions.
If there aren't any, ask.

There's a particular feeling of despair when it's late the night before your poster is due and you're on your 5th cup of coffee when you finally finish the dang thing, only to find out it was supposed to be portrait orientation, not landscape.*

*No, I'm not speaking from experience, what do you mean?

set poster dimensions





mensions

>> Select "Custom size" from the dropdown list and set the height & width to the specified dimensions.

Map it out.

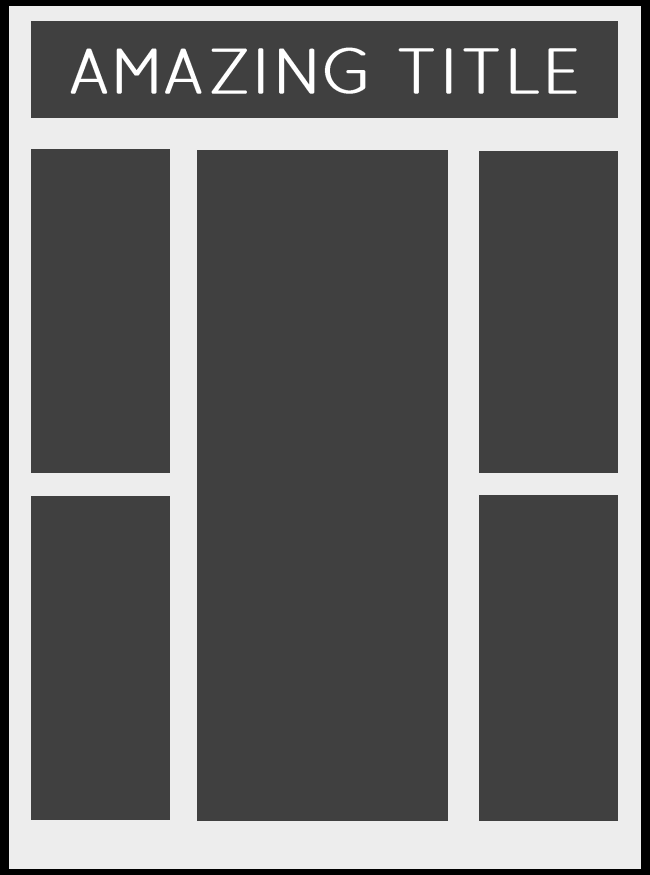
Get away from the computer and whip out ye olde pencil and paper.

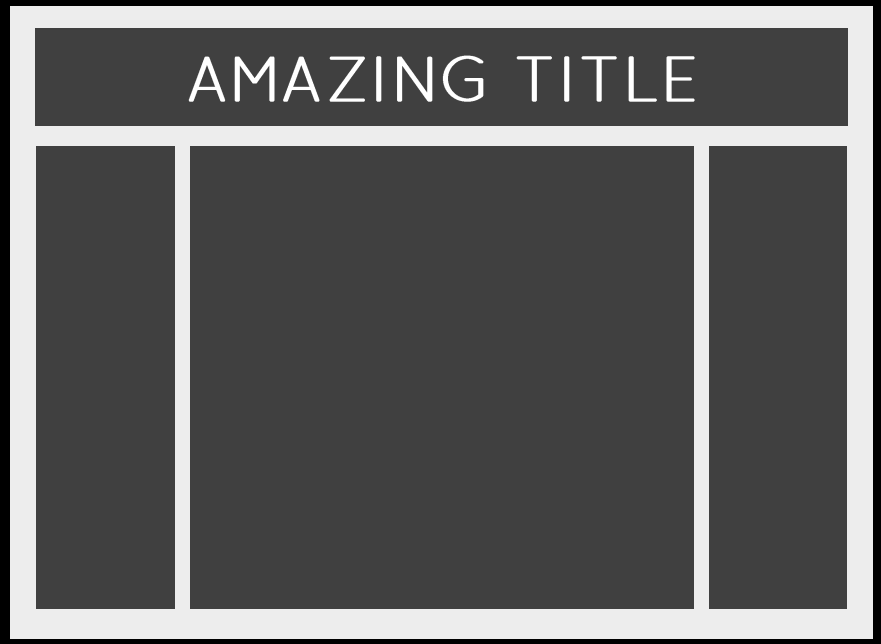
Draw yourself a rectangle, and plan where your sections will go.

layout

This is the point where you definitely want to know whether you'll be working in portrait or landscape.

