Summary

- Linear models help us **answer questions** about differences across groups
- The basic strategy is to formulate a **probabilistic description** of our data, and to establish a **relation between data and parameters** in the statistics model
- In linear models, coefficients are **comparisons across categories**, and we can interpret their estimates

- There are many ways to fit the models
- We like to encode the information the data brings about parameters using the **posterior distribution**, and this requires the definition of **priors**
- We can also fit the models using OLS and Maximum Likelihood, but if we do, we are stuck with default priors that don't bring useful information