**Theme**: Technology (August 2012)

Throughout history, existing technology has been modified or replaced by new technological innovations. These new technological innovations have had various effects on societies and the world.

**Task**: Select two technological innovations and for each

* Describe the existing technology that was replaced by this new technological innovation and how this new innovation changed the existing technology
* Discuss the effects this new technological innovation has had on a society or the world

You may use any technological innovation from your study of global history and geography. Some suggestions you might wish to consider include aqueducts, **gunpowder**, **printing press**, caravel, steam engine, factory system, nuclear power, and Internet communications.

**Gunpowder**

* Describe the existing technology that was replaced by this new technological innovation and how this new innovation changed the existing technology
  + Developed by the Chinese
  + Prior to the use of gun powder wars were mainly fought with weapons that required training and skill to be used effectively
    - Bows and arrows, catapults, swords, and spears
  + Guns required little to no skill to use them and could be mass produced
  + Gun powder became widely used in cannons as well that were mounted to ships or on wheel and moved around the battle field
* Discuss the effects this new technological innovation has had on a society or the world
  + Guns were the greatest advantage European imperialists had.
    - Africa 🡪 Europeans used guns as currency when obtaining slaves from West Africa
      * West African societies used the guns to raid neighboring villages and to defend themselves against being sold as slaves themselves
        + As technology improved guns given to West Africans were obsolete

African did not have access to improved guns and were at a disadvantage when European imperialists conquered their lands

* + - China 🡪 1700s Chinese did not want to trade with Britain
      * Felt that the British did not have desirable goods
        + British began to import opium into China, only item Chinese would purchase
      * Opium was illegal in China
        + Chinese dumped opium into the harbor after the British refused to stop importing it
      * Led to the Opium wars 🡪 Chinese lost because they did not have guns
        + Chinese were forced to sign a series of unequal treaties
        + Led to Spheres of Influence being created in China

**Printing Press**

* Describe the existing technology that was replaced by this new technological innovation and how this new innovation changed the existing technology
  + Created by Johannes Gutenberg
  + Prior to the printing press books were hand copied
    - Often by monks
    - Very tedious and time consuming process
    - Oftentimes there were mistakes from human error
  + Very few books were available
  + Books were very expensive
  + Most scribes (those who knew how to write and read) were church officials
* Discuss the effects this new technological innovation has had on a society or the world
  + Printing press made books easier to produce, cheaper to purchase, and more abundantly available
    - Increased literacy
    - Books were printed in the Vernacular (common language)
  + First book that was printed was the Bible
    - Became widely available and people started to interpret and read the bible for themselves without the aid of the church
  + Fueled the Protestant Reformation
    - Luther’s 95 Theses and Religious Pamphlets were reproduced rapidly spreading his ideas