

**23. How important are material tools in the production or acquisition of knowledge? (Knowledge and Technology)**

**Word count: 556**

**Object 1 - My electric guitar.**



My first object is the electric guitar that I own since the Summer of 2021. I chose this object because it has a personal meaning to me since I have been learning to play it for more than half a year. Electric guitars are essential tools in creating modern music, and their current state represents the evolution and development of the music industry throughout the millennia. This instrument has turned from a piece of wood with strings on it to a difficult electronic device that has a complex electronic circuit inside, which indicates that not only music has shaped this instrument, but the technological advances had their effect too. Music conveys the features and technological advances of different eras in time and by learning to play a guitar person acquires new knowledge about the instrument and music. As a person, who learned this instrument, I acquired a lot of knowledge on the topic of music and song structure. This instrument is available to a big variety of people and this

tool is important to allow people to acquire new knowledge through learning it.

**Object 2 - James Webb Space Telescope. (The Guardian, 2020)**



My second object is the James Webb space telescope that was launched on 25th December of 2021. Telescopes were always important in learning knowledge away from our planet and researching space is the main area of science because it is able to show us where we came from. I chose this object because it displays the technological advances of humankind at their peak. As the magnification scale increases, telescopes are able to see for a further distance, which gives more information for the scientists. This telescope is the biggest and most powerful telescope ever launched by humanity. This telescope is currently the peak of human space research and this tool is 100 times more powerful than the Hubble telescope, not a single telescope comes close to its ability. This telescope will totally change astronomy and it is a big

step forward for humankind. By using this tool scientists are able to acquire new information about the stars and planet formation. Not only that, but the telescope is able to view 13.7 billion light-years away, to the point of star formation after the potential Big Bang. This tool is important in the production of new knowledge for people of science since it allows us to find habitable planets and information about the formation of the first stars, which is completely new for astronomers.

### **Object 3 - My headphones.**



My final object is my personal headphones that I use on day to day basis for different purposes. I chose this object because it is deeply connected with my prompt. Headphones have developed technologically throughout time and the technological progress allowed the headphones to be portable and accessible for everyone however, this pair of headphones has a personal meaning to me, since I use these headphones to listen to music, videos, lectures, audiobooks, and even lectures. As a person who is most comfortable with getting information via hearing this piece of tool is important to me and it

allows me to learn and acquire new knowledge. I have received and acquired a lot of information through this exact audio device and that is why the tools are important to acquire new knowledge.

**Reference list:**

Clark, S. (2020) *Spacewatch: Nasa delays James Webb space telescope to October 2021*. The Guardian. Retrieved from:  
<https://www.theguardian.com/science/2020/jul/23/spacewatch-nasa-delays-james-webb-space-telescope-to-october-2021>