2a.

My artifact represents electric vehicles and how they relate to renewable energy and data collection and usage. The purpose of an automobile is to transport people from point A to point B, but the purpose of using an electric powered vehicle is to use electricity instead of gasoline, which reduces gas consumption and cost while increasing safety. My artifact depicts a "green" electric car that is powered by solar energy, transmitting data via the internet, and using data to control the car.

2b.

First, I used Google to search for a number of images to represent an electric car, clean energy, data transmission, and the environment, which are all relevant topics for electric vehicles. Then, I uploaded them to Google Drawings and moved them around accordingly. Along the way, the Google Drawings platform made it simple to move, resize, and crop images. Finally, I was able to export my image as a PDF document.

2c.

Electric cars are less complex than traditional cars, so they will have fewer safety issues. Nicolas Zart, from cleantechnica.com, cites a study from the National Highway for Testing Safety Administration that found that there were 174,000 gas and diesel vehicle fires in 2016, while a specific model of electric car suffered only one fire. As electric cars take over the road, the number of car failures and accidents will plummet.

The transition to electric car dominance is not without roadblocks, however. Some unfortunate deaths are still happening, even with the safest cars on the road. Drivers of Tesla automobiles can turn on the autopilot and take their hands off the wheel for short amounts of time. According to Neal E. Boudette, this caused a crash in March of 2018. Mike Ramsey, a self driving car analyst cited in Boudette's article, says that "The system as it is now tricks you into thinking it has more capability than it does. It's not an autonomous system. It's not a hands-free system." As more electric cars are on the road, they will continue to have accidents, just at a lesser rate than cars today.

2d.

Danielle Muoio, in her article, reports on the "Big Data" collection by Tesla Motors. Muoio cites a company message from Tesla that says they collect videos in order to lean how to "recognize things like lane lines, street signs, and traffic light positions." The car works by scanning its environment with a number of sensors and cameras. The internal computers have already learned how to recognize such objects, but they regularly receive updates to improve safety. The cars are able to update and transmit information over the internet. Adam Jona, a finance analyst cited in Muoio's article, says that the "[Internet of Cars] is too big and too complementary to harvesting and analyzing data for the world's most valuable firms to ignore." That is good news for a big business like Tesla, but valuable data is vulnerable to theft. For example, the BBC reports that Facebook recently was victim to a data theft of 87 million users. As car companies collect driving data, more people are at risk of having their data stolen.

2e.

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