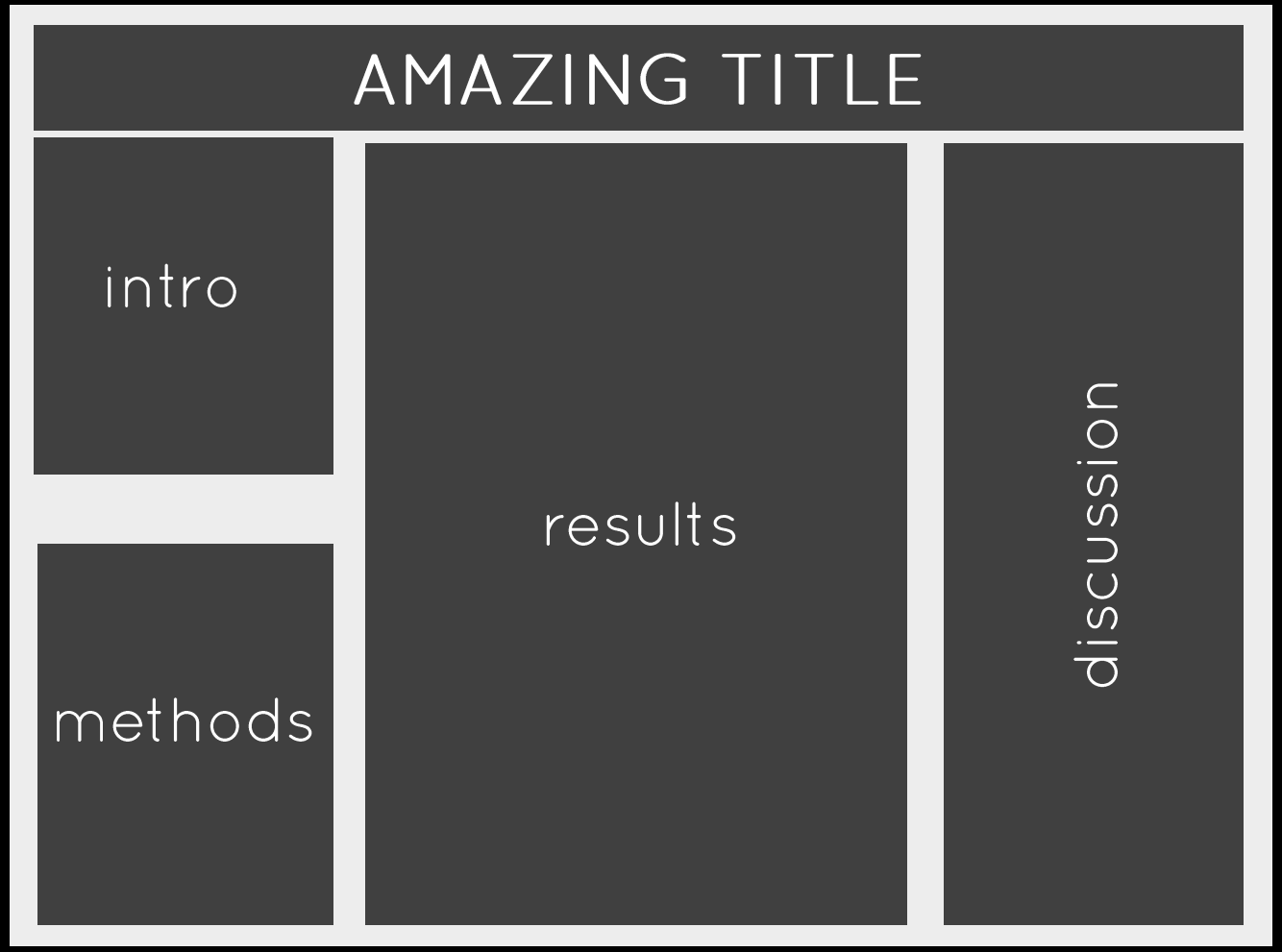
portrait!





landscape!

Your standard layout:

