From Farms to Factories	1500s: Europe's population grew. -Around 1700s entered phase of rapid population growth due to changes in climate, improved agriculture efficiency, better food production, and better hygiene. England: 5 million people in 1700, to 8 million in 1800. Other European countries increased population by 60%-80% American colonies went to from 275,000 to 4 million. More people around, but less work in the country (due ot improvements in agriculture. This caused massive migrations from the countryside to cities. Villages turned to towns, then to big cities (absorbing nearby towns and villages)
A Cottage Industry	Merchant would take bundle of wool, cotton, or flax to a farm family to wash and clean it. Then he would pay someone else to spin it into yarn or thread. After a month, he would pick it up, and take it to another person for dying. Finally, the merchant would bring the dyed thread to a weaver. This process took months, and the merchant had to trust the people to do their work. Was slow and inefficient.
The Spinning Jenny Water Frame	1730, John Kay invented the flying shuttle --an invention that doubled the amount of cotton cloth that could be woven in a day. This led to the invention of the Jenny by James Hargreaves --this invention could spin several threads at the same time. 1769, Richard Arkwright invented the water frame. --used water power to stretch the tread before spinning it. By 1800, Samuel Crompton combined the jenny and water frame into "The mule" (one steam driven machine) --this increased thread production by ten times. --large mules were built in factories.