Ian Eggleston

1. You do not want to have an excessive amount of parameters tested within one model because this increases the amount of error for the model. More error means more uncertainty when it comes time to predict outcomes with the model.
2. The simplest explanation of the slope parameter, β, is to show how an incremental increase in the predictor variable affects the response variable. This is why we limit the predictor variable to something that can be increased incrementally to control the experiment.
   A simple example is the effect of distance on light intensity. Increasing the distance by x, decreases the intensity by x^2 constantly so the intensity or distance can be determined as long as one of the variables is known. β in this scenario then is 1^2 to square the response variable.
3. The base case water treatment is the low water level.
4. The average plant mass for low water is 2.4 grams. Because low water is the base case, the intercept is then the low water treatment.
5. The average plant mass for medium water treatment is 3.7 because it is the estimate for waterMed + the base case.
6. You cannot answer B.