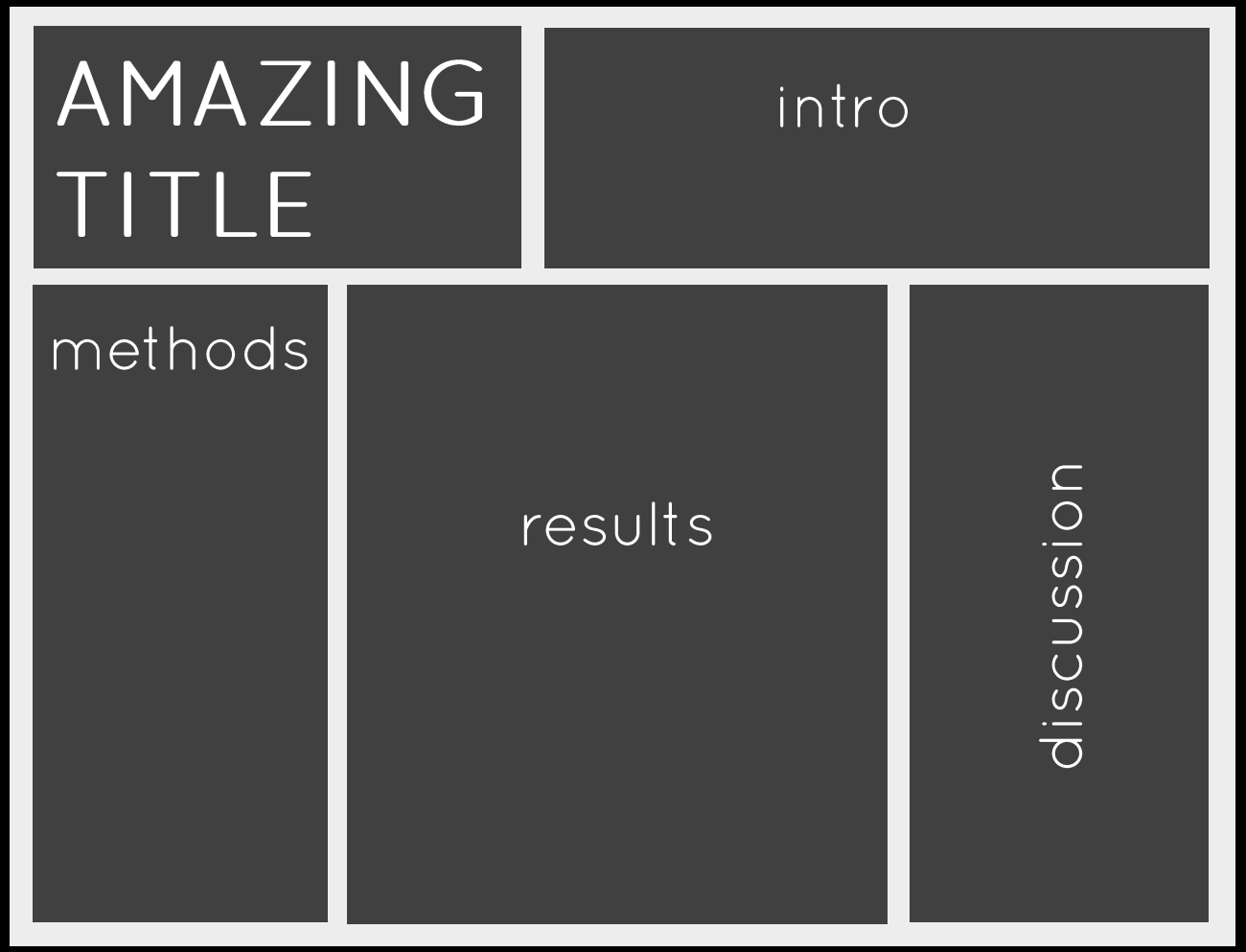


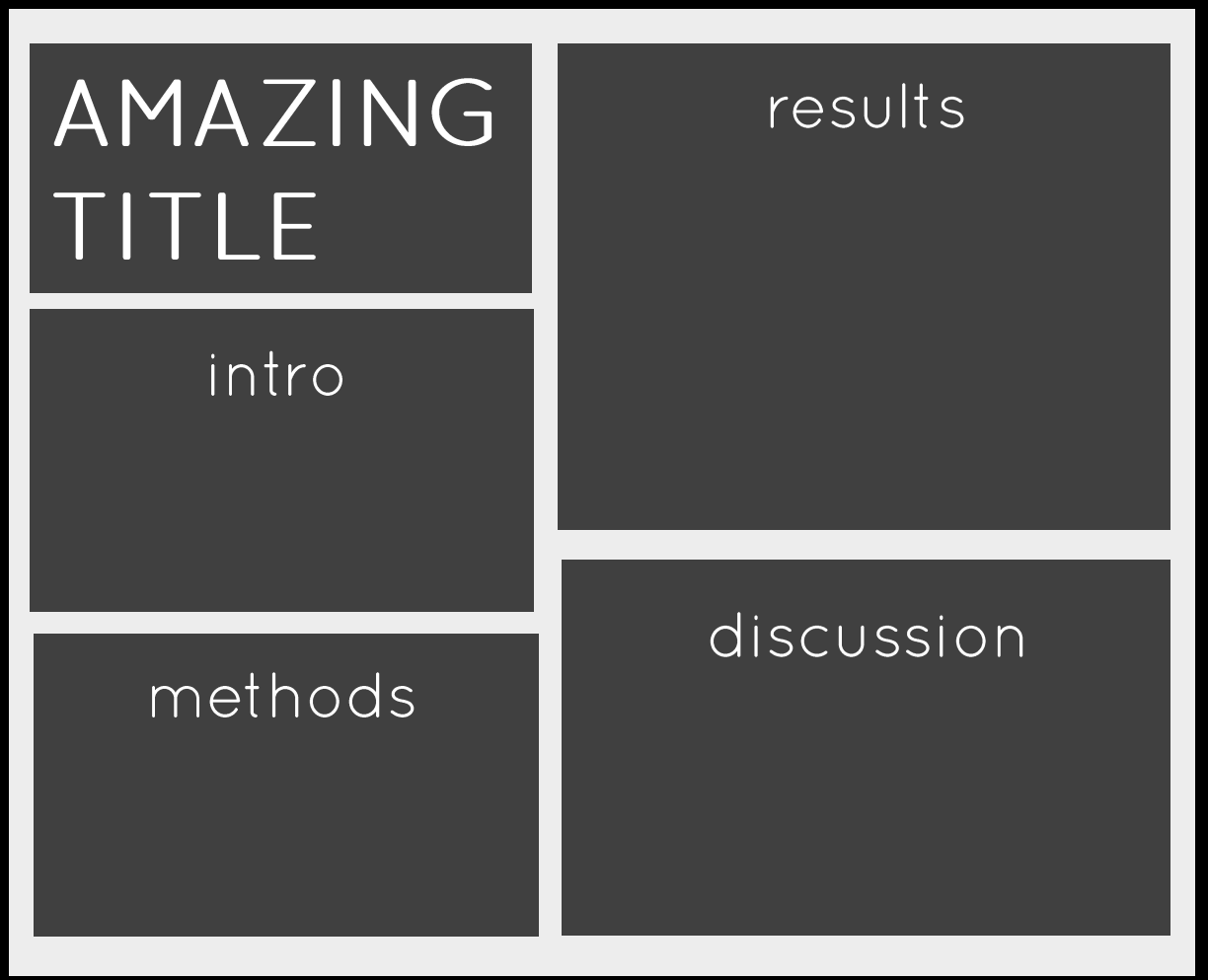
Your poster COULD be like this. Or you could switch it up!

