Carl Friedrich Gauss

(30 April 30 1777 – 23 February 1855)

Carl Friedrich Gauss (original name Johann Friedrich Carl Gauss) was born in the Duchy of Brunswick-Wolfenbüttel (now in Germany). Gauss was the only child of poor parents. He is generally regarded as one of the greatest mathematicians for his contributions to number theory, geometry, probability theory, geodesy, planetary astronomy, the theory of functions, and electromagnetic theory.

He was extremely talented in mathematics, physics, engineering, astronomy and even land surveying. At eight, he figured out how to add up all the numbers from 1 to 100. Gifted with a remarkable calculating prodigy, he was supported by the Duke of Burnswick to continue his studies in Mathematics at the University of Göttingen. His two major publications in 1801, on algebraic number theory, *Disquisitiones Arithmeticae* and on his rediscovery of the asteroid Ceres made him famous amongst the scientific community of that time.

In 1830s, he became interested in terrestrial magnetism and invented the magnetometer. Along with Wilhelm Welser, he built the first electric telegraph in 1833. His mathematical theory of curved surface laid the foundation for the later work of Riemann. Gauss also wrote on the theory of map projections called cartography. For his study of angle-preserving maps, he was awarded the prize of the Danish Academy of Sciences in 1823. Carl Gauss formulated the Gauss's law relating the distribution of electric charges to the electric field the distribution produces.

Teachers may suggest students to make a collage of photographs of scientists in physics depicting the advancements in the subject