

# Thursday Warm-Up (INTD262)

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## 1 Chapter 5 of *Science in Latin America*

1. Match the following social reforms to those who made major contributions to the effort:

- A: Mining reforms in late 18th-century Mexico      1: Hipólito Unánue
- B: Medical and surgical reforms in Perú              2: Francisco Zea and Francisco José de Caldas
- C: Botany and naturalism in Nueva Granada      3: Francisco Xavier Gamboa and Joaquín Velázquez de León

2. Give a brief account of how *scientific nationalism* was born in Latin American nations

3. Given what you know about *the scientific attitude*, interpret this quote:

A significant number of scientists formed a community in each country, and institutions especially dedicated to the fostering and teaching of science were established ... Francisco José de Caldas wrote thus from his native Popayán in 1801: ‘I am certain that when the nineteenth century ends, we won’t have to envy the home country for its Enlightenment.’”

4. (a) When did Latin American wars of independence begin, approximately? (b) Give some examples of scientists and engineers who fought and died for their countries. (c) **Reflect:** given what we have learned about concepts like the free press and the creation of scientific institutions, what would it take for you to join in a revolution?

5. (a) Reflect on another quote from chapter 5: “Science and technology became ... the preferred vehicle for Latin American nations to instill the notion of social equality through education, to create and develop an economy that could overcome the colonial bureaucratic and centralist vices ... to provide the nation-state with the necessary means to justify its power rationally.” **Reflect:** Compare these ideas to the situation in our own country today. How is STEM and STEM education related, or not, to social equality?