You can stick your boxes anywhere, just make sure there's a logical ~flow~ to your poster.

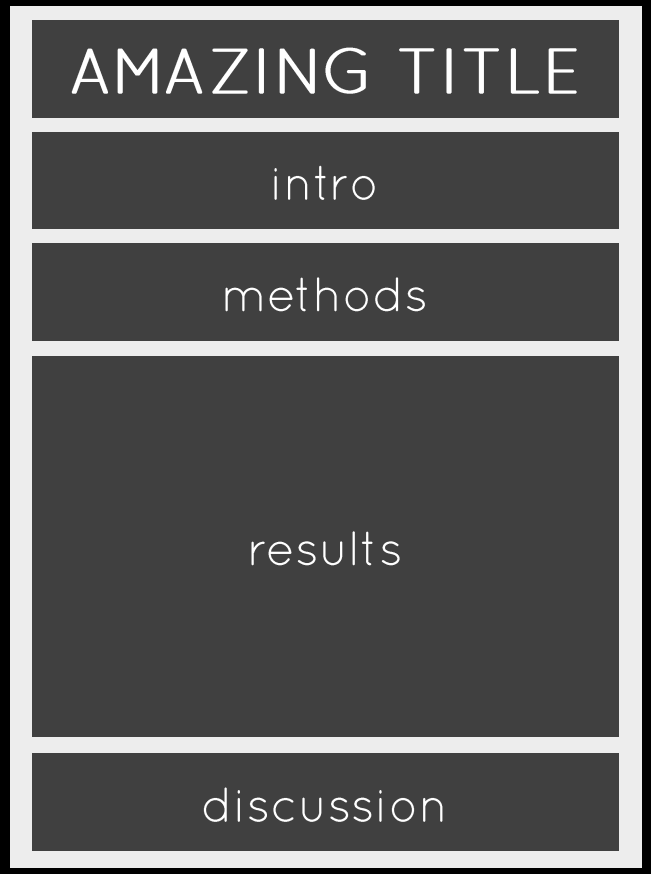
What do I mean by flow? Other people's eyes should *flow* from section to section so your project is easy to grasp.

