

	A/B Testing
200	1.why should we define our parameter of interest ahead of time?
	- we want to give direction to our experiment. We're setting our end goal. By changing your goal mid-analysis, you're very close to measuring a bunch of things, then saying ' oh this thing happened to have a significant different so let's make this our goal' it's a little like p-hacking, where you're running. Bunch of hypothesis test to see which test will give you a significant p-value.
400	In experimental design, only one variable should be changed at a time. Why?
	If you're changing multiple independent variables, it gets harder to assign causality to a variable. If I changed the media and button on my website, I don't really know if my boost in emails is due to the media or due to the button. There are types of experiment designs, like factorial designs, that can account for having multiple changed variables.
600	what is the difference between a statistic and a parameter?
	Because we can't study populations directly, we have to take subsets of these populations called samples. We calculate some value on a sample, called a statistic. We make inferences about our parameters so that we learn about our population.
800	3. What is blocking in experimental design? Blocking in experiments is the same as stratifying in tts. - you're getting the right cross section of people: Block your observations so that each group has the same distribution of important variables. For example, make sure that when you split web traffic into groups, one group doesn't have an overly large share of a certain demographic. - If the people assigned to group A and the people assigned to group B look very different on variables that matter (like age or socioeconomic status), then we can't know if our experimental results are caused by treatment A/B or caused by other variables.
1000:	Explain when you might use a Matched Pairs t -test
	to see if some intervention had an effect on the baseline sample - the blood pressure example, or you want to see if yoga is really good at reducing blood pressure over time. take blood pressure before starting a yoga regimen and after doing yoga for x time frame. see how/if heart rate and blood pressure change.
Daily Doubles:	add a custom emoji in slack
Final Jeopardy:	calculate the output of a neural network: