

Quiz #2

1) a) Mexico: Mine owners organized into bodies that had their (1780's) own tribunals, and merchants organized trade groups. Jose Bustamante Bustillos and Pedro Romero de Terreros, Mine owners. In Mexico, schools of mining (1792), Botany (1788), and the arts (1785) were created. Trade groups were created in all important Hispanic American cities at a rapid rate because of Trade liberalization (in Mexico 1594).

b) Peru: In the 1780's, Mine owners organized into bodies that had their own tribunals, and Merchants organized trade groups. Trade group was created in Lima in 1618. Franco Romero de Terreros, mine owner. In Lima, the Laboratorio Quimico-Metalurgico (1792) was sponsored by the Tribunal de Minería.

c) Venezuela (Caracas): Trade group created in 1793. In Caracas, the Academia de Matematicas (founded in 1760) was supported by the business consulate.

d) Guatemala: Trade group created in 1793. The Jardín Botánico (Botanical Garden, established in 1796) and the drawing and mathematics schools (in 1797) were set up by the Sociedad Económica de Amigos del País.

2) Empiricism in the philosophy of science emphasises evidence, especially as discovered in experiments. It is a fundamental part of the scientific method that all hypothesis and theories must be tested against observations of the natural world rather than resting solely on a priori reasoning, intuition, or revelation. The difference between Empiricism and Scholasticism is Empiricism focuses on ethicists and the answer is often derived from experience and experiments. Scholasticism focuses on faith and the strength of religious life. It focuses on faith and reason, realism and nominalism, and the provability of the existence of God.

3) Private Libraries were built in spite of official restrictions and by book smuggling, publications and scientific newspapers disseminated scientific news with the double purpose of creating a culture of science and advancing scientists socially. The existence of these new, modern books tell us about advance material such as Hermetic scientific texts, mathematics, astrological, and physics. The common libraries held traditional material and lacked modern scientific texts and were not acquainted with the works of Enlightenment philosophers. Some books were not in public libraries because a lot of teaching and books were banned from there. A few examples of the birth of modern scientific culture that more private than public are Mathematics by Christian Wolff and Elements of Chemistry by Académie de Paris,

4) The first properly scientific magazine of the American Enlightenment, *Diario Literario de Mexico* (established in 1768) was published by a citizen of New Spain, Jose Antonio Alzate y Ramirez. *Diario Literario*, *Asuntos Varios sobre Ciencias y Artes* (1772) and *Observaciones sobre Ciencias y Artes* (1772). These covered science and helped popularize it over the next 30 years. Other scientific magazines included *Primicias de la cultura de Quito* (1791), *Memorias de la Sociedad Economica* (1793) and *La Gaceta de Guatemala* (1797). These publications were encouraged by the Enlightenment philosophy that characterized the economic societies: to study the country; to promote reforms in education and major economic activities, and to modernize scientific and technical areas.

5) The significance over the debate over mining methods was to give miners children or miners the proper education they deserved. They would teach them physics, chemistry, mathematics, etc.