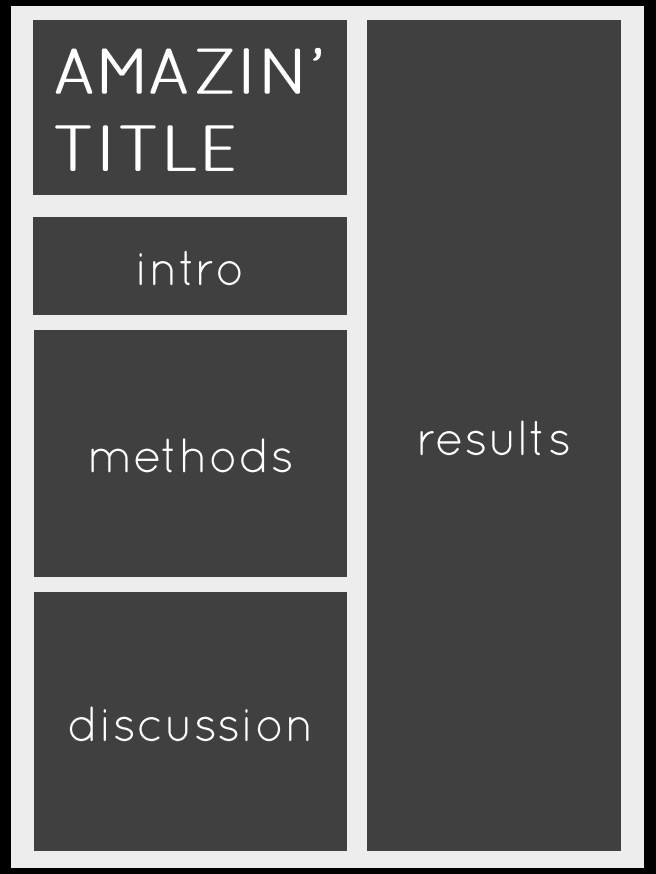
alternate layouts

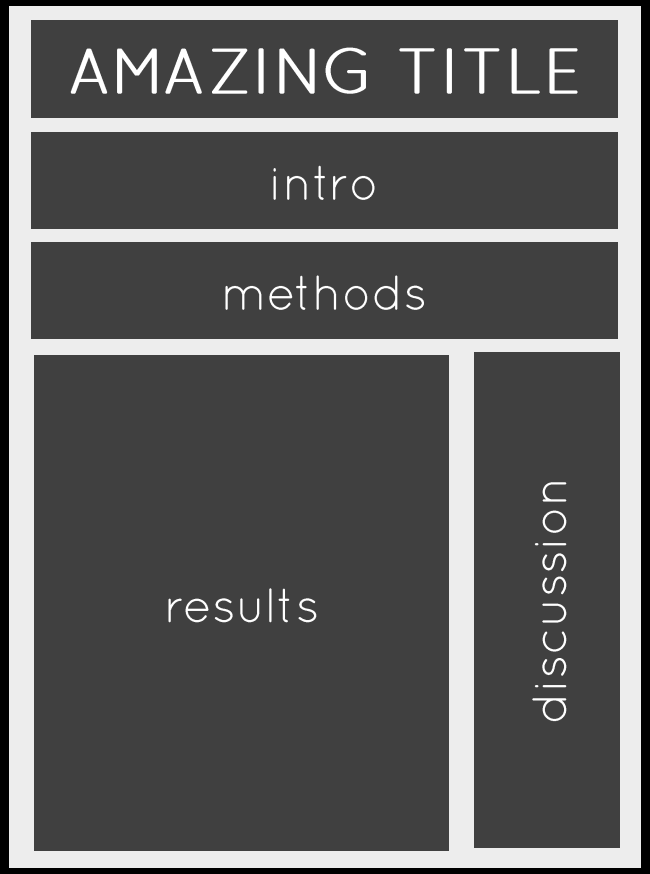




alternate layouts







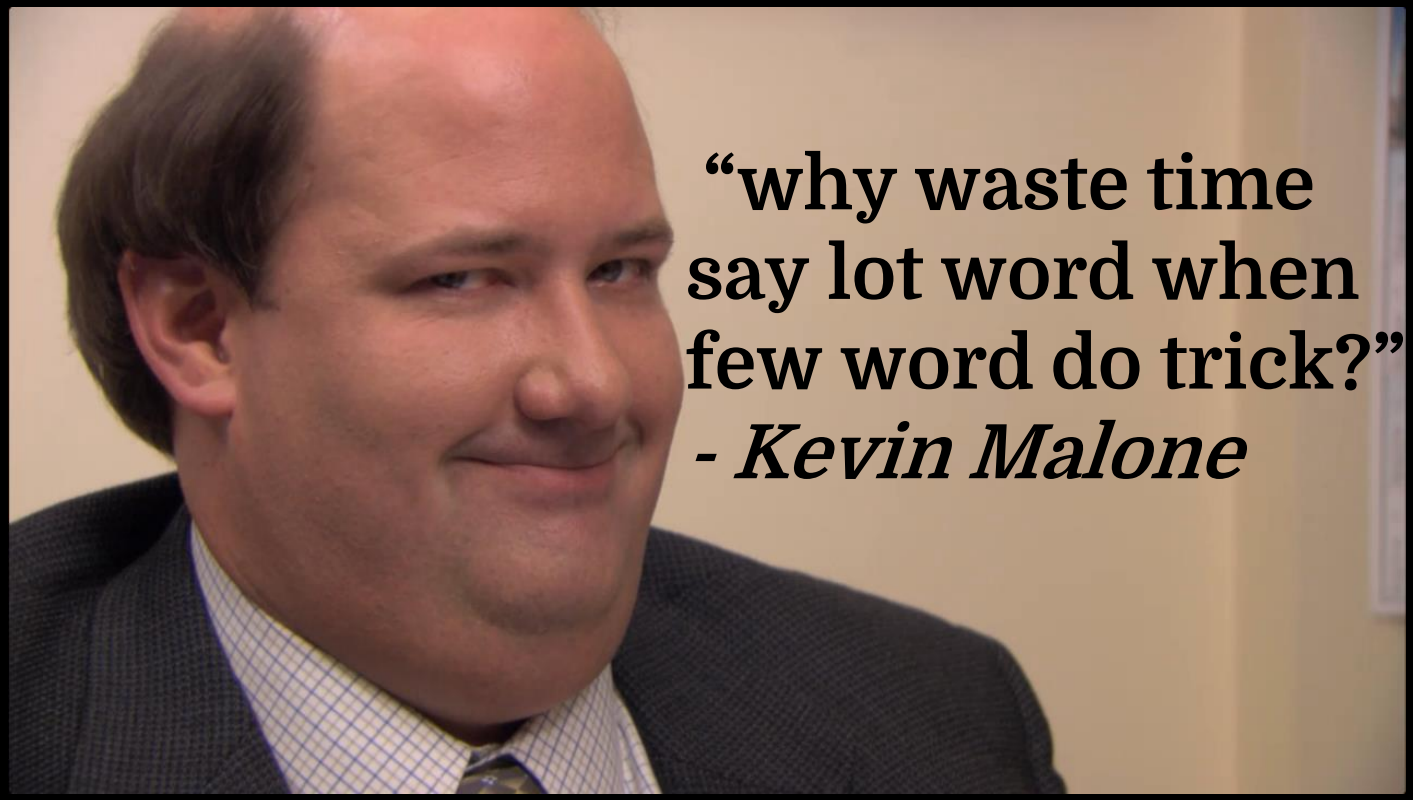
Pick your key points.

