

3rd Physics-anglais scientifiques

The scale goals

The student will be familiar with the goals of the scale based on Bloom's cognitive levels

- 1- The level of knowledge and reminder-**Remember**-: stimulating students to restore information from memory in order to evoke regarding the scale
- 2- The level of assimilation and understanding- **Understand**-: The student determines the various variables and concepts related to the scale through his understanding of the scale
- 3- The level of application- **Apply**-: The student diagnoses the various developments that have occurred
- 4- The level of analysis- **Analyze**-: The student analyzes various changes and developments
- 5- The level of installation and construction- **Create**-: The student searches for the role of science throughout various ages
- 6- Evaluation level- **Evaluate**-: a final test for student knowledge and its ability to determine various changes and developments

Every person has a beginning and an end except the scientists, their names immortalize their works. And this is what we try to study in the second semester

Chapter one :

James Clark Maxwell was born on June 13, 1831 and died on November 5, 1879 was a mathematician from Scotland who is responsible for the classical theory of the electromagnetic wave, which describes electricity, magnetism and light as different manifestations of the same phenomenon and called Maxwell's electromagnetic equations B the second unification in physics after Newton's equations and the equation of the first unification. He published the process of wave navigation of electromagnetic fields in a vacuum and their movement at the speed of light in his work - a dynamic theory of the electromagnetic field – and he is considered the founder of modern electrical engineering.

Chapter two :

Paul Dirac is Paul Adrian Maurice Dirac , was born on August 8, 1902 –and died on October 20, 1984) was a British physicist and one of the founders of the theory of quantum mechanics, where he developed a theory that includes the theories of Heisenberg and Schrödinger in 1926, where he relied on spinning matrices (spinning) 2×2 and derived the Schrödinger equation and named after him - Dirac equation - as a relative equation for the wave motion of an electron. He predicted the existence of positron, the anti-electron particle, which he explained by what came to be called the Dirac Sea, which describes elementary particles with a spin moment equal to half an integer ($1/2$) that were incorporated into quantum theory and special theory of relativity.

Chapter three :

William Lawrence Bragg was born on March 31, 1890 and died on July 1, 1971 is an Australian physicist who won the Nobel Prize in 1915 jointly with William Henry Bragg, where he worked with his father at the beginning from 1912 - 1914 in crystal subjects and used Chinese rays and discovered an equation called the Prague equation in 1912 and he developed with his father the Chinese X-ray spectrometer. Which was used in the study of many crystals of materials and developed with his students a theory of the crystal structure of silicate.