Categorize each of the following research questions as "good" or "bad", and provide alternative formulations for the bad ones. Save your responses in a document of some kind, submit a link below, and discuss your reasoning with your mentor.

1. What is the 1994 rate of juvenile delinquency in the U.S.?

Good question as it can be answered using quantities or a mathematical model.

1. What can we do to reduce juvenile delinquency in the U.S.?

Bad, too vague and doesn’t provide a quantitative way of answering the question. Alternative question would be “Can we reduce juvenile delinquency by 10% within a year in the U.S.?”

1. Does education play a role in reducing juvenile delinquents' return to crime?

Good, as we can create a model that will predict a yes or no answer to the question.

1. How many customers does AT&T currently serve in Washington, DC?

Good, as we can provide a quantitative way of answering the question.

1. What factors lead consumers to choose AT&T over other service providers? Bad, I think the question is a little too vague as there can be multiple factors. Alternative question would be “What is the number one reason consumers choose AT&T over other service?
2. How can AT&T attract more customers?

Bad question as it is too vague and doesn’t provide a quantitative way of answering the question. Alternative question would be “How many customers can AT&T attract within a year?”

1. Why did the Challenger Shuttle explode? Bad question as it is too vague and doesn’t provide a quantitative way of answering the question. Alternative question would be “What is the number one reason the Challenger Shuttle exploded?
2. Which genes are associated with increased risk of breast cancer? Good question.
3. Is it better to read to children at night or in the morning? Good question as a model could be used to predict reading in the night or morning.
4. How does Google’s search algorithm work? Bad, the question is too vague and doesn’t produce a quantitative model. Alternative question would be “How many search algorithm’s does Google use?”