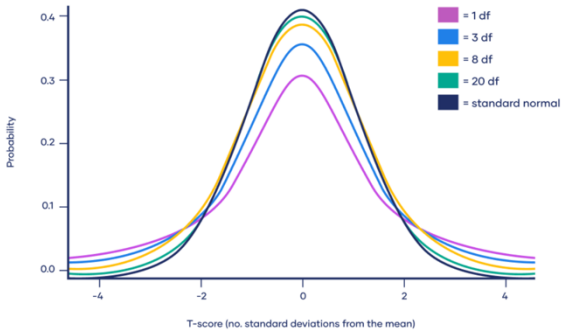
Day 50: Confidence Intervals and Hypothesis Tests for Means with the t-distribution

According to Nabisco, an Oreo weighs 11.3 grams.
We want to estimate the average weight of an Oreo cookie ourselves.
We select a random sample of 30 cookies and find the weight of each cookie (in grams). The mean weight of our sample is 11.1921 grams with a standard deviation of 0.0817 grams. We want to make a 95% confidence interval to estimate the true mean weight of an Oreo.

This time, we will use the _____ instead of the Normal model:



We can also perform a hypothesis test using the t-distribution instead of the Normal distribution. Let's test if the mean weight of Oreos is less than what Nabisco claims (11.3g).