

Name: **Vivica McBean**Date: **8/19/2020**_____

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|-----------------------------------|-------------------------|----------------------------------|
| Edward Jenner | Charles Best | Baruch Blumberg |
| Francis Crick | Charles Drew | Sir Alexander Fleming |
| Benjamin Franklin | Garrett Morgan | Louis Pasteur |
| Wilhelm Conrad Rontgen | Albert Sabin | Jonas Salk |

PART ONE (24 pts)

Match the invention with the inventors from the list above. Indicate the inventor by writing out the complete name from the listed names above next to the inventions below.

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|-------------------------|----------------------------------|
| 1. X-ray | 1. Wilhelm Conrad Rontgen |
| 2. Structure of DNA | 2. Francis Crick |
| 3. Insulin | 3. Charles Best |
| 4. Small Pox Vaccine | 4. Edward Jenner |
| 5. Blood Bank | 5. Charles Drew |
| 6. Oral Polio Vaccine | 6. Albert Sabin |
| 7. Gas Mask | 7. Garrett Morgan |
| 8. Penicillin | 8. Sir Alexander Fleming |
| 9. Rabies Vaccine | 9. Louis Pasteur |
| 10. Hepatitis B Vaccine | 10. Baruch Blumberg |
| 11. Bifocal Lens | 11. Benjamin Franklin |
| 12. Polio Vaccine | 12. Jonas Salk |

PART TWO (50 pts)

Conduct an internet search and provide the following information.

1. A. Inventor: Edward Jenner.
B. One biological invention: Small Pox Vaccine
C. Year of Invention: 1796
D. What does this vaccine do? It protects people from smallpox by helping their bodies develop immunity to small pox

2. A. Inventor: Baruch Blumberg
B. One biological invention: Hepatitis B Vaccine.
C. Year of Invention: 1969
D. Describe the functions of this vaccine. It is given to prevent severe liver disease that can develop when children or adults are infected with hepatitis B virus. Also known as the first “anti-cancer” vaccine because it prevents hepatitis B the cause of liver cancer worldwide.

3. A. Inventor: Charles Best.
B. One biological invention: Insulin
C. Year of Invention: 1921
D. What does this vaccine do? It lowers blood sugar, especially in Type 1 diabetes.

4. A. Inventor: Jonas Salk
B. One biological invention: Inactivated Polio Vaccine (IPV).
C. Year of Invention: 1955
D. What is the difference between IPV and Oral polio vaccine? IPV is given by shot in the leg or arm versus Oral polio vaccine is given orally.
E. What does this vaccine do? OPV produces antibodies in the blood ('humoral' or serum immunity) to all three types of poliovirus, and in the event of infection, this protects the individual against polio paralysis by preventing the spread of poliovirus to the nervous system.

5. A. Inventor: Louis Pasteur
B. One biological invention: Pasteurization.
C. Year of Invention: 1862
D. How is Pasteurization done? It's the process in which packaged and non-packaged foods (such as milk and fruit juice) are treated with mild heat, usually to less than 100 °C (212 °F)
E. What is the importance of Pasteurization? In order to eliminate pathogens and extend shelf life.

PART THREE (26 pts)

Answer the following questions.

What is Apgar Scale (score) ? (10 pts)

Answer: The Apgar score is a test given to newborns soon after birth. This test checks a baby's heart rate, muscle tone, and other signs to see if extra medical care or emergency care is needed

How does it work? (12pts)

Answer: Apgar testing is typically done at one and five minutes after a baby is born, and it may be repeated at 10, 15, and 20 minutes if the score is low. The five criteria are each scored as 0, 1, or 2 (two being the best), and the total score is calculated by then adding the five values obtained (1).

Who invented Apgar Scale (score)? (4 pts)

Answer: Dr Virginia Apgar