A poster is a visual aid. Onlookers should be able to quickly grasp the bare bones of your work without you there.

But also remember you *will* be there. Next to the poster. For at least a little bit.

It's *possible* to make the font really tiny and get all the juicy details of your work on the poster, but the goal here isn't to make an exam cheatsheet on an index card. We're going for eye *candy*, not eyesore.

THE GOLDEN RULE OF POSTERS



Keep it short & sweet

IN GENERAL

- Use pictures or diagrams instead of words wherever you can. (Lookin' at you, Methods)

INTRO

- ~2 sentences for background
- 1 sentence for research question

METHODS

- You know how people usually skip the methods section in a paper? Yeah.
  - *Make a list, but leave any in-depth explanations for when you're presenting.*

RESULTS

- Don't aim for sentences, make a list.

DISCUSSION

- 2 sentences wider context
- 1 sentence conclusion

Think of your key points as an abstract: if you string them together, they should tell your whole research story.

In fact, you can start with an abstract*, then cut out as many words as you can.

Bada bing, bada boom, poster text!

*If you don't have an abstract already, check out this guide to writing a *Nature* summary paragraph for a basic example: https://cbs.umn.edu/sites/cbs.umn.edu/files/public/downloads/Annotated_Nature_abstract.pdf

You'll still want fewer words than this, though.

21.

SIZE

Due to the nature of a poster, size is going to be the main form of emphasis. You want to be able to see the most important things from far away.

You also want everything to be legible from a reasonable distance.

People shouldn't have to lean in like they're reading a book.

> Once you change the slide size, everything you thought you knew about reasonable font sizes goes out the window.

Rough guidelines* on a 3 x 4 ft. poster:

Title: 150 pt.

Headings: 60 pt.

Text: 44 pt.

References, Acknowledgements: can go down to 18 pt. if you need more room.

these sizes skew large. A highly recommended personal preference. Fewer, bigger words are better!

emphasis

Time to bring out those key points from Step 2.

Parts that should be **bigger** & **bolder** than others:

The **TITLE**,

Your **QUESTION / HYPOTHESIS**,

The **MAIN** results,

Your **CONCLUSION**.

emphasis

TITLE,

HYPOTHESIS,

MAIN results,

CONCLUSION.

>> *Set the font sizes for these parts midway between regular text and headings. Make them bold, too, or use a heavier font.*

AMAZING TITLE

Intro

This is the intro. Giving some context.

What's the point of this poster?

Methods r Here

- We did some cool stuff,
- ask me about it.

Discussion

So what is it we're talking about here, exactly?

Turns out the point was in front of us all along.

GRAPHS ON GRAPHS ON GRAPHS!!!!!!!

We found:

- **This**
- **That**
- & **the other thing**

emphasis

In addition to size and boldness, you can also emphasize your main points with color,

or stick them in their own boxes.

emphasis

(Title: Lato Black)
16x base font size

(Header: Lato Light)
2x base font size
Emphasis:
> All caps
> In its own rectangle
> Letter spacing increased

(Paragraph: Lato)
This is the base font size.
No emphasis.

(Hypothesis: Lato Black)
1.1x base font size
Emphasis:
> Large, bold font
> Key words in different color

Ge

INTRODUCTION

This is a poster about genetic diversity in cities. Cities are fragmented and it can be hard for animals to get around in them.

Because of this, we expected genetic diversity to be lower in cities.

Design!

YAY IT'S THE BEST PART

For color schemes, making backgrounds, choosing fonts, & other stuff, see our guide on how to make presentations pretty.

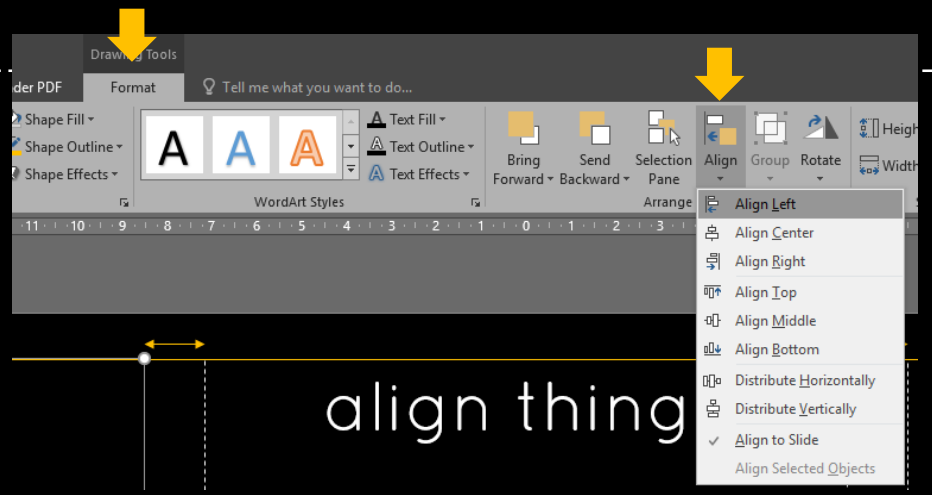
The same principles apply.

