Categorize each of the following research questions as "good" or "bad", and provide alternative formulations for the bad ones.

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

If this question is: what was the rate of juvenile delinquency in the U.S.in 1994?

then:

This research question is bad. We can get this information (from the data we have or from internet).

Alternative formulations:

What are the best predictors for juvenile delinquency in the US?

Or

what will the most accurate estimate of juvenile delinquency in the U.S.in a future year, say for example-in 2020 or in next 5 or 10 years? Will it increase or decrease …

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

This question seems to be asking people to brainstorm ideas, rather than testing a specific approach. So, it can be considered as a bad one.

Alternative formulations:

This question could be more specific:

Like

Does a “Youth Violence Prevention Programs” play a role in reducing juvenile delinquency in the U.S.?

Or

Is there a correlation between juvenile delinquency and nature of parenting style? (like parents are not aware of child's activities or parents are too strict)

Or

Is there a correlation between juvenile delinquency and antisocial peer groups association?

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

This question is a good research question as it is very specific, asking about the relation between juvenile delinquency and education.

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

This research question is bad. We can get this information (from the data we have or from internet).

Alternative formulations:

What could be the new subscriber rates and/or churn rates based on current situation.

1. What factors lead consumers to choose AT&T over other service providers?

This question is a good research question.

1. How can AT&T attract more customers?

This question is too broad. So, it can be considered as a bad one.

Alternative formulations:

What factors lead consumers to choose AT&T over other service providers?

Or

Will a better price and service quality(etc.) help AT&T attract more customers?

1. Why did the Challenger Shuttle explode?

This research question is bad. This event happened many years ago and investigators have already laid out the technical causes for the failure.

Alternative formulations:

Will there be another shuttle explosion in the future?

or

What is the likelihood of another shuttle explosion in the future?

1. Which genes are associated with increased risk of breast cancer?

This research question is good.

1. Is it better to read to children at night or in the morning?

This research question is bad.

We can ask a more specific, measurable question.

Alternative formulations:

Do children perform better academically if their parents read to them at night or in the morning?

1. How does Google’s search algorithm work?

This research question is bad.

Alternative formulations:

How accurately Google determine the ranking of the searched pages based on the words in your search query?