**Примерные вопросы для беседы по разделу 2**

***SCIENCE AND TECHNOLOGY***

***(на усмотрение преподавателя)***

1. How did the printing press evolve over time to meet the increasing demands of newspapers for more pages and faster delivery?   
     
   – Newspapers were printed on Gutenberg machine
2. Who is recognized as the inventor of the electric light, and what key elements led to the triumph of his invention of the incandescent light bulb?   
     
   – Thomas Alva Edison is recognized as inventor of electric light. His invention outperformed others in 3 key factors: effective incandescent material, higher vacuum, and a high resistance.
3. What innovative methods did the Wright brothers employ to achieve success in manned flight, setting them apart from previous attempts at creating flying machines? -   
     
   They built an movable track to help launch their Flyer by giving it enough airspeed to take off and stay afloat.
4. What was the significance of Joseph Nicéphore Niépce's creation of a prototype photographic camera in 1816, and how did it contribute to the development of photography? –

He managed to take first recorded long-lasting picture. Nicephore’s success led to several other experiments and photography progressed very rapidly.

1. Who was Carl Benz, and what significant contribution did he make to the transportation industry? -   
     
   Carl Benz – German mechanical engineer, applied for a patent for cars powered by gas engines. Basically the birth of the automobile.
2. What mass-production techniques were innovated by Henry Ford that became standard in the automotive industry? -
3. What inventions revolutionized the world in the past and paved the way to modern technologies?
4. What technologies are going to change the world in the upcoming 25 years?
5. What do you know about science?
6. How do researchers study the world around us?
7. Can scientists investigate strange or funny things sometimes? Can you give any examples? -   
     
   Yes, they can. You can take a look at science humour magazine the Annals of Improbable Research – Punch-preventing beards and transportation of upside-down Rhinos.
8. What was the focus of the study that won the physics prize related to foot traffic? -   
     
   It was focused on explaining why pedestrians aren’t constantly colliding with each other.
9. What hypothesis did the trio of US researchers propose regarding the evolution of human beards? -   
     
   “We hypothesized that beards protect the skin and boned of the face when human males fight by absorbing and dispersing the energy of a blunt impact”
10. What was the result of the experiment conducted by the researchers to test the protective function of beards during blunt impacts? -   
      
    Hairy skin absorbs more of the force of an impact – lending a little more credence to the theory that beards evolved to prevent injury, cuts or bruises.
11. What was the transportation prize at the Ig Nobels awarded for year 2021? -   
      
    It was awarded to an international team of scientist working out how to move rhinos
12. Why do black rhinos in South Africa need to be transported to another location? -   
      
    To protect black rhinos from poaching in South Africa.
13. When was the drink Coca-Cola originally created, and who was its inventor?  
      
    - It was John Remberton in 1886
14. How was the Coca-Cola formula passed down before it was finally written down in 1919?  
      
    - It was passed down by word of mouth.
15. What event in 1919 led to the Coca-Cola formula being written down and used as collateral for a loan?  
      
     - A group of investors led by Ernest Woodruff took out a loan to purchase the company and he needed collateral for the loan.
16. How did Coca-Cola use the secrecy surrounding its formula as part of a marketing strategy?  
      
     - Coke built an entire vault in 1995. Coke claims only two senior executives within the company know the formula at a time and they can never travel together.
17. Where is the Coca-Cola formula kept, and what security measures protect it?  
      
     - It is kept in the vault. It’s accessible only via a palm scanner, a numerical code panel and a huge steel door. And inside vault there’s box with more security features.
18. How was the Industrial Revolution in the United States influenced by intellectual property smuggled out of England after the American Revolution?

- It was founded

1. Why did Parliament pass laws in 1774 to protect England's industrial secrets, and what restrictions did these laws impose?  
     
    - It prohibited engineers and mechanics from traveling abroad.
2. Why were machine secrets important to England in the 18th century?   
     
    - It was a matter of national intelligence
3. Why does the author draw a parallel between the theft of industrial secrets during the Industrial Revolution and modern-day cyber secrets leaked by organizations like Wikileaks?   
     
   - It was as devastating as cyber sescrets leeched in 21th century.
4. What is the meaning of the know-how?
5. What other examples of know-how can you give?
6. Why did marketing specialists create the shroud of mystery around the formula of the product?
7. Why is it important to take all advertisement with a grain of salt?  
     
   - Prob because it’s fake.
8. What is the purpose of smuggling?   
     
   - Stealing intelligence
9. Why does it still exist today?
10. What is the brain drain and why does it happen?
11. What is the Rhode Island System?
12. Was the invention of the power loom successful?
13. Where can scientists present their findings ?  
      
     - In science journals
14. What is the difference between Peer-Reviewed Articles and Popular/news articles?   
     - Peer-reviewed articles are reviewed by some respectable scientist or smh
15. What academic research databases can you name?
16. What is the purpose of submitting articles to scientific journals before publication?
17. How do scientific conferences contribute to the dissemination of research findings?
18. How do academic research databases like Scopus or Web of Science support researchers in their work and academic careers?