align things

it's important

it will help make your poster look crisp & professional

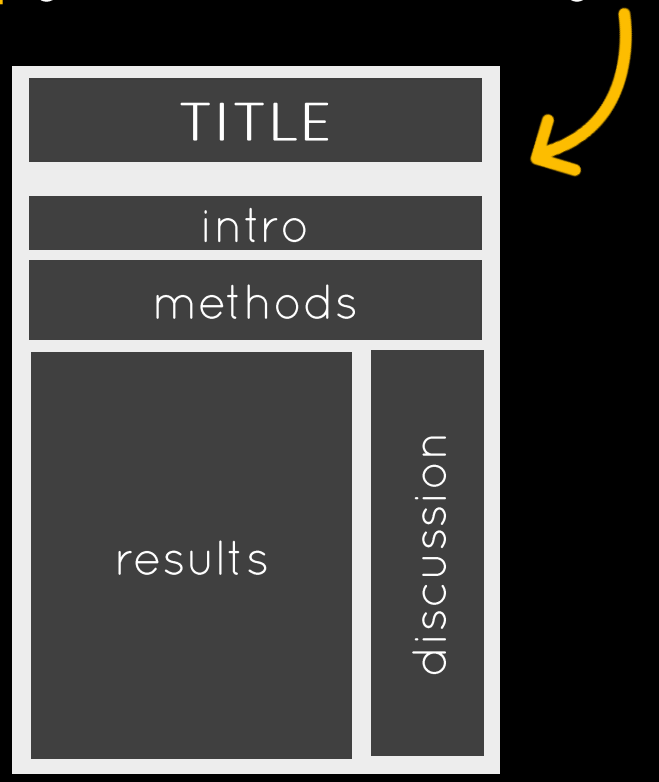
Click on a shape, then go to the Format tab



align thing

a word on rectangles

Thus far we've used some nice rectangles to get an idea about layout.



We're going to extend the Golden Rule of Posters from text, to... **everything.** If something doesn't need to be on the poster, whether it be a word, a method, a graph or a picture, *leave it out*.

Once you get a good draft of your poster, give it the good ol' KonMari treatment. If an element doesn't spark joy, delete it!

TITLE

intro

methods

results

discussion

This is not an invitation to fill every space in these rectangles with something.

In reality your poster should look more like:

TITLE

Author list & affiliations!

INTRODUCTION

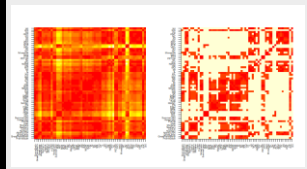
Stuff stuff stuff stuff, more stuff more stuff, more stuff. Stuffedy stuff stuff. Maybe some more stuff cos background info ain't bad.

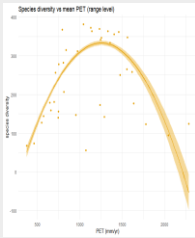
HYPOTHESIS!

METHODS

- This is what we did, not too much detail
- Also did this other thing

RESULTS





This is what's going on in Fig. 1

While this is what's happening in Figure 2

DISCUSSION

This is what my results mean in the greater context of the bigger picture, la de da.

Some other discussion point I wanna talk about.

CONCLUSIONS!

ACKNOWLEDGEMENTS, LOGOS

Once you're comfortable playing with layout, don't be afraid to go suuuuper minimal. Stick a giant picture of your study organism in the middle and do away with IMRAD* structure entirely. Make some panels flow into other panels. Don't use panels. Do whatever you want.

It feels shallow to say, but more people will visit interesting-looking posters. Attendees tend to avoid walls of small text. Whatever you leave off, you'll be able to tell the masses swarming around your poster in person.

