2a)

The innovations that are represented by computational artifacts are differences between augmented reality and virtual reality. Virtual reality uses the direction you're facing, and the imagery that is uploaded to your headset to create a reality outside of the real world for you to experience. Augmented reality uses your position in the real world, and the imagery displayed on your screen to create a new world for you to experience. Virtual reality is meant to be an escape from reality, so that people are able to experience something they may not have been able to experience normally. Augmented reality is just an add on to the real world, which allows you to experience the world through a different lense. Both of these technological advancements have been rising in popularity for some time now, and will continue to rise in popularity for more time to come.

2b)

I used the Google Draw software to generate my artifact. What I did was split the image into six sections, with one side of three being dedicated to virtual reality, and the other being dedicated to augmented reality. I then chose images of a virtual reality headset, computer, monitor, and tracking chip off the internet, drew arrows connecting them, all to create the artifact you see or have seen. I then added text to explain the process that is shown. As well as dividers to show where the content splits, on top of other images that were used.

2c)

Both innovations have their own positives and negatives that come with their usage. For example, one benefit of virtual reality is allowing a simulation in dangerous field of work. These simulations allow people to learn skills that they couldn't learn unless they were put in a dangerous situations. In augmented reality, the user can travel through two worlds at once. Although both innovations have their advantages, but they have some disadvantages as well. For example, one disadvantage of virtual reality is that people can get lost in the virtual world and become completely separate from the real world, thus reducing society to "outcasts." One disadvantage of augmented reality is people can get distracted with it, and can lose their life, or wander into an area that is prohibited.

2d)

Virtual reality uses data that's processed from your perspective, transmits that data to a processor, which in turn sends data back to the virtual reality headset that generates an image. The image changes depending on where you look, and if there are frame skips, the entire virtual reality experience could be ruined(1). Data from a GPS that is attached to the person is sent to the processor. The processor then sends data to a display which uses the data to show an image of what is going on in your new world (2). Your position changes what is displayed on the monitor. Both of these objects have privacy risks. For example, in vr, a hacker could force a new object within your virtual world (3). This object could range from a simple snail or insect to an object that can be extremely mortifying to the user. The same could be said for augmented reality.

2e)

https://www.androidauthority.com/virtual-reality-work-702049/ (1)

https://www.vrs.org.uk/augmented-reality/how-it-works.html (2)

http://cacm.acm.org/magazines/2014/4/173222-security-and-privacy-for-augmented-reality-systems/abstract (3)