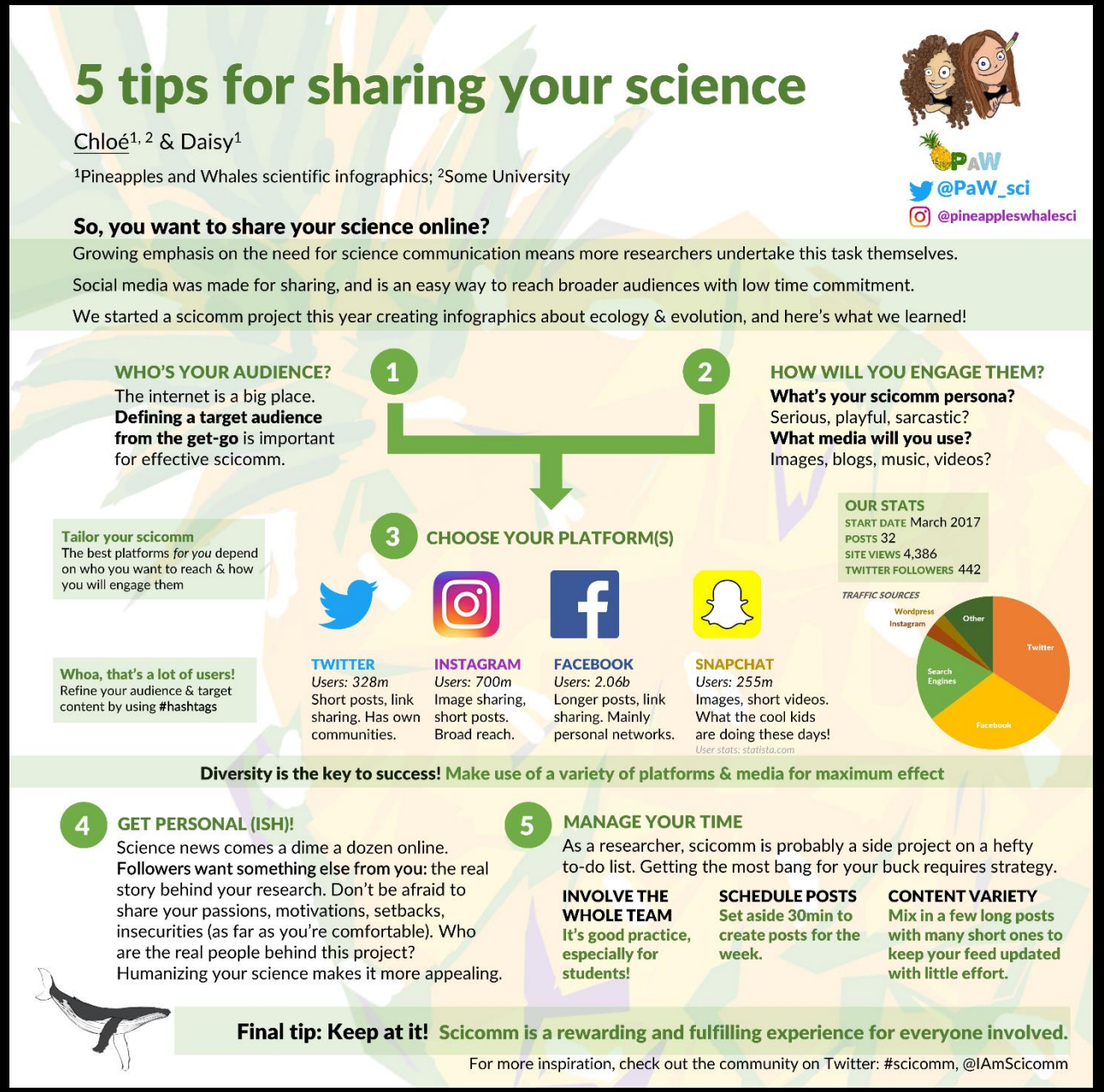
A worthwhile trade-off.

*IMRAD = Intro, Methods, Results And Discussion. Traditional paper/poster structure.

example

Not saying this is the best poster out there, but here's an example of one we presented in 2018. Granted, it wasn't about experiments or results, so we easily avoided IMRAD structure.

But you get the gist: use pictures & diagrams, emphasize key points, and leave space between things.



* don’t forget

Other important bits that should be on your poster:

- Author list and affiliations
- Your contact information (email, Twitter, etc.)
- Acknowledgements (use organization logos instead of text when you can)

before you print

Make sure your images scale.

- Otherwise they might come out  .
- If possible, use vector graphics because they scale infinitely.
- How to check: set the zoom to 100% and see how they look.

  While you're there, take a look at font sizes at full scale too.

before you print

Save your poster as a PDF.

Most printers will require a PDF anyway, but you want to do this regardless because PDFs will preserve your fonts, positions, etc.

Remember Murphy's Law of Powerpoints: Anything that can go wrong will definitely go wrong when opening a PowerPoint file on another computer.

a note on materials

There are a few printing options to choose from, which depend on your budget and where you're printing. Usually you'll be able to see examples.

1. Uncoated paper. Looks like regular paper, except huge. Little thin, but good!

2. Glossy paper. Looks fancy, but the glare is kind of annoying. Also, ink smudges easier when fresh. Not recommended.

3. Matte paper. Looks fancy too, without glare. Bit more robust than uncoated paper.

4. Fabric. ever so slightly see-through. I prefer paper myself. BUT, fabric posters can be folded and shoved in your suitcase, so that's nice.

Remember:

There's no one way to do a poster!

Variety is the spice of a poster session!

Don't be bound by templates!

K BYEE

